Health and Disability in the Workplace:  
Empirical Insights and Recommendations for Organizations

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

of the University of St. Gallen,
School of Management,
Economics, Law, Social Sciences
and International Affairs

to obtain the title of
Doctor of Philosophy in Management

submitted by

Miriam K. Baumgärtner

from

Germany

Approved on the application of

Prof. Dr. Heike Bruch

and

Prof. Dr. Martin Hilb

Dissertation no. 4134

Rosch-Buch Druckerei GmbH, Scheßlitz 2013
The University of St. Gallen, School of Management, Economics, Law, Social Sciences and International Affairs hereby consents to the printing of the present dissertation, without hereby expressing any opinion on the views herein expressed.

St. Gallen, May 17, 2013

The President:

Prof. Dr. Thomas Bieger
Dedicated to my parents
Acknowledgments

I thank Professor Dr. Heike Bruch for supporting me over the last four years and for creating an inspiring learning environment at the Institute for Leadership and Human Resource Management. I enjoyed our internal conferences and team events immensely.

I also wish to express my sincere gratitude to Professor Dr. Martin Hilb for constructively supporting this dissertation as a co-supervisor. I appreciated his critical questions, valuable feedback, and benevolent nature.

Special thanks go to Professor Dr. Stephan Böhm for being my supervisor and “unofficial” PhD supervisor. He always kept a critical eye on my work, provided challenging learning opportunities, and supported me in many ways.

Big thanks go to Dr. Dave Dwertmann for being an excellent colleague.

Two CDI members have been special to me: Professor Dr. Eva Deuchert offered her professional and emotional support in addition to a much-needed sense of humor. Ursula Würmli created a friendly office environment and always had an open door and a willingness to listen.

I will never forget Christoph Jindra, Dr. Anneloes Raes, Dr. Florian Kunze, and Dr. Simon DeJong for their encouragement, their willingness to offer advice, and their expertise when I struggled with methodological challenges.

I further thank all of my (former) colleagues at the Center for Disability and Integration and the Institute for Leadership and Human Resource Management. My journey would not have been as rewarding without each and everyone of them. I wish to express my gratitude to Lukas Kauer, Helge Liebert, Professor Dr. Nils Jent, Sofie Cabus, Julia Kensbock, Regula Dietsche, Ina Zwingmann, Kirill Bourovoi, Dr. Beatrix Eugster, Slawomir Skwarek, Ulrich Leicht-Deobald, Sandra Kowalevski, Andrea Schmid, Nina Lins, Markus Rittich, Ivonne Preusser, Leonie Spalekhaver, Dr. David Maus, Dr. Justus Kunz, Geraldine Mildner, Simon Körner, and Nicole Stambach.

I thank my peer-group – Tobias Dennerlein, Dr. Petra Kipfelsberger, Dr. Klemens Knöferle, Dr. Johannes Paefgen, and especially Dr. Daniela Dolle – for their generosity, support, and all the inspiring activities we shared.
I also thank Professor Dr. Lisa Nishii and Professor Dr. Adrienne Colella for a wonderful time during their CDI visits as well as for reviewing my work and providing advice.

Finally, I thank Rabea Wörthwein-Mack, Simone Unfried, Dr. Daniela Dolle, and Dr. Lisa Hopfmüller for their friendship and for supporting me in every sense, especially during the final phase of this dissertation project.

Last but not least, I wholeheartedly thank Philipp Haas, my parents Margarete and Dr. med. Dieter Baumgärtner, Sabine Baumgärtner, my two sisters Judith and Kim Baumgärtner, and my grandmother Elisabeth Buder for their unconditional love and support, which have meant so much to me.

St. Gallen, July 2013

Miriam K. Baumgärtner
# Overview of Contents

1 **Introduction** ............................................................................................................. 1

1.1 Health-Related Challenges and Relevance of the Research Topic ......................... 1

1.2 Defining Health, Disability, and Related Constructs ............................................... 7

1.3 Literature Review and Development of Research Questions ................................. 10

1.4 Methodological Approach ...................................................................................... 33

1.5 Outline of the Dissertation ...................................................................................... 35

2 **Study 1 – Health-Focused Leadership – Prevention and Intervention as Enablers of Followers’ Health and Well-Being** ..................................................... 38

2.1 Abstract .................................................................................................................. 38

2.2 Introduction .......................................................................................................... 39

2.3 Theory and Hypotheses Development ................................................................... 41

2.4 Study A ................................................................................................................... 50

2.5 Study B ................................................................................................................... 56

3 **Study 2 – Job Satisfaction of Employees with Disabilities: The Role of Perceived Structural Flexibility** ................................................................................. 87

3.1 Abstract .................................................................................................................. 87

3.2 Introduction .......................................................................................................... 87

3.3 Theory and Hypotheses Development ................................................................... 90

3.4 Methods ............................................................................................................... 97

3.5 Results .................................................................................................................. 102

3.6 Discussion ............................................................................................................. 106

4 **Study 3 – Job Performance of Employees with Disabilities: Interpersonal and Intrapersonal Resources Matter** .................................................................... 111

4.1 Abstract .................................................................................................................. 111

4.2 Introduction .......................................................................................................... 112

4.3 Theory and Hypotheses Development ................................................................... 114

4.4 Methods ............................................................................................................... 122

4.5 Results .................................................................................................................. 125

4.6 Discussion ............................................................................................................. 129
## Overall Discussion and Conclusion

5.1 Summary of Key Research Findings ................................................................. 133
5.2 Practical Implications ..................................................................................... 135
5.3 Overall Limitations and Directions for Future Research ......................... 152
5.4 Conclusion ........................................................................................................ 159

## Appendix

6.1 Survey Items for Study 1 ................................................................................. 161
6.2 Survey Items for Study 2 ................................................................................. 166
6.3 Survey Items for Study 3 ................................................................................. 168

References ............................................................................................................. 171

Curriculum Vitae .................................................................................................... 217
Table of Contents

Overview of Contents ..................................................................................................... I

Table of Contents ........................................................................................................ III

List of Figures ............................................................................................................. VIII

List of Tables ............................................................................................................. IX

List of Abbreviations ................................................................................................. XI

Abstract ...................................................................................................................... XIII

Zusammenfassung ...................................................................................................... XIV

1 Introduction ............................................................................................................ 1

1.1 Health-Related Challenges and Relevance of the Research Topic ..................... 1

1.1.1 A Company’s Imperative to Deal with Health-Related Problems and Disabilities ... 2

1.1.2 Economic Costs to the Society ........................................................................ 6

1.2 Defining Health, Disability, and Related Constructs ......................................... 7

1.2.1 The International Classification of Functioning, Disability, and Health .......... 7

1.2.2 Disability Management ................................................................................... 9

1.3 Literature Review and Development of Research Questions ......................... 10

1.3.1 The Management of Health as a Core Leadership Task ......................... 12

1.3.2 The Diversity Perspective on Disability – Similarities and Differences between Disability and General Diversity Research .................................................. 16

1.3.3 Research on Disability and Employment ....................................................... 19

1.3.3.1 Overview of Past Empirical Research from a Managerial Perspective .... 20

1.3.3.2 Summary of the Literature Review and Resulting Research Gaps ............. 23

1.3.3.3 The Treatment of Individuals with Disabilities in Organizations: A Theoretical Framework ................................................................................................. 25

1.3.3.4 The Role of Organizational Characteristics for Job Attitudes of Employees with Disabilities ........................................................................................... 27

1.3.3.5 The Interplay of Helping Behavior and Attributes of Employees with Disabilities on their Job Success ................................................................. 29

1.3.4 Summary and Integration of Research Questions ........................................ 31

1.4 Methodological Approach ............................................................................... 33

1.4.1 Methodological Fit ......................................................................................... 33

1.4.2 Research Paradigm and Study Design ......................................................... 34
2 Study 1 – Health-Focused Leadership – Prevention and Intervention as Enablers of Followers’ Health and Well-Being

2.1 Abstract

2.2 Introduction

2.3 Theory and Hypotheses Development

2.3.1 The Relationship between Leadership and Followers’ Health

2.3.2 Health-Focused Leadership as an Example of Domain-Specific Leadership Behavior

2.3.3 Prevention and Intervention as the Two Dimensions of Health-Focused Leadership

2.3.4 The Scale Development Process

2.3.5 The Relationship of Health-Focused Leadership and LMX

2.4 Study A

2.4.1 Methods Study A

2.4.1.1 Sample and Data Collection

2.4.1.2 Measures

2.4.2 Results Study A

2.4.2.1 Exploratory Factor Analysis

2.4.2.2 Internal Consistency Assessment

2.4.2.3 Descriptive Results

2.4.2.4 Relationship of HFL and LMX

2.4.3 Discussion Study A

2.5 Study B

2.5.1 Study B, Part 1: Confirmatory Factor Analysis and Factorial Structure of the HFL Construct

2.5.2 Study B, Part 2: Establishing Concurrent and Discriminant Validity of the HFL Construct

2.5.2.1 The Relationship of LMX/HFL with Followers’ Work Ability

2.5.2.2 The Relationship of LMX/HFL with Followers’ Emotional Exhaustion

2.5.2.3 The Relationship of LMX/HFL with Followers’ Supervisor Satisfaction, Organizational Commitment, and Turnover Intention

2.5.3 Study B, Part 3: An Overall Model of Occupational Health

2.5.3.1 The Relationship of HFL with Followers’ Job Performance

2.5.3.2 The Relationship of Followers’ Emotional Exhaustion with their Job Performance and their Turnover Intention
2.5.3.3 The Relationship of Followers’ Work Ability with their Job Performance and their Turnover Intention ......................................................................................................... 66
2.5.3.4 Emotional Exhaustion and Work Ability as Mediators of the HFL-Job Performance/Turnover Intention Link .......................................................... 68

2.5.4 Methods Study B .............................................................................................................. 68
2.5.4.1 Sample ................................................................................................................................. 68
2.5.4.2 Measures ............................................................................................................................. 69
2.5.4.3 Data Analysis ...................................................................................................................... 71

2.5.5 Results Study B ................................................................................................................. 75
2.5.5.1 Descriptive Results .............................................................................................................. 75
2.5.5.2 Results and Discussion of the HFL/LMX-Outcome Relationships ............................. 79
2.5.5.3 Results of the Overall Model of Occupational Health ......................................................... 81

2.5.6 Limitations and Future Research Directions ..................................................................... 85

3 Study 2 – Job Satisfaction of Employees with Disabilities: The Role of Perceived Structural Flexibility ...................................................................................... 87

3.1 Abstract ......................................................................................................................................... 87
3.2 Introduction .................................................................................................................................. 87
3.3 Theory and Hypotheses Development ...................................................................................... 90
3.3.1 Differences in Job Satisfaction between Employees with and without Disabilities ...... 90
3.3.2 The Moderating Role of Perceived Flexibility for the Relationship between Having a Disability and Job Satisfaction ......................................................... 92
3.3.2.1 Formalization and Having a Disability .............................................................................. 92
3.3.2.2 Centralization and Having a Disability .............................................................................. 93

3.4 Methods ...................................................................................................................................... 97
3.4.1 Sample and Data Collection .............................................................................................. 97
3.4.2 Measures ................................................................................................................................ 98

3.5 Results ...................................................................................................................................... 102
3.5.1 Descriptive Statistics ............................................................................................................ 102
3.5.2 Tests of Hypotheses ............................................................................................................ 102

3.6 Discussion .................................................................................................................................. 106
3.6.1 Discussion of Findings ........................................................................................................... 106
3.6.2 Limitations and Future Research Directions ...................................................................... 108

4 Study 3 – Job Performance of Employees with Disabilities: Interpersonal and Intrapersonal Resources Matter ........................................................................ 111

4.1 Abstract ..................................................................................................................................... 111
4.2 Introduction.................................................................................................................................................. 112

4.3 Theory and Hypotheses Development ........................................................................................................ 114

4.3.1 The Construct of Social Support........................................................................................................... 114

4.3.2 The Relationship between Social Support and Job Performance............................................................ 115

4.3.3 The Relationship between Self-Efficacy and Job Performance................................................................. 117

4.3.4 The Moderating Role of Self-Efficacy on the Relationship between Social Support and Performance ...................................................................................................................... 119

4.3.4.1 The Support Buffer (Compensation) Hypothesis ............................................................................. 120

4.3.4.2 The Interference Hypothesis ............................................................................................................ 121

4.4 Methods..................................................................................................................................................... 122

4.4.1 Sample and Data Collection.................................................................................................................... 122

4.4.2 Measures.................................................................................................................................................. 123

4.4.3 Data Analysis.......................................................................................................................................... 125

4.5 Results....................................................................................................................................................... 125

4.5.1 Descriptive Statistics................................................................................................................................. 125

4.5.2 Tests of Hypotheses.................................................................................................................................. 126

4.6 Discussion.................................................................................................................................................... 129

4.6.1 Discussion of Findings............................................................................................................................ 129

4.6.2 Limitations and Future Research Directions.......................................................................................... 130

5 Overall Discussion and Conclusion........................................................................................................ 133

5.1 Summary of Key Research Findings .......................................................................................................... 133

5.2 Practical Implications................................................................................................................................... 135

5.2.1 Strategy Processes: Aligning the Creation of a Healthy and Disability-Friendly Workplace with Corporate Strategy ................................................................................................................................ 135

5.2.1.1 Understanding the Business Case of Health- and Disability Management ........................................ 136

5.2.1.2 Determining the Status Quo, Target State, and Concrete Actions......................................................... 137

5.2.1.3 Top Management Support as Key Success Factor for Health Management and the Inclusion of People with Disabilities .................................................................................................................. 137

5.2.1.4 Aligning Team Diversity with Organizational Objectives ..................................................................... 138

5.2.2 Leadership Structures: The Core Role of Leaders in the Effective Management of Health and Disability ......................................................................................................................... 139

5.2.2.1 Development and Demonstration of Health-Focused Leadership (Study 1) ........................................ 140

5.2.2.2 Establishing Flexibility by Creating a Decentralized Organizational Environment (Study 2) ....... 141

5.2.2.3 Creating a Supportive Environment that Fosters the Development of Interpersonal and Intrapersonal Resources (Study 3) .................................................................................................................................. 141
5.2.3 Creating a Healthy and Disability-Inclusive Culture ................................................. 143
  5.2.3.1 Implementation of Disability-Conscious HRM Structures and Responsibility Structures 146
  5.2.3.2 Creating a Win-Win Situation by Transforming a “Disability” into a Unique Talent....... 147
  5.2.3.3 Fostering the Development of Networks among People with Disabilities through Affinity Groups and Mentoring Programs ................................................................. 149
  5.2.3.4 Using Partial Work Capacity: From “all or nothing” to “partial is better than nothing”... 150

5.2.4 Specific Practical Implications for Different Organizational Groups .......................... 150

5.3 Overall Limitations and Directions for Future Research ............................................ 152
  5.3.1 Methodological Limitations and Possible Solutions .................................................. 153
  5.3.2 General Future Research Directions ...................................................................... 156

5.4 Conclusion ................................................................................................................. 159

6 Appendix ......................................................................................................................... 161
  6.1 Survey Items for Study 1 ......................................................................................... 161
  6.2 Survey Items for Study 2 ......................................................................................... 166
  6.3 Survey Items for Study 3 ......................................................................................... 168

References ......................................................................................................................... 171

Curriculum Vitae .............................................................................................................. 217
List of Figures

Figure 1.1 Representation of the International Classification of Functioning, Disability, and Health (WHO, 2011) ........................................................................................................... 8

Figure 1.2 Overview of Overall Topics, Specific Topics, and Research Questions of this Dissertation .............................................................................................................. 11

Figure 1.3 Theoretical Framework for Studies 2 and 3 (Stone & Colella, 1996) .......... 25

Figure 1.4 Structured Overview of all Constructs Investigated in this Dissertation .... 31

Figure 2.1 Overall Model of Occupational Health and Structural Model Results ....... 84

Figure 3.1 Research Model Study 2: The Relationship between Having a Disability and Job Satisfaction, Moderated by Formalization and Centralization ...................... 96

Figure 3.2 Job Satisfaction for Different Levels of Centralization, Plotted for Employees with and without Disabilities ................................................................. 106

Figure 4.1 Research Model Study 3: The Relationship between Instrumental Social Support and Job Performance, Moderated by Occupational Self-Efficacy ........ 122

Figure 4.2 Moderating Effect of Occupational Self-Efficacy on the Relationship between Instrumental Social Support and Job Performance ......................... 128

Figure 5.1 Research Strategies and Related Limitation (McGrath, 1981) ............... 153
# List of Tables

Table 2.1 Overview of the Scale Development Process.................................................. 47

Table 2.2 Descriptive Statistics of and Correlations among Focal Variables of Study A\textsuperscript{a} ........................................................................................................................... 51

Table 2.3 EFA Results for the Two Dimensions of the Health-Focused Leadership Scale and LMX with Oblique Rotation (Study A\textsuperscript{a}) ................................................................................. 54

Table 2.4 Cronbach’s Alpha for the Health-Focused Leadership Dimensions and Overall Scale\textsuperscript{a} ........................................................................................................ 55

Table 2.5 Comparison of Alternative Models of the Health-Focused Leadership Scale\textsuperscript{a} ............................................................................................................................... 57

Table 2.6 Descriptive Statistics of and Correlations among Focal Variables of Study B\textsuperscript{a} ........................................................................................................................................ 73

Table 2.7 Results of Hypotheses 3a,b,c-7a,b,c ..................................................................... 77

Table 2.8 Measurement Model Comparison ..................................................................... 82

Table 2.9 Structural Model Comparison ........................................................................ 85

Table 3.1 Descriptive Statistics and Correlations among the Variables Used in Study 2 ........................................................................................................................................ 101

Table 3.2 Hierarchical Regression Results of the Centralization and Formalization Moderation of the Relationship between Having a Disability and Job Satisfaction – Missing Data Imputation Using the EM Algorithm ........................................ 103

Table 4.1 Descriptive Statistics and Correlations among the Variables Used in Study 3 ........................................................................................................................................ 126

Table 4.2 Results of Hierarchical Moderated Regression Analysis of Instrumental Social Support and Occupational Self-Efficacy ........................................................................ 127

Table 5.1 Summary of Practical Implications, Divided by Target Group and Field of Managerial Action .................................................................................................................. 151

Table 6.1 Survey Items Study 1: Leader-Member Exchange........................................ 161
Table 6.2 Survey Items Study 1: Health-Focused Leadership .............................. 162
Table 6.3 Survey Item Study 1: Work Ability ....................................................... 163
Table 6.4 Survey Items Study 1: Emotional Exhaustion .................................... 164
Table 6.5 Survey Item Study 1: Satisfaction with Direct Supervisor .................... 164
Table 6.6 Survey Items Study 1: Organizational Commitment .......................... 165
Table 6.7 Survey Items Study 1: Turnover Intention and Job Performance ........... 165
Table 6.8 Survey Item Study 2: Disability Status .............................................. 166
Table 6.9 Survey Items Study 2: Perceived Flexibility ....................................... 166
Table 6.10 Survey Items Study 2: Job Satisfaction ............................................ 167
Table 6.11 Survey Items Study 3: Instrumental Social Support ........................... 168
Table 6.12 Survey Items Study 3: Occupational Self-Efficacy ............................. 169
Table 6.13 Survey Items Study 3: Job Performance/In-Role Behavior ............... 170
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>α</td>
<td>alpha-coefficient</td>
</tr>
<tr>
<td>AIC</td>
<td>Akaike information criterion</td>
</tr>
<tr>
<td>β</td>
<td>beta-coefficient</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>chi square value</td>
</tr>
<tr>
<td>CFA</td>
<td>confirmatory factor analysis</td>
</tr>
<tr>
<td>CFI</td>
<td>comparative fit index</td>
</tr>
<tr>
<td>CI</td>
<td>confidence interval</td>
</tr>
<tr>
<td>C.R.</td>
<td>critical ratio = estimate divided by its standard error</td>
</tr>
<tr>
<td>Δ</td>
<td>delta</td>
</tr>
<tr>
<td>df</td>
<td>degrees of freedom</td>
</tr>
<tr>
<td>Ed./Eds.</td>
<td>editor/editors</td>
</tr>
<tr>
<td>ed.</td>
<td>edition</td>
</tr>
<tr>
<td>EFA</td>
<td>exploratory factor analysis</td>
</tr>
<tr>
<td>e.g.</td>
<td>example gratia/for example</td>
</tr>
<tr>
<td>et al.</td>
<td>et alii</td>
</tr>
<tr>
<td>etc.</td>
<td>et cetera</td>
</tr>
<tr>
<td>F</td>
<td>F-test value</td>
</tr>
<tr>
<td>H</td>
<td>hypothesis</td>
</tr>
<tr>
<td>HFL</td>
<td>health-focused leadership</td>
</tr>
<tr>
<td>HR</td>
<td>human resource</td>
</tr>
<tr>
<td>HRM</td>
<td>human resource management</td>
</tr>
<tr>
<td>ICF</td>
<td>International Classification of Functioning, Disability, and Health</td>
</tr>
</tbody>
</table>
i.e. id est/that is

LMX leader-member exchange

N or n number of observations

n.s. not significant

p level of significance

p. page

$R^2$ squared multiple correlation coefficient

RMSEA root mean square error of approximation

s.d. standard deviation

SEM structural equation modeling

SRMR standardized root mean square residual

t t-test value

vs. versus
Abstract

Two current public health developments threaten the most valuable resource of organizations: their employees. These developments are the increase in work-related health problems and the rising number of people with disabilities in the workforce. Higher absenteeism and costs as well as lower productivity and business performance on the one hand and the imperative to accommodate employees with disabilities on the other, pose challenges to organizations. This dissertation takes a first step in addressing these challenges by (1) developing a health-focused leadership (HFL) style and demonstrating its influence on organizational outcomes; (2) investigating the role of organizational flexibility on differences in job satisfaction between employees with and without disabilities; and (3) analyzing the interplay of interpersonal and intrapersonal resources on the job performance of people with disabilities.

In Study 1, a two-dimensional HFL scale is developed and validated. Analyzing a sample of 1,277 employees of a German public service organization, HFL is used as a predictor of health-related and traditional job outcomes and distinguished from mere relationship-based effects (i.e., leader-member exchange). Finally, HFL is incorporated into an overall model of occupational health.

Studies 2 and 3 contribute to the inclusion of employees with disabilities in the workplace. Study 2 uses data from 110 small and medium-sized companies (n = 4,141) and investigates job satisfaction as a focal job attitude. Besides examining job satisfaction differences between employees with and without disabilities, perceived structural flexibility is investigated as an organizational boundary condition. Study 3 is conducted in an Israeli call center. It sheds light on the interplay of social support as an interpersonal resource, and self-efficacy as an intrapersonal resource in predicting job performance of people with disabilities.

In addition to the theoretical contributions of the three studies, this dissertation identifies fields of managerial action and provides practical recommendations for top managers, line managers, and HR managers on how to promote health and accommodate employees with disabilities in the workplace.
Zusammenfassung


In Studie 1 wird eine zweidimensionale HFL-Skala entwickelt und validiert. HFL wird in einer Stichprobe von 1.277 Mitarbeitern des öffentlichen Dienstes als Prädiktor für gesundheitsbezogene sowie traditionelle arbeitsbezogene Zielgrössen verwendet und von rein beziehungsbasierten Effekten (leader-member exchange) abgegrenzt. Abschliessend wird HFL in ein Gesamtmodell betrieblicher Gesundheit integriert.


Zusätzlich zu den theoretischen Beiträgen der drei Studien identifiziert diese Dissertation betriebswirtschaftliche Handlungsfelder und leitet praktische Empfehlungen für Top Manager, Line Manager und HR Manager ab, die aufzeigen, wie sie Gesundheit fördern und mit Behinderung am Arbeitsplatz erfolgreich umgehen können.
“Health is not just a value in itself – it is also a strong economic driver for growth” (European Commission, 2011a).

1 Introduction

To set the foundation for my three empirical studies, I will introduce my dissertation by addressing its relevance. Further, I will present a managerial perspective on health and disability management and explain the economic imperative to include people with illnesses or disabilities into the workforce. In the second section, I will define and distinguish central constructs of this dissertation. Then, I will summarize relevant literature to provide a theoretical overview of my overall research agenda. In the fourth section, I will elaborate on the methodological approach of my studies. Finally, I will provide an outline of my dissertation.

1.1 Health-Related Challenges and Relevance of the Research Topic

My thesis is based on an alarming trend: Despite the fact that the average global health status is continuously increasing, a large proportion of the workforce is dropping out of employment into long-term sickness and disability benefits (OECD, 2010). The OECD summarizes the result of this development as “a social and economic tragedy common to virtually all OECD countries” (OECD, 2010: 9). Data from the European Union show that 8.6 percent or 20 million of workers of the EU-27 states experienced a work-related health problem within one year (De Norre, 2009). For 62 percent of them, this resulted in a sick leave that was in 27 percent of the cases longer than one month. Over the last few decades, the number of disabilities has increased in almost all industrialized countries (WHO, 2011). One billion people, which is around 15 percent of the world’s population already have a disability, which makes this group of people the largest minority of the world (WHO, 2011).

Workforce health directly affects productivity and business performance (Allen, Hubbard, & Sullivan, 2005). However, lost work days are considered to be only the “tip of the iceberg” (Dewa & Lin, 2000: 41) and “direct costs (e.g., those associated with the provision of medical insurance benefits, disability payments, workers’ compensation losses) most likely represent only a fraction of what employers spend to keep workers healthy and on the job” (Goetzel, Guindon, Jeffrey Turshen, & Ozminkowski, 2001:
The bigger portion of expenditures, namely indirect costs, include spending for replacing workers, overtime premiums, productivity losses related to unscheduled absences, as well as costs related to low presenteeism. Lower presenteeism comprises negative on-the-job consequences of struggling with health conditions, such as productivity losses and a decrease in work quality (Goetzel et al., 2004). Thus, poor employees’ health is associated with enormous risks for a company’s success.

Counteracting employees’ sickness is a key challenge in terms of keeping important human resources in the long run. A recent OECD study shows that in all OECD countries, between 50 and 75 percent of all new disability benefit claimants were previously employed or on sick benefit (OECD, 2010). These alarming percentages indicate the need to tackle sickness absence early on. At an early stage, organizations still have a chance to intervene and reduce work-related disabilities.

The second challenge for organizations arises if early intervention has not taken place or was unsuccessful. When sick employees have developed a long-term disability, companies need to adequately deal with them.

For companies, these challenges are interlinked: Counteracting the negative health trend of employees and dealing with the rising number of people who have developed a disability during their career. My thesis addresses research questions regarding both challenges. Companies that possess comprehensive knowledge about dealing with health-related problems and disabilities can reduce social tragedies and increase economic benefits for the organization. This thesis aims at taking a step in this direction.

### 1.1.1 A Company’s Imperative to Deal with Health-Related Problems and Disabilities

For companies, several challenges arise from the public health developments outlined above. In today’s continuously changing environment, companies are in constant competition with other companies worldwide. As a result, the ability to successfully react to environmental changes significantly depends on employees’ learning and their competencies. Therefore, ensuring and retaining skilled employees is getting more and more important because their knowledge and skills are a central asset to stay competitive (Kyndt, Dochy, Michielsen, & Moeyaert, 2009). Along these lines, a study among chief-executives revealed that employee know-how and reputation are considered as
the resources which contribute the most to business success (Hall, 2006). Grant (1996: 375) states that “knowledge has emerged as the most strategically-significant resource of the firm.” Thus, employees are a company’s most important resource (Dibble, 1999). In the following, I will provide reasons why companies need to promote their employees’ health, deal with those employees that have developed a disability, and recruit skilled people with disabilities as an alternative pool of talent.

With regard to disabilities, it is important to point out that most people are not born having a disability but develop one during their career (WHO, 2011). This means that – at the time a disability develops – they are employees of a company and have accumulated knowledge, competencies, and know-how valuable to an organization.

Further, the relative value of qualified personnel will increase against the background of the demographic change, which describes the projected aging and shrinking of the population. According to recent numbers of the UN Population Division, the proportion of people aged 65 and older is projected to increase about four times in Germany from now until 2035 (United Nations, 2010). Worldwide, the number of those aged 60 and over will approximately increase by a factor of 10. As a consequence, the labor force is expected to drop from 36 million in 2000 to about 28 in 2050 in Germany, which corresponds to an approximately 23 percent smaller workforce (Börsch-Supan, 2003). As a consequence, labor is becoming relatively scarce in almost all industrialized countries (Börsch-Supan, 2009). Accordingly, the number of young specialists and experts will decline as well. The trend associated with this development is called the “war for talents” (Michaels, Handfield-Jones, & Axelrod, 2001), expressing the increased competition of companies to recruit well-educated specialists and executives. The potential lack of junior staff will make it even more important to retain employees with health conditions or disabilities. Moreover, companies may discover people with disabilities as a pool of talent that was neglected so far.

In addition, not only the size but also the age composition of the workforce will change due to the demographic development (Bruch, Kunze, & Böhm, 2010). In Germany, the average age of employees will increase from 29 (2009) to 42.5 years (2029) within the next 20 years (Börsch-Supan, 2009). In the member states of the European Union, the number of people aged over 65 is expected to rise by 45 percent, from 85 million in 2008 to 123 million in 2030 (European Commission, 2011a). Since older age groups are overrepresented in the group of people with disabilities because health
risks like disease, injury, and chronic illnesses accumulate over the lifespan (WHO, 2011), the challenge of keeping especially older employees in good health and not having them develop a disability will even increase. Studies investigating samples of older workers identify health status as the main determinant of labor supply. Health status essentially influences retirement decisions (Van den Berg, Elders, & Burdorf, 2010). By keeping employees healthy, skilled workers are less likely to retire early. Thus, by investing in the health of their employees, companies increase productivity and avoid costs that can be prevented (Bloom, Börsch-Supan, McGee, & Seike, 2011).

Moreover, workgroup diversity turns into a competitive advantage when managed the right way (Cox & Blake, 1991; Kunze, Böhm, & Bruch, 2011). Under certain preconditions, diverse groups can attain better outcomes than homogenous groups on certain outcomes, such as a higher innovation (Yang & Konrad, 2011), range, number, and quality of ideas as well as performance (Milliken & Martins, 1996). This is due to the fact that diverse groups have a greater variety of information, experience, perspectives, and cognitive styles (Konrad, 2003). Moreover, recruiting from all demographic categories is important to attract and retain the best talent. Consequently, there is a “business case for diversity” (Leka, Jain, Zwetsloot, & Cox, 2010; Robinson & Dechant, 1997; Thomas & Ely, 1996), stating that the effective management of differences has a positive impact on a company’s success. Thus, an appropriate diversity management has become a strategic business imperative (Jackson & Alvarez, 1992; Jayne & Dipboye, 2004). In addition, well-managed board diversity can also be a competitive advantage (Hilb, 2012).

Beyond these outlined reasons for preserving and using valuable human resources, I will provide three important other reasons for companies to deal with health problems or disabilities of their employees.

First, people with disabilities comprise a big demographic group of possible customers and create an important market for companies. Mirroring the potential customers in terms of demographic characteristics at all hierarchy levels is considered to be a competitive advantage (Childs Jr, 2005). Konrad (2003: 5) states that employing diverse employees will lead to “market intelligence” in terms of acquiring a more diverse customer base. In a similar vein, Jackson and colleagues (1992) emphasize the importance of “customer literacy,” the need to understand what customers want. One promising
strategy in this regard is to have employees that reflect their customers and know their needs, in this case, people with health conditions or disabilities.

Second, companies attract public attention and interest. They are supposed to act according to a society’s norms, ethical standards, and values and to signal their commitment to live up to them (Dobbin, Kim, & Kalev, 2011). Thus, companies have a social responsibility to adequately deal with employees developing a health issue/a disability or to even actively recruit them (Markel & Barclay, 2009). Consequently, above and beyond economic reasons, trying to increase employee health and adequately dealing with people who have developed a disability is also an issue of corporate social responsibility, visible to potential talent as well as to customers and the society.

Finally, companies have to deal with legal obligations to employ and retain people with disabilities (Lalive, Wuellrich, & Zweimüller, 2013). An important legal advancement has been the entry into force of the United Nations Convention on the Rights of Persons with Disabilities in 2008. In Article 27 (work and employment), the “States Parties recognize the right of persons with disabilities to work, on an equal basis with others” (United Nation, 2013). To attain this goal, the states parties commit to prohibit any form of disability-related discrimination and to actively provide people with disabilities access to education, jobs, and job retention. Moreover, existing disability legislation in Germany and Austria oblige employers to fill a certain number of positions with people with disabilities to increase the employment quota of this group. In Switzerland, there is no employment quota for people with disabilities. According to Article 71 SGB IX (SGB IX Sozialgesetzbuch - Rehabilitation und Teilhabe behinderter Menschen, 2001), German employers of 20 employees or more have to fill 5 percent of their positions with people with an acknowledged disability (i.e., severe disability). In Austria, an employment quota of 4 percent is mandatory for organizations employing at least 25 people. The legislation of both countries requires employers who do not fulfill the quota to pay a fine. The amount depends on the size of the company and can be as high as 260 Euros (Germany) and 336 Euros (Austria) per month and per not employed person with disabilities.
1.1.2 Economic Costs to the Society

Above the mentioned reasons for companies, there are also strong economic and societal implications for using the work capacity of people with disabilities. The economic disadvantages of non-employed people with disabilities are twofold: On the one hand, they do not contribute to the economy; on the other hand, they cause enormous costs and challenge social security systems.

People with disabilities continue to be underrepresented in the workforce. In contrast to the overall trend, the unemployment rate among people with disabilities is still increasing (WHO, 2011). In the Global Report on Equality at Work 2011, the International Labour Organization (ILO, 2011) concludes that work-related discrimination is reflected in low employment rates of persons with disabilities. The employment rate of people with disabilities is only about 40 percent in Germany and 50 percent in Switzerland and Austria (OECD, 2010). The probability to be unemployed is approximately twice as high for people with disability as for those without, even in economically good times (OECD, 2010). This employment gap can be found throughout different countries (ILO, 2011).

Over and above the fact that unemployed people with disabilities are not contributing to the productivity of society, governments also face a growing number of disability benefit recipients, which exceeds five percent of the working age population (20-64) in the 28 OECD countries (OECD, 2009). These growing disability rates challenge social security systems, constituting a demand of resources which is almost 2.5 times higher than those of unemployment benefits. The amount of total public social spending for disability cost is approximately 10 percent on average across all OECD countries, and even up to 20-25 percent in some of them (OECD, 2010). OECD countries spend on average 1.2 percent of gross domestic product (GDP) on disability benefits and this figure rises to 2 percent when including sickness benefits (European Commission, 2011a).

Mental health problems have become the “biggest, new challenge” according to the OECD (2009: 15). Mental and behavioral disorders are related to high costs and high unemployment rates (OECD, 2009). Recent numbers of the German Federal Statistical Office show that they are among the most cost-intensive sicknesses in the German public health sector (Destatis, 2010). More specifically, the sickness costs due to men-
tal and behavioral illnesses have increased up to 26.7 billion Euros in 2006, which is 11.3 percent of the total sickness costs. This is 3.3 billion Euros more than in 2002. Above and beyond these costs, people with mental disabilities have the lowest labor market participation rate of all disabilities (about 25% in average, OECD, 2009). They are 30 to 50 percent less likely to have a job than those with other disabilities.

In addition to negative financial consequences, unemployment also has a negative impact on physical and psychological health (Wanberg, 2012). This, in turn, leads to a further decrease in health status and to higher medical costs. Governments and researchers consider labor participation “the main road to well-being” (Van Campen & Cardol, 2009: 56). To sum up, there is no way around retaining and including the largest minority of the world into the workforce.

1.2 Defining Health, Disability, and Related Constructs

In the following paragraphs, I will define the central constructs of this thesis, namely health and disability. Moreover, I will distinguish them from various related terms.

1.2.1 The International Classification of Functioning, Disability, and Health

In the preamble to the constitution of the World Health Organization, health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” (WHO, 1948). According to the WHO constitution “the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being.” Thus, health is individually, not universally defined, which means that every person has her own frame of reference.

Disability is viewed as a complex and multidimensional concept. Depending on the context and reference framework, there subsist a lot of different definitions. A generally accepted one does not exist (Colella & Bruyère, 2011). The Americans with Disabilities Act of 1990 states that a disability is: “An impairment that restricts the ability to perform normal daily activities.” More recent efforts of international experts led by the World Health Organization (WHO) have started to conceptualize disability based on a social rather than on a medical model. The main difference is that environmental factors in creating disability are taken into account (WHO, 2011). A central outcome of these efforts has been the International Classification of Functioning, Disability, and
Health (ICF), including a broad range of measures of activities and external factors (WHO, 2001). The graphic representation of the ICF is depicted in Figure 1.1. In line with this reconceptualization of the disability construct, its definition has been re-framed as “the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual’s contextual factors (environmental and personal factors)” (WHO, 2011: 4): Thus, there are factors both within and outside a person that – in combination – determine a person’s functioning. Health conditions or disabilities are viewed as a variable state rather than a fixed trait. Thus, a health or disability status is not constant but changes over time. This also applies to the onset of disability, its progression as well as its possible degression. Moreover, disability is viewed as a continuum, ranging from “minor difficulties in functioning to major impacts on a person’s life” (WHO, 2011: 22).
To understand the phenomenon of disability, it is important to know the differences between the terms impairment, activity limitation, participation restriction, health condition, and symptoms. In the ICF, three major areas are distinguished that are assumed to be interrelated (WHO, 2011): impairments, activity limitations, and participation restrictions. Problems with functioning are classified in one of these areas. Impairments are difficulties in body functions or structures, such as paralysis. Activity limitations refer to problems in executing activities, such as walking. Participation restrictions refer to any difficulty related to involvement in life, such as inaccessibility of a building for wheelchair users. Disability refers to problems in any or all of these areas of functioning. Health conditions are diseases, injuries, and disorders (such as depression, Down syndrome, or arthritis), while impairments refer to specific decrements in body functions and structures. Impairments are often referred to as symptoms. A primary health condition can lead to a wide range of impairments (WHO, 2011: 58).

There are two further important influencing factors depicted in Figure 1.1: environmental and personal factors. Environmental factors refer to all external factors that characterize the context in which people with different levels of functioning live. The environment has an enormous influence on the extent to which a disability is experienced. Inaccessible environments, for instance, can impede inclusion (e.g., a wheelchair user in a building without elevators). From an organizational perspective, the working context comprises various factors that impact a person’s health condition and level of functioning, such as organizational structures, HR practices, workplace conditions, and accommodations. Personal factors are individual characteristics such as self-efficacy, self-esteem, and personality, which are also essentially related to the activity level and participation of a person.

1.2.2 Disability Management

Disability management refers to the approach to reduce the negative impact of employees who are on sick leave, for the employees themselves as well as for the company (Harder & Geisen, 2011). Disability management is practiced by various professionals, such as occupational therapists, nurses, insurance specialists, psychologists, and rehabilitation professionals (Harder & Scott, 2005). Moreover, the term is also used to refer to the fact that a company has some kind of formal processes in place to deal with the emergence of disabilities.
Concerning the definitions of disability management, there can be found a broad spectrum in the literature. A common threat is the emphasis on the importance of early intervention. Shrey and LaCerte (1995: 5), for instance, define disability management as “a proactive process that minimizes the impact of an impairment on the individual’s capacity to participate competitively in the work environment.” This definition primarily focuses on the respective individual with health restrictions. Harder and Geisen (2011) extend this definition and emphasize the fact that disability management is a comprehensive process that relies on personal interactions rather than on pre-defined procedures. They define disability management as “a professional action that needs the capacity to be understood, analyzed and worked on with adequately developed organizational structures” (p. 2). They underscore the importance of an overall commitment from all organizational members to disability management and to working together in order to achieve the best possible solution. An even more comprehensive definition comes from Williams and Westmorland (2002). The authors state that “Disability management (also referred to as return to work programs) can be defined as a proactive, employer-based approach to: a) prevent and limit disability; b) provide early intervention for health and disability risk factors; and c) foster coordinated disability management administrative and rehabilitative strategies to promote cost effective restoration and return to work” (p. 88). This definition refers to an even broader perspective of disability management reaching from disability prevention to return to work processes. Concerning the prevention dimension, there is considerable overlap with concepts such as occupational health promotion. However, two decisive distinctions of disability management are the focus on work-related injuries and return to work (Williams & Westmorland, 2002).

1.3 Literature Review and Development of Research Questions

In this chapter, I will summarize the relevant body of work and embed my research questions in the literature. The objective of this review is placing my dissertation topic in a broader research context. By doing so, I will provide the theoretical foundation to understand the phenomena of health promotion and disability from a perspective of organizational behavior. Figure 1.2 provides an overview of the three studies of this dissertation by presenting the general and specific research topics as well as the related research questions that I derived. Whereas the first set of research questions
### Figure 1.2 Overview of Overall Topics, Specific Topics, and Research Questions of this Dissertation

<table>
<thead>
<tr>
<th>Study 1</th>
<th>Study 2</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Topic</strong></td>
<td><strong>Specific Topic</strong></td>
<td><strong>Research Questions</strong></td>
</tr>
<tr>
<td>Promoting health and preventing</td>
<td>A leader’s role in occupational</td>
<td>➤ How can HFL be conceptualized?</td>
</tr>
<tr>
<td>disabilities</td>
<td>health management</td>
<td>➤ How can it be measured?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ How is HFL different from LMX?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ How do LMX and HFL relate to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>employees’ well-being and central</td>
</tr>
<tr>
<td></td>
<td></td>
<td>job outcomes?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ How does HFL predict – mediated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>by emotional exhaustion and work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ability – turnover intention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and performance?</td>
</tr>
<tr>
<td>Dealing successfully with</td>
<td>Organizational characteristics</td>
<td>➤ Are there job satisfaction</td>
</tr>
<tr>
<td>employees with disabilities in</td>
<td>as boundary condition of job</td>
<td>differences between employees</td>
</tr>
<tr>
<td>the workplace</td>
<td>satisfaction differences</td>
<td>with and without disabilities?</td>
</tr>
<tr>
<td></td>
<td>between employees with and</td>
<td>➤ What role does perceived</td>
</tr>
<tr>
<td></td>
<td>without disabilities</td>
<td>structural flexibility play for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the relationship between</td>
</tr>
<tr>
<td></td>
<td></td>
<td>disability status and job</td>
</tr>
<tr>
<td></td>
<td></td>
<td>satisfaction?</td>
</tr>
<tr>
<td></td>
<td>The interplay of interpersonal</td>
<td>➤ How are instrumental social</td>
</tr>
<tr>
<td></td>
<td>and intrapersonal resources as</td>
<td>support and occupational self-</td>
</tr>
<tr>
<td></td>
<td>predictors of job success of</td>
<td>efficacy related to job</td>
</tr>
<tr>
<td></td>
<td>people with disabilities</td>
<td>performance in a sample of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>people with disabilities?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➤ How do instrumental social</td>
</tr>
<tr>
<td></td>
<td></td>
<td>support and occupational self-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>efficacy interact to predict</td>
</tr>
<tr>
<td></td>
<td></td>
<td>job performance of employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with disabilities?</td>
</tr>
</tbody>
</table>
focuses on promoting health and preventing disabilities, the second and third set of questions refer to successfully dealing with employees who have a disability.

1.3.1 The Management of Health as a Core Leadership Task

“Employers are key players in preventing health problems at work and facilitating a swift return to work for people absent from work due to sickness” (OECD, 2010: 125).

Several studies provide evidence for the relation between poor health and economic costs on the one hand (Suhrcke, Arce, McKee, & Rocco, 2012) and good health and economic performance (European Commission, 2011a) on the other hand. Also on the individual level, good health is considered to be one of the most essential contributors to productivity (Suhrcke, 2010). Thus, improving employees’ health status as well as proactively designing a health-promoting working environment and a respective organizational culture has become one of the top priority challenges of companies (Badura, 2012). The American Psychological Association (APA, 2013) recognized the huge costs of stress to employers by setting up a program called “Psychologically Healthy Workplace Program.” The APA estimates the cost of stress, displaying in absenteeism, turnover, and decreased productivity, to amount to approximately 300 billion dollars a year to US industries. The APA defines five cornerstones of a so-called “psychologically healthy workplace.” These are (1) employee involvement, (2) health and safety, (3) employee growth and development, (4) work-life balance, and (5) employee recognition.

Research consistently shows that health, especially psychological health is in danger when job demands exceed job resources (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Organizations aiming at keeping their workforce productive, need to invest in the reduction of demands and the provision of resources. Despite its practical importance, health interventions still lag behind their intended results (Cox, Taris, & Nielsen, 2010). One of the more promising avenues for health promotion is leadership behavior (Kelloway & Barling, 2010). Since leadership is more proximal than organization-wide health interventions, which are rather seen as unrelated to the daily business (Kelloway & Barling, 2010), it has the potential to more directly affect employees. Leadership has a central influence on working conditions in terms of rather operational procedures, but also in terms of workplace climates and
cultures. Leaders’ specific behaviors directed towards health promotion could be a key mechanism translating and interlinking health programs to concrete actions.

According to Yukl (2012: 66), the essence of leadership is “influencing and facilitating individual and collective efforts to accomplish shared objectives.” As enablers of objectives, leaders have an important role within a company’s occupational health management since they are the ones that determine the relative importance of health-promoting behaviors and procedures. Yukl (2012) recently introduced a new taxonomy and classified all types of leadership behaviors into four categories: task-oriented, relations-oriented, change-oriented, and external. The first two categories (i.e., task-oriented and relations-oriented) can be related to the promotion of employee health in terms of strengthening resources and reducing demands.

Task-oriented leadership behaviors comprise planning, clarifying, monitoring operations, and problem solving. Realistic planning is key to avoid work-related pressure and stress. Clarifying ensures “that people understand what to do, how to do it, and the expected results” (Yukl, 2012: 70). Clear goal assignments, explaining who does what and why, and setting adequate priorities also helps to prevent work-overload. Monitoring is especially important to evaluate progress, identify problems, and make sure the tasks are being performed as planned. Proactive problem solving behaviors are important for health-focused leadership behaviors. Effective leaders demonstrate rather proactive than reactive behaviors (Yukl, 2012), which means intervening timely when a health problem emerges instead of waiting until the health problem aggravates to a serious illness or disability.

Relations-oriented leadership behaviors capture supporting, developing, recognizing, and empowering. Leaders’ supporting behaviors are shown in demonstrating concern for the needs of employees, listening, encouraging, and communicating in conflicting situations (Yukl, 2012). Developing refers to facilitating and fostering an employee’s career. Recognizing and showing appreciation is also likely to be related to good health. Empowering covers behaviors directed at providing employees with autonomy and decision power. This is in line with a recent literature review of nearly 30 years of empirical research conducted by Skakon and colleagues (Skakon, Nielsen, Borg, & Guzman, 2010) addressing the relationship between leader behaviors and employees’ well-being. The behaviors studied comprised supportive, empowering, and considerate behaviors. Outcomes included lower levels of employee stress (e.g., Offermann &
Hellmann, 1996), reduced levels of burnout (e.g., Tourigny, Baba, & Lituchy, 2005), affective well-being (e.g., Gilbreath & Benson, 2004), and job satisfaction (e.g., Sellgren, Ekvall, & Tomson, 2008). Moreover, Kelloway and Barling (2010: 260-261) state that “virtually every outcome variable in the field of occupational health psychology is empirically related to organizational leadership.” In their review, they underline the important role of leaders and conclude that leadership behaviors are related to health- and safety-relevant outcomes.

To sum up, there is theoretical as well as empirical evidence that “good” leadership and health are positively related. Beyond relating general leadership behaviors to certain health outcomes, it seems worthwhile to investigate health-specific leadership behavior as an approach to sustainably and constantly affect employees’ health.

Concerning the relationship between general leadership practices and health, there is ample evidence in the literature illustrating the important role that supervisors play in terms of health promotion. For instance, findings support the influence of leader-member exchange (e.g., McGee, Goodson, & Cashman, 1987; Rousseau, Aubé, Chiocchio, Boudrias, & Morin, 2008) or transformational leadership (e.g., Arnold, Turner, Barling, Kelloway, & McKee, 2007; Sosik & Godshalk, 2000) on stress and well-being.

In contrast, there is virtually no research concerning health-specific leadership (Gurt, Schwennen, & Elke, 2011). As Eriksson (2011: 35-36) summarizes the status quo of this line of research, “there are many indications of the importance of health promoting leadership but there are very few empirical studies of this leadership type.” Against the background of the important influence that a leader has on his/her subordinates, this lack of research is surprising. Leaders affect employees through the implementation of organizational policies as well as the design of working conditions on the one hand, and through direct personal interaction on the other (Yukl, 2006). Thus, leaders are in an ideal position to address the topic of occupational health and put it into daily practice. Consequently, investigating a leader’s explicit engagement in health-supporting behaviors may be a promising avenue for preserving his or her subordinates’ health.

Gurt, Schwennen, and Elke (2011: 110) introduced the construct of “health-domain specific leadership” as “the leaders’ explicit and therefore visible consideration of and engagement in employee health.” They include task-related and relationship-related
aspects of health-specific leadership. However, there are several problems with this construct, both concerning its conceptualization and operationalization. First, it is not embedded into a broader theoretical framework. Moreover, Gurt and colleagues (2011) rather focus on the discussion with and information from the supervisor concerning health-related issues than on concrete leader behaviors. Third, they find a low mean value for their construct and acknowledge that this could be “a result of omitted or, conversely, irrelevant behaviours included in the scale” (Gurt et al., 2011: 122). Finally, the predictive validity of the construct seems questionable as the authors do not find a direct relationship between their health-specific leadership construct and employee strain. As discussed above, leadership might have wide ranging consequences for employees’ health. Yet to my knowledge, there exists no well-established and validated scale for health-oriented leadership. The lack of an accepted conceptualization as well as a validated measurement of this leadership type pose a barrier to further theory development and testing. Hence, I formulate the first research question as follows:

**Research Question 1: How can a health-focused leadership style be conceptualized and how does it relate to employees’ well-being as well as to central job outcomes?**

The first study of this dissertation addresses this question by developing a construct named health-focused leadership (HFL). By drawing from the fields of medicine, public health, disability management, and social work, HFL is conceptualized as consisting of the two sub-dimensions prevention and intervention. Combining knowledge of various disciplines of research and transferring it to the leadership context is a main contribution in broadening our understanding of health-promoting aspects of leadership behavior. This domain-specific leadership style is aimed at complementing – not replacing – existing, more general leadership behaviors. This is in line with Judge and Piccolo’s meta-analysis (Judge & Piccolo, 2004) which revealed that different leadership sub-dimensions predict various outcomes differently well. To demonstrate HFL’s joint and unique effects on work-relevant outcomes, I aim at differentiating it from more general relationship-based behaviors, specifically leader-member exchange (LMX; Graen & Uhl-Bien, 1995).

Whereas Gurt and colleagues (2011) examined the relationship between their health-oriented leadership construct and irritation/employee strain, I broaden the investigation of possible influences of the HFL construct to a variety of individual outcome variables, such as work ability, emotional exhaustion, supervisor satisfaction, commitment,
and turnover intention. Moreover, I place the newly developed construct within a broader frame of occupational health by demonstrating how it is – mediated by work ability and emotional exhaustion – related to job performance and turnover intentions.

In the following, I will provide an overview on research concerning people with disabilities in the workplace, which serves as a theoretical base for the research questions of Study 2 and Study 3 as they explicitly deal with employees with disabilities.

1.3.2 The Diversity Perspective on Disability – Similarities and Differences between Disability and General Diversity Research

Diversity research has started to spark scientific interest in the 1990s (Cox, 1993), resulting from the anti-discrimination movement in the United States of America (Ivancevich & Gilbert, 2000). Definitions of diversity differ in terms of content and broadness (for further details see Ashkanasy, Härtel, & Daus, 2002). Harrison and Klein (2007) define diversity as “the distribution of differences among the members of a unit with respect to a common attribute, X, such as tenure, ethnicity, conscientiousness, task attitude, or pay.” (Harrison & Klein, 2007: 1200). Disability status is typically considered to be one of these attributes (Bell, 2007; Shore et al., 2009). Thus, diversity is a dynamic, compositional construct, which is determined in relation to the respective group and context. Organizations aim at fostering positive effects of diversity while preventing its negative consequences. In general, theoretical explanations for positive effects of diversity focus on processes leading to a broader base of perspectives, experiences skills, and opinions, resulting in more creative or innovative problem solutions (Van Knippenberg & Schippers, 2007). Negative effects of diversity are theoretically explained by identity (Tajfel & Turner, 1986), categorization (Turner, 1987), dissimilarity (Byrne, 1971), and unequal group processes (Blau, 1964; Kreckel, 2004), that lead to detrimental consequences, such as stereotyping, discrimination, and exclusion (Dipboye & Colella, 2005).

In sum, disability and general diversity research share a common goal: Including minority groups or units of employees in organizations and the society. In this regard, dealing with stereotypes and discrimination is an important area of research. Diversity management, which is defined as “a voluntary organizational program designed to create greater inclusion of all individuals into informal social networks and formal com-
pany programs” (Gilbert, Stead, & Ivancevich, 1999: 61), should therefore try to max-
imize positive outcomes of diversity while minimizing detrimental consequences. Re-
ferring to differences in knowledge or experience among organizational members, 
scholars suggest that people with disabilities bring unique competencies into a team or 
an organization. Jent (2002), for instance, uses the term of “comparative competen-
cies” (komparative Kompetenzen). They are defined as a combination of the most rel-
evant social data (e.g., being a person with disability) and the resulting strength/s (e.g, 
having rich tacit knowledge) of a person. Similarly, Shore and colleagues (2011) pick 
up the idea of uniqueness in their inclusion framework. The authors conceptualize in-
clusion as a two by two matrix, consisting of the dimensions value in uniqueness (i.e., 
the need to maintain a distinctive and differentiated sense of self) and belongingness 
(i.e., the need to be part of interpersonal relationships). Depending on the combination 
of both, differentiation, assimilation, and inclusion emerge. Inclusion takes place when 
both uniqueness and belongingness work together, i.e., high belongingness paired with 
high value in uniqueness. This means that a group has to accept an individual with dis-
ability and simultaneously value his/her unique attributes. As a consequence, people 
with disabilities belong to a certain group, but can keep their uniqueness and do not 
have to completely adjust to the group (Roberson, 2006). For instance, employees with 
disabilities may have a different style of work behavior (e.g., have to take more 
breaks), but are valued because of their unique attributes, such as unconventional ex-
periences. Whereas most diversity researchers have merely focused on the belonging-
ness theme, Shore and colleagues (2011) add an important aspect: being valued for 
adding unique experiences and skills. In sum, viewed from this perspective, dissimilar-
ity is not something inherently negative that automatically leads to exclusion. The key 
issue is if people with disabilities are valued for being different or not.

People with disabilities typically possess different knowledge bases, experiences, or 
skills, which might help a team when dealing with non-routine problems, in case this 
additional “sociocognitive horsepower” (Carpenter, 2002: 280) is valued. Employees 
with disabilities or health restrictions may help a team to approach a problem from a 
different perspective. Disability-related knowledge may be especially important when 
stakeholders with disabilities are involved, such as customers with disabilities.

Despite an increase of research following the enactment of the Americans With Disa-
bilities Act (ADA) of 1990 especially in the fields of law, sociology, economics, and
rehabilitation, studies investigating the effects of disabilities in the workplace are still underrepresented in the literature of industrial and organizational psychology (Colella & Bruyère, 2011; Colella & Varma, 2001; Ren, Paetzold, & Colella, 2008). This situation is especially staggering against the background that the number of diversity studies has almost doubled every five years (time frame: 1988-2007; Harrison & Klein, 2007) and disability is typically considered to be one of the main diversity dimensions (e.g., Shore et al., 2009). Moore and colleagues (Moore, Konrad, Yang, Ng, & Doherty, 2011) stated just recently that disability status as a diversity attribute is not only underrepresented in practice, but also in research. A recent literature search of top tier journals publishing empirical studies revealed that there were only 18 studies published on this topic since the work of Stone and Colella in 1996 (Dwertmann, 2013). In contrast, 376 studies on other diversity attributes were identified. Thus, many important questions concerning the behavior of individuals with disabilities as well as that of their supervisors and colleagues have remained unanswered and need to be addressed.

The gap in this area of research weighs especially heavily since – despite the outlined similarities to general diversity research – disability diversity has unique characteristics. For general diversity research as well as for disability diversity, psychological barriers arising from stereotypes and (unconscious) discrimination processes are essential. For disability diversity, however, there are additional barriers arising from physical limitations (Böhm, Dwertmann, & Baumgärtner, 2011). Above the fact that those physical impairments may lead to detrimental group processes which exclude people with disabilities, additional unique challenges exist: Companies have to operationally deal with the demands of employing someone with a disability. Compared to other diversity categories, people with health problems or disabilities may be partially or temporarily less productive than people without disabilities due to their health-related restrictions. This is especially likely when their specific needs are not adequately met. The diversity perspective neglects these disability-related specifics and their implications so far.

The operative side of meeting the specific needs of people with disabilities is addressed by the topic of accommodations. Accommodations refer to workplace or work environment adjustments. Colella and Bruyère (2011) distinguish four common types of accommodations, namely assistive technologies (e.g., screen reader, wheelchair),
environmental accessibility (e.g., automatic doors, modified restrooms), personal assistance (e.g., job coach), and job restructuring (e.g., flextime, excused absences). In many situations, accommodations enable people with disabilities to work without physiological barriers. The importance of accommodations for people with disabilities becomes apparent when investigating the main topics of disability research in the literature: It turns out that accommodations are a quite prominent topic within the rather scarce number of disability studies (Dwertmann, 2013). The relevance of the accommodation topic, the necessity to address specific needs, and related questions imply that disability- (or health-) related diversity takes a special position among other categories of diversity.

Creating knowledge about factors influencing the behavior of people with disabilities and other organizational members is an important step towards a long-term inclusion of people with disabilities into the workforce. Hence, a specific focus on investigating people with disabilities in the workplace and identifying factors enabling their successful labor force participation is important to overcome the current unsatisfactory situation (WHO, 2011).

### 1.3.3 Research on Disability and Employment

Research on disability and employment has been mainly addressed by other research disciplines than management or industrial and organizational psychology, i.e., law, sociology, economics, and rehabilitation psychology (Colella & Bruyère, 2011). As a basis for the development of my research questions, I will provide an overview on empirical research conducted in the field of management/organizational behavior (Chapter 1.3.3.1). Based on this literature review, I will identify general and specific gaps of empirical research that are relevant for the future development of the field and thus, for this thesis (1.3.3.2). Concerning the theoretical view on disability in the field of management/organizational behavior, theories “do not explicitly portray disability as positive or negative, but rather propose variability in how people with disabilities deal with workplace situations and how coworkers respond” (Shore et al., 2009: 121, 122). A common thread, however, is that a significant amount of research focuses on theoretical reasons for the treatment differences between people with and without disabilities (Colella & Stone, 2005). A milestone for disability research in this regard has been established by Stone and Colella (1996) with their contribution in the Academy of
Management Review. The authors proposed a comprehensive model of factors affecting people with disabilities in the workplace. The model of Stone and Colella (1996) serves as a theoretical framework for Studies 2 and 3 of this dissertation and will be presented in Chapter 1.3.3.3. On the basis of the empirical literature review and based on the theoretical framework of Stone and Colella (1996), I will derive the research questions of Study 2 (1.3.3.4) and Study 3 (1.3.3.5).

1.3.3.1 Overview of Past Empirical Research from a Managerial Perspective

Colella and Bruyère (2011) identified three major lines of disability research: (1) accommodation, (2) selection and entry, and (3) integration into the workplace. I will adopt this classification of research fields and summarize the literature of each area.

**Accommodation.** Three main questions dominate the field of accommodation research: (1) When and why do people with disabilities ask for accommodations/withhold their request? (2) When and why are accommodations perceived as fair? (3) When and why are accommodations granted? To explain the request likelihood of people with disabilities to ask for accommodations, Baldridge and Veiga (2001) developed a framework of factors influencing the likelihood of people with disabilities to ask for an accommodation. In their framework, they proposed that situational characteristics influence a requester’s formulation of salient beliefs, and these, in turn, his or her intention to request an accommodation. Situational characteristics comprise identified workplace attributes (i.e., accommodation culture), accommodation attributes (i.e., accommodation magnitude), and disability attributes (onset controllability). Again, a combination of concrete physical as well as psychological barriers influences the assessment (salient beliefs) of social consequences, which, in turn, predicts if someone follows through with the request or not. Baldridge and Veiga (2006) also empirically tested the model and found corresponding evidence in a sample of hearing-impaired employees. The authors emphasized the importance for organizations to understand that employees with disabilities face numerous barriers in the workplace and that they may not fully contribute when needed accommodations are not requested, and thus, not implemented. Recently, Baldridge and Swift (2013) provided support that disability attributes and individual differences, namely age and gender, simultaneously influence the request withholding frequency.
A further topic of accommodation research is the fairness perception of accommodating people with disabilities. Paetzold and colleagues (2008) conducted an experimental study, in which they manipulated the granting of an accommodation, reward structure, and performance level of the person with a disability. They found that the granting of an accommodation was perceived as being unfair when the person with a disability excelled in performance.

Research has also examined responses to accommodation requests and on coworkers’ fairness perceptions of accommodations. The topic has been covered under a theoretical framework of procedural and distributive justice (Colella, 2001; Colella, Paetzold, & Belliveau, 2004). The propositions resulting from the assumed theoretical relationships have not been fully empirically investigated yet. However, some laboratory experiments and survey studies shed light on specific aspects related to the granting of accommodations. Florey and Harrison (2000) conducted two scenario-based experiments. They manipulated onset controllability of a disability (i.e., internally or externally caused) and the magnitude of accommodation requests. An externally caused disability (i.e., a hearing impairment resulting from an inner-ear disease) was positively related to the intention to grant an accommodation. The size of the requested accommodation was not directly related to behavioral intention, but mediated by attitude towards an accommodation and felt obligation. Moreover, past performance and previous contact also had an influence on intentions to grant an accommodation. Similarly, in a further experiment, Mitchell and Kovera (2006) confirmed that the probability to grant an accommodation decreased when the disability was viewed to be self-caused and increased when it was externally caused (e.g., by an accident). Further, they also revealed that an excellent work history increased the chance of attaining an accommodation.

**Selection and Entry.** This field of research addresses underlying reasons for the difficulties that people with disabilities face entering the workforce. Since my dissertation concentrates on people with disabilities in the workplace, I will not go into much detail here. Most notably, a meta-analysis by Ren, Paetzold, and Collella (2008) established a significant negative effect of disability on hiring decisions. There is also support that bias occurs in interview settings and that it depends on the type of disability (Colella & Bruyère, 2011; McLaughlin, Bell, & Stringer, 2004). Most of the studies in this field
of research are laboratory experiments using descriptions or video tapes of a hypothetical person with a disability.

**Workplace Inclusion.** A quite prominent topic within the field of workplace inclusion is performance evaluation. Similarly to the findings observed in studies on accommodations, performance evaluations are more negative when individuals with disabilities are perceived to be self-responsible for their disability status (Chan, McMahon, Cheing, Rosenthal, & Bezyak, 2005). Moreover, stereotypes in terms of disability-job fit have been identified as moderator of the relationship between disability and performance appraisals (Colella, DeNisi, & Varma, 1998; Colella & Varma, 1999). In general, there seems to be a bias in favor of people with disabilities as demonstrated in the meta-analysis of Ren and colleagues (2008), in which 13 experiments that investigated performance appraisals of people with disabilities were summarized. This finding is in line with a “‘positivity’ or ‘sympathy’ reaction” towards stigmatized groups (Carver, Glass, Snyder, & Katz, 1977). However, this positive bias does not affect employment or career opportunities. Stone and Colella explain this contradiction between higher performance ratings versus lower opportunities for advancement with lower expectations concerning the performance of employees with disabilities (Stone & Colella, 1996). Again, this theoretical proposition was empirically confirmed by the meta-analytic results of Ren and colleagues (2008).

The “least examined area in the field of disability and employment” constitutes research on organizational inclusion per se (Colella & Bruyère, 2011: 493). Results of surveys asking employees with disabilities how they rate their interactions with supervisors and coworkers revealed mixed findings (Colella & Bruyère, 2011). Colella and Varma (2001) combined data from an experiment as well as from a field survey to shed light on the relationship between a person with a disability and his/her supervisor. They found that people with disabilities generally had a lower quality relationship. Only if they engaged in impression management techniques, those negative effects were buffered. Summarizing the state of disability research on organizational inclusion, Colella and Bruyère (2011: 493) concluded that “not much is known about the experiences of people with disabilities at work.” Moreover, they call for the systematic examination of potential boundary conditions of the effect of having a disability on workplace inclusion. One positive exception in this regard is a large-scale survey conducted by Schur and colleagues (Schur, Kruse, Blasi, & Blanck, 2009). The authors
included fairness and responsiveness as moderating variables in their analyses to ex-
plain attitudinal differences between employees with and without disabilities. They
found that gaps in attitudes between employees with and without disabilities differ
across organizations. However, in organizations that were rated as fair and responsive
by all employees, these attitudinal differences dissolved.

1.3.3.2 Summary of the Literature Review and Resulting Research Gaps

In general, disability research in the area of industrial and organizational psychology is
limited. As outlined in the literature review, it is especially scarce in the field of work-
place inclusion. Colella and Bruyère (2011: 494) even summarized the status quo as
follows: “To some extent, what goes on in the organization has been ignored by disa-
bility and employment researchers.” Across the three general fields of research out-
lined above, the majority of the empirical studies investigated rather narrow aspects of
the overall picture. With regard to selection and entry, mainly judgments as a function
of certain disability attributes have been examined. Concerning the topic of accommo-
dation, the studies mainly focused on either the likelihood that an accommodation is
asked for, granted, or on colleagues’ fairness perceptions. Hence, this line of research
also focuses on a rather limited scope of the overall picture by looking at isolated phe-
nomena. Moreover, relating the topic of accommodation to organizational factors
would broaden our understanding of boundary conditions in the workplace that enable
their implementation.

The overall picture from a theoretical perspective is provided by the model of Stone
and Colella (1996), which will be referred to in the next chapter. The authors not only
provide different categories of factors but also suggest how they might interrelate.
However, the empirical investigations of many components of the model are still miss-
ing.

In addition, many studies solely focused on how people with disabilities are viewed by
others. Hence, the internal view of people with disabilities themselves and their em-
ployment experiences are missing from the literature so far. Moreover, there are virtu-
ally no empirical studies concentrating on directly work-related outcomes. Despite
their importance in the fields of organizational psychology and management, there are
almost no studies that look at job outcomes of people with disabilities.
A further common thread, which appears is the investigation of the phenomenon of disability in an experimental setting. Whereas experimental studies have many strengths, they can lack external validity (Shadish, Cook, & Campbell, 2002). Hence, more field studies with “real” people with disabilities are needed in addition to hypothetical people with disabilities or confederates who are often used in experiments. Further, most of the research is conducted in North America. This can result in a further reduction of generalizability, which is why these samples should be extended by samples from different countries/continents.

In this dissertation (Studies 2 and 3), I focus on employees with disabilities who are part of the workforce. Hereby, I contribute to the most under-researched topic of disability in the workplace, namely workplace inclusion. As outlined in the definition of disability used in this thesis (see Chapter 1.2.1), environmental as well as personal factors play an important role for the manifestation of a disability. My studies address both sets of factors. Moreover, I focus on so far neglected work-related outcomes, namely job satisfaction and job performance. In addition, I address Colella and Bruyère’s call (2011) for the investigation of boundary conditions of disability effects on work-related outcomes. Creating knowledge about factors interacting with disability status or external resources to predict job attitudes as well as job performance is an important step towards a long-term inclusion into the workforce.
The Treatment of Individuals with Disabilities in Organizations: A Theoretical Framework

The most comprehensive theoretical model within the field of organizational behavior that summarizes relevant factors influencing how people with disabilities are treated in organizations has been developed by Stone and Colella (1996). The model is presented in Figure 1.3. It outlines possible avenues for future research investigating the treatment of people with disabilities in organizations. This model serves as a theoretical framework for Studies 2 and 3 of my dissertation. Hereby, I follow the call made by Stone and Colella (1996) to empirically investigate central components of their proposed model.

As can be seen from Figure 1.3, I classified the variables pertaining to my research questions/studies into the model (gray-shaded). They will be further elaborated on in
the following paragraphs. In addition, I extended the box “attributes of individual with disability” by intrapersonal resources because they also constitute important attributes of an individual with a disability (Klimoski & Donahue, 1997).

In line with the definition of disability used in this dissertation (see Chapter 1.2.1), the model assumes that disability is an interaction between environmental and individual factors that influence and interact with each other. As mentioned in the introduction of this thesis, legislation plays an important role in determining certain organizational characteristics, such as technology, organizational design, norms and values, as well as organizational policies and practices. Further, Stone and Colella (1996) suggest that organizational characteristics determine who works for the organization. This influences the attributes of the person with a disability on the one hand and those of coworkers and supervisors on the other hand. The attributes of both, in turn, determine the psychological consequences taking place within the colleagues and supervisors of the employee with disability (psychological consequences of observers).

Organizational characteristics are also assumed to influence the nature of a job, more specifically ability requirements, interdependence, and reward systems. The nature of the job impacts stereotypical images and expectancies among coworkers and supervisors. Based on the attributes of a person with disability, such as the type of disability for instance, observers hold certain stereotypes concerning the competencies of the person and match these with the nature of the job, more specifically, with the assumed job requirements. As a result, attributes of the employee with disability interact with the job nature to predict work-related expectations of persons without disabilities and their reactions to working with colleagues with disabilities. These job-related expectations of observers influence the psychological consequences taking place as well as how observers treat individuals with disabilities.

Finally, observers’ treatment of people with disabilities – along with various other components of the model – influences the reactions of individuals with disabilities. Their responses are affective, cognitive, and behavioral. The behaviors of employees with disabilities are assumed to feed back to and interact with legislation as well as with organizational characteristics.
1.3.3.4 The Role of Organizational Characteristics for Job Attitudes of Employees with Disabilities

Investigating disability in the workplace includes the question whether people with disabilities make different workplace experiences than those without. The scientific literature suggests differences in workplace experiences between employees with and without disabilities (Schur et al., 2009; Stone & Colella, 1996). Generally it is known that job attitudes play an important role in predicting work behavior (Harrison, Newman, & Roth, 2006). A positive job attitude is related to employee contributions, it “leads individuals to contribute rather than withhold desirable inputs from their work roles” (Harrison et al., 2006: 320). Further, in a meta-analytic comparison study of behavioral outcomes, Harrison and colleagues consider job attitudes as “one of the most useful pieces of information an organization can have about its employees” (Harrison et al., 2006: 320-321). Therefore, in Study 2, I focus on job satisfaction as the potentially most central job attitude and construct of individual-level organizational research (Harrison et al., 2006). The scientific literature indicates that job satisfaction is directly related to the productive functioning of organizations (e.g., Ironson, Smith, Brannick, Gibson, & Paul, 1989). Among the outcomes of job satisfaction are performance (Judge, Thoresen, Bono, & Patton, 2001b; Riketta, 2008), absenteeism (Harrison & Martocchio, 1998), organizational commitment (Tett & Meyer, 1993; Yousef, 2002), organizational citizenship behavior (Murphy, Athanasou, & King, 2002; Organ & Ryan, 1995), and turnover (Shahnawaz & Jafri, 2009; Tett & Meyer, 1993). Thus, job satisfaction constitutes an important indicator of a person’s contribution to an organization’s success (Riketta, 2008). Attaining and maintaining high levels of job satisfaction should therefore be an essential goal of all organizations.

In terms of job attitudes, two research gaps emerge from the field of disability: The first and more general one is that few research has been conducted which investigates experiences of people with disabilities who are actually part of the workforce (Schur et al., 2009). Except the study of Schur and colleagues (2009), there are no other systematic studies of disparities in job attitudes of people with and without disabilities in the management literature. Rather, the findings on differences between individuals with and without disabilities in job outcomes mainly focus on more objective variables such as working conditions and job requirements (e.g., use of computers, frequency of in-
teractions, etc.; Yelin & Trupin, 2003). Therefore, I propose the following research question:

**Research Question 2a:** Are there job satisfaction differences between employees with and without disabilities?

The absence of studies investigating potential moderators of the relationship between disability and job attitudes constitutes the second major research gap in the disability literature (Colella & Bruyère, 2011). For companies, it is not only important to know whether there are differences in job attitudes, but especially how they can be explained and addressed. To take a step in this direction, research question 2b extends beyond investigating a main effect concerning job satisfaction differences and takes possible influencing factors of the disability-job satisfaction relationship into consideration. More specifically, perceived organizational flexibility will be investigated. This is because people with disabilities are confronted with certain health-related restrictions that lead to specific needs (Chapter 1.3.2). Consequently, an organization needs to address those by facilitating and implementing individualized solutions. For employees with disabilities, the degree of organizational flexibility might represent an enabling structural factor that ensures unbureaucratic realization of individualized solutions like for example the realization of an accommodation. Thus, organizational flexibility is assumed to have a positive effect on the relationship between disability and job satisfaction. This leads to the following research question:

**Research Question 2b:** What role does perceived structural flexibility play for the relationship between having a disability and job satisfaction?

As apparent from Figure 1.3, the factors investigated in Study 2 represent organizational characteristics as well as responses of individuals with disabilities. Specifically, I empirically examine the impact of one group of influencing factors, namely organizational characteristics, on one focal response of individuals with disabilities, namely job satisfaction, which is subsumed under affective and cognitive responses.

However, for certain questions related to the effects of having a disability, people without disabilities are not the appropriate standard of comparison. For companies, employing people with disabilities (in most cases retaining employees who have developed a disability), it is important that these employees perform as successful as possible. Consequently, the question is: What makes this specific group of employees...
successful? This implies that the frame of reference is not a person without disabilities but other individuals with disabilities. Consequently, instead of investigating differences between employees with and without disabilities, performance differences within the group of people with disabilities need to be investigated. What differentiates a successful employee with disabilities from a less successful one? This leads to research question 3, which explicitly analyzes predictors of individual performance of people with disabilities. Hereby, the interaction of interpersonal and intrapersonal resources is addressed.

1.3.3.5 The Interplay of Helping Behavior and Attributes of Employees with Disabilities on their Job Success

As outlined in the definition of disability as well as in the overall idea of the Stone and Colella (1996) model, there are external and internal factors influencing the behavior of people with disabilities. Concerning the external factors, Kulkarni and Lengnick-Hall (2011) emphasize the key role of colleagues and supervisors on employees with disabilities. One way by which colleagues and supervisors may turn into an interpersonal resource is by providing helping behavior, more specifically social support. Social support, referring to “the function and quality of social relationships” (Warner et al., 2011: 4), represents one essential interpersonal resource. As demonstrated by numerous studies on supported employment (e.g., Burns et al., 2007; Gutman, Kerner, Zombek, Dulek, & Ramsey, 2009; Tsang, Fung, Leung, Li, & Cheung, 2010), providing social support is considered to be a key success factor for people with disabilities’ job performance.

But is more social support always better? Are there individual differences between employees with disabilities concerning the social support-performance relationship? Following the call of researchers to account for intrapersonal resources when aiming to understand the influence of interpersonal resources (Warner et al., 2011), the effect of social support is assumed to depend on intrapersonal resources. Thus, I derive the following research question:

Research Question 3: How do interpersonal and intrapersonal resources interact to predict on-the-job success?
One important intrapersonal resource which has been linked to performance outcomes in many studies is self-efficacy (e.g., Judge & Bono, 2001). Self-efficacy describes a person’s belief in his or her capabilities to produce certain effects by his or her actions (social cognitive theory; Bandura, 1997). As a theoretical basis, I use the support buffer hypothesis (also referred to as the compensation hypothesis) (Schwarzer & Leppin, 1991) and the interference hypothesis (Schröder, 1997) to explain the assumed interaction between social support as an interpersonal resource and self-efficacy as an intrapersonal resource. Whereas the support buffer hypothesis postulates positive effects of social support (LaRocco, House, & French Jr, 1980), the interference hypothesis focuses on the downside of social support, postulating that it might interfere with high intrapersonal resources, such as self-efficacy, leading to detrimental effects such as a decline in autonomy (Schröder, 1997; Warner et al., 2011). I apply these hypotheses to explain differences in job success among people with disabilities. Hereby I follow a recent call made by Shore and colleagues (2011) to focus on positive outcomes instead of problems within diversity research. Instead of predicting discrimination, I concentrate on a positive work-related outcome, which is especially important for an organization’s productivity, namely job performance.

As illustrated in Figure 1.3, research question 3 addresses two components of the Stone and Colella model (1996): first, attributes of individuals with disabilities; second, observers’ treatment of individuals with disabilities. Hereby, instrumental social support is conceptualized as an example of constructive helping behavior.

To sum up, the idea of research question 3 is to investigate performance differences between people with disabilities within a framework of interpersonal and intrapersonal resources by applying the support buffer and the interference hypothesis. The main goal of the study is to shed light on the question of individual needs in terms of social support (i.e., observers’ treatment of individual with disability) depending on intrapersonal resources such as self-efficacy (i.e., attribute of a person with disability) to predict a productivity attribute (i.e., performance level).
An overview of the overall and specific topics as well as the related research questions of my three studies have been provided in Figure 1.2 and elaborated on in the chapters 1.3.1 and 1.3.3. Overall, my research questions deal with promoting health, preventing the emergence of, and dealing with disabilities in the workplace. Figure 1.4 provides an overview of the constructs I investigate in the three studies of this dissertation. I assigned all constructs to one of three categories: contextual factors, individual factors, and relevant outcomes that are affected by these factors. The numbers indicate the corresponding study. In line with the definition of health-related functioning (Chapter 1.2.1), I assume that contextual and individual factors both influence relevant work-related outcomes. Contextual factors refer to influences that relate to the working context. They include leadership (e.g., HFL, LMX), organizational characteristics (e.g., structural flexibility), and interpersonal resources (i.e., social support). Individual fac-
tors comprise within-person factors. They include occupational health and intrapersonal resources (i.e., self-efficacy). Occupational health is the core of this dissertation, comprising the health condition and disability status of employees. Outcomes that I investigate are emotional exhaustion, work ability, job attitudes, turnover intention, and job performance. While all of the outcomes are relevant for an organization’s productive functioning, their graphical alignment in Figure 1.4 follows a sequence from soft to hard factors.

In Chapter 1.3.1, I summarized the literature relevant for management and leadership in the field of occupational health and derived the research question of Study 1. I provided an overview on research on disability in the workplace in Chapter 1.3.3.1 and summarized the current state and the corresponding research gaps in 1.3.3.2. My dissertation is located within the organizational context, adding insights to the least researched field of disability and employment (Colella & Bruyère, 2011). The theoretical perspective on the treatment of individuals with disabilities in the workplace was provided in 1.3.3.3. On the basis of this overview on empirical research and theoretical considerations, I identified relevant research gaps and derived the research questions of this dissertation accordingly (1.3.3.4 and 1.3.3.5).

In sum, this dissertation addresses the following general research gaps:

- Shedding light on the role of leadership behaviors in promoting employees’ health, intervening when (early signs of) work-related health problems arise, and preventing long-term disabilities
- Adding new insights to the scarce research on disability in the workplace and acknowledging unique characteristics of disability compared to other diversity attributes (such as addressing specific needs of people with disabilities)
- Investigating the phenomenon of disability in a field setting and using non-American samples
- Concentrating on experiences of people with disabilities as well as on work-related outcomes and possible boundary conditions
- Focusing on the interaction of individual and contextual factors in disability research
- Empirically testing central parts of the Stone and Colella model (Stone & Colella, 1996)
With the three studies of this dissertation, I aim at making the following general contributions to the field of disability and employment:

- Advancing the conceptual understanding of HFL as a key mechanism to sustainably promote employees’ health by drawing from the fields of medicine, public health, disability management, and social work (Study 1)
- Developing a new construct and scale of HFL (Study 1)
- Focusing on positive and central work-related outcomes for the inclusion of people with disabilities, i.e., job satisfaction and job performance (Studies 2 and 3)
- Shedding light on the relationship between having a disability and job satisfaction (Study 2)
- Relating organizational characteristics favorable to the needs of employees with disabilities to job attitudes/job satisfaction differences between people with and without disabilities, specifically, investigating perceived organizational flexibility as a boundary condition of the emergence of job satisfaction of employees with disabilities (Study 2)
- Investigating the interplay of interpersonal and intrapersonal resources for the prediction of job success of people with disabilities (Study 3)
- Applying and extending the support buffer hypothesis and the interference hypothesis to explain underlying mechanisms of the link between instrumental social support and job performance of employees with disabilities (Study 3)
- Providing practitioners with explicit recommendations on how to deal with health- and disability-related challenges (all studies and additional literature)

1.4 Methodological Approach

1.4.1 Methodological Fit

Broadly speaking, research in social science has used two methodological approaches, namely qualitative and quantitative (Punch, 2005). In their paper on methodological fit in management field research, Edmondson and McManus (2007) emphasize the important role of the state of theory to come to the appropriate methodological decision.
The states of research are positioned along a continuum, ranging from nascent over intermediate to mature theory.

My studies cover all three states of theory development. In Study 1, I introduce a new construct, namely HFL. As suggested for nascent research, I chose a qualitative approach to develop the construct by conducting various interviews with colleagues at the university as well as with experts in the field of health and disability management. At later stages of Study 1, however, I proposed relationships between this new construct and established constructs, such as commitment, supervisor satisfaction, and turnover intention, as well as with intermediate constructs, such as work ability and emotional exhaustion. These research procedures classify as the “intermediate” archetype on Edmondson and McManus’ (2007) contingency framework and are tested with a quantitative approach.

I would position Study 2 in the intermediate to mature section since I combine a less investigated construct, namely disability, with rather mature constructs, namely centralization/formalization and job satisfaction. The main theoretical contribution refers to shedding light on the relationship between having a disability and job satisfaction. Therefore, I investigated perceived flexibility as a boundary condition of the emergence of job satisfaction. This is in line with one of Edmondson and McManus’ (2007: 1160) examples of the purpose of mature research, which is “new boundaries to existing theories.”

Study 3 can be located within intermediate and mature research prototypes since it tests the interplay of rather mature constructs (i.e., instrumental social support, occupational self-efficacy, and job performance) within a sample of people with disabilities. As suggested for mature research, I chose a quantitative approach.

To sum up, I mainly rely on existing constructs and measures. Exceptions are the newly developed construct of HFL as well as the introduction of an under-researched construct or group of people, namely employees with disabilities.

1.4.2 Research Paradigm and Study Design

As Edmondson and McManus (2007) propose for mature research states, I approached my three studies from a quantitative research paradigm with the exception of qualitative interviews used in the first stage of Study 1 to develop the scale items of the new
leadership construct. The data of all three studies were collected by using survey methodology, which is a recommended option for mature research fields. In all of my studies, I formulated research questions, resulting in specific, testable hypotheses.

In Study 1, I collected data in a German public service organization (n = 1,277). For Study 2, data were collected in cooperation with an agency focusing on benchmarking small to medium-sized companies. Overall, 110 companies took part in the survey (n = 4,141). The survey of Study 3 was administered in an Israeli call center agency, employing mainly people with disabilities (n = 51).

1.4.3 Measurement of Variables and Data Analysis

All data of this dissertation were collected via questionnaires. Almost all questionnaires were administered electronically. The only exceptions are 117 questionnaires in Study 2 that were filled in on paper-pencil surveys.

For all studies, I used well-established and validated scales. These are listed in the Appendix, separately for each study.

As suggested by Edmondson and McManus for mature research areas, statistical inference and standard statistical analyses were used. More specifically, I applied regression analyses (Cohen, Cohen, West, & Aiken, 2003) and structural equation modeling (Bollen, 1989) to test the hypotheses (Arbuckle, 2011). I conducted my statistical analyses using SPSS and AMOS 20.0.

Concerning the scales that were used, internal consistency and factorial structure were checked in each of my studies.

1.5 Outline of the Dissertation

This dissertation contains five main chapters. It is structured according to the research questions and corresponding studies. I will briefly summarize the chapters in the following, in order to provide a better orientation for the reader.

- Chapter 1: Introduction

In Chapter 1, I address health-related societal challenges and the relevance of my dissertation topic. Then, I define central constructs. Moreover, I present a literature
review and identify relevant research gaps, which set the ground for my research questions. I conclude with the presentation of the overall methodological approach.

- **Chapter 2: Study 1 – Health-Focused Leadership – Prevention and Intervention as Enablers of Followers’ Health and Well-Being**

In Chapter 2, I present a cross-sectional study focusing on the conceptualization and measurement of a health-related leadership style. Study 1 is composed of Study A and Study B. In Study A (n = 96), the construct is derived from various literature streams and a new scale to measure it is developed. In Study B, which was conducted in a German public service organization (n = 1,277), the validity of the new scale is tested; moreover, HFL is placed in a nomological framework of occupational health.

- **Chapter 3: Study 2 – Job Satisfaction of Employees with Disabilities: The Role of Perceived Structural Flexibility**

Chapter 3 deals with the second study, in which I focus on the minority group of people with disabilities in the workplace. I investigate perceived organizational flexibility as a moderator of the relationship between having a disability and job satisfaction. 4,141 employees from 110 small- and medium sized German companies participated in the investigation.

- **Chapter 4: Study 3 – Job Performance of Employees with Disabilities: Interpersonal and Intrapersonal Resources Matter**

In Chapter 4 of this dissertation I present Study 3, concentrating on the prediction of job success of people with disabilities. Hereby, I examine the interplay of instrumental social support as an interpersonal resource and occupational self-efficacy as an intrapersonal resource on job performance of employees with disabilities. The study was conducted in an Israeli call center that mainly employs people with disabilities. Data was provided from three different sources, and 51 cases containing full information were obtained.

- **Chapter 5: Overall Discussion and Conclusion**

The aim of the final chapter is to integrate the findings of all three studies by providing an overall discussion and conclusion. First, the contributions of the different studies are summarized to form an overall picture. Second, I provide practi-
cal implications on how to meet health- and disability-related challenges. To structure and integrate the practical implications, I subsume them under a framework that differentiates between strategy processes, leadership structures, and culture as main managerial fields of action (Bruch & Vogel, 2011). Then, I break the managerial fields of action into specific practical recommendations for top management, line management, and HR management. Third, I discuss overall limitations and ideas for future research. Finally, I draw an overall conclusion of my dissertation.
2 Study 1 – Health-Focused Leadership – Prevention and Intervention as Enablers of Followers’ Health and Well-Being

2.1 Abstract

The paper aims at advancing the conceptual understanding and measurement of health-focused leadership (HFL).\(^1\) By drawing from the fields of medicine, public health, disability management, and social work, and transferring this knowledge to the leadership context, we\(^2\) develop a construct with the two dimensions prevention and intervention. We define HFL as a domain-specific leadership style that goes beyond the relationship quality that a supervisor has with his or her employee. Moreover, we develop a scale to measure the construct and empirically test it in two different data sets (\(n_1 = 96; n_2 = 1,277\)). By conducting expert interviews (Pre-Studies), an exploratory factor analysis (Study A), an internal consistency assessment (Study A) as well as a confirmatory factor analysis (Study B), we ensure content as well as construct validity of the new measure. By contrasting HFL to leader-member exchange (LMX) and relating both constructs separately and simultaneously to various job-related outcomes, we establish concurrent and discriminant validity. We show that our new measure outperforms LMX as a predictor for health-related outcomes, i.e., work ability and emotional exhaustion. Finally, we extend the predictor-outcome models and incorporate the two HFL dimensions into an overall framework of occupational health.

**Keywords**: Health-Focused Leadership, Domain-Specific Leadership, Scale Validation, LMX, Work Ability, Emotional Exhaustion

---


\(^2\) Since all of my studies were conducted in collaboration with other authors, I will use “we” instead of “I” when referring to the studies.
2.2 Introduction

The fostering of employees’ physical and psychological health is gaining importance in organizations around the world. Recent data from the European Union (De Norre, 2009) indicate that 8.6 percent of workers in the EU-27 states experienced a work-related health problem in the past 12 months, which corresponds to 20 million employees. Those health-related problems covered both physical challenges (including bone joint or muscular problems) as well as psychological problems (including stress, anxiety, and depression) and led to sickness absence for 62 percent of the affected workers. For 27 percent of them, absence took longer than one month. In addition, as current statistics from Germany indicate, especially the number of psychologically-induced days absent increased significantly from 33.6 million in 2001 to 53.5 million in 2010 (German Federal Ministry of Labour and Social Affairs/Bundesministerium für Arbeit und Soziales, 2012). When it comes to perceived risks for health in the workplace, the numbers are even more impressive with 40 percent of employees in the EU (i.e., 80 million) reporting that they are exposed to factors that negatively affect their physical health and 27 percent of employees (i.e., 56 million) reporting that they are exposed to factors that adversely affect their mental well-being.

For organizations, these numbers are alarming for several reasons. First, a lack of health and well-being is related to several negative outcomes on both the individual and collective level. For instance, employees suffering from health-related problems have been found to be less productive, to be absent from work more often, and to make lower quality decisions as well as lower overall contributions to the organization (Danna & Griffin, 1999). In addition, they might suffer personally from various physiological, psychological, and emotional costs (Bourbeau, Brisson, & Allaire, 1996; Cartwright & Cooper, 1993). Second, the ongoing demographic change in most industrialized countries with increased longevity and shrinking birth rates will provoke an aging of the workforce combined with a lack of young professionals (Dychtwald, Erickson, & Morison, 2004; Tempest, Barnatt, & Coupland, 2002). Consequently, for organizations it will be even more pivotal to care for employees’ health and well-being as health risks typically increase with age (Ilmarinen, 1994, 2001). Perceived health

---

3 The introduction sections of Chapters 2 to 4 contain some redundant information also found in Chapter 1.1, due to the fact that Chapters 2 to 4 correspond to the full current versions of the respective papers.
problems have been found to be a primary predictor of older workers’ early retirement decisions (Mein et al., 2000) as well as a source of performance differences between younger and older workers (McCann & Giles, 2002). Based on these findings, organizations should have a keen interest in fostering their employees’ health and well-being across all age groups.

A key strategy in achieving this goal might be the fostering of appropriate leadership behavior. Past research has demonstrated that leadership is associated with various positive outcomes related to health including psychological well-being (Arnold et al., 2007; Nielsen, Randall, Yarker, & Brenner, 2008; Rousseau et al., 2008) and safety climate (Zohar, 2002a, 2002b), as well as with negative outcomes including stress (Offermann & Hellmann, 1996), burnout (Hetland, Sandal, & Johnsen, 2007), cardiovascular diseases (e.g., Wager, Feldman, & Hussey, 2003), workplace injuries and accidents (e.g., Barling, Loughlin, & Kelloway, 2002; Mullen & Kelloway, 2009). In sum, “good” leadership seems to play a key role in keeping employees healthy and happy (for recent reviews, see Kelloway & Barling, 2010; Kuoppala, Lamminpää, Liira, & Vainio, 2008).

Much less clear, however, seems to be the question what constitutes “good” leadership in terms of fostering employees’ physical and psychological health (Eriksson, Axelson, & Axelson, 2010). Existent research on the leadership-health relationship has mainly investigated the impact of established leadership approaches on followers’ stress and well-being, such as leader-member exchange (e.g., McGee et al., 1987; Rousseau et al., 2008) or transformational leadership (e.g., Arnold et al., 2007; Sosik & Godshalk, 2000). Only very recently, scholars started to ask if leaders can influence their followers’ health states in a more immediate and focused way. As we know from research in related fields such as on organizational climate, scholars should strive for a best possible match between predictor and outcome in order to gain a high predictive validity of their models (Schneider, Ehrhart, & Macey, 2011). For instance, diversity climate should be a better predictor for the well-being of minority groups in organizations than general organizational climate (Gelfand, Nishii, Raver, & Schneider, 2005). Similarly, for the field of leadership, Barling, Loughlin, & Kelloway (2002) argued that “safety-specific transformational leadership” is a better predictor of safety behavior than general transformational leadership. Even if leaders are rated as highly trans-
formational, there is no guarantee that they channel their efforts and attention to a specific topic, such as safety that might be of particular relevance in a given situation.

In spite of the promising potential of such domain-specific leadership (Barling et al., 2002) also for the field of health promotion, theoretical and empirical research on this topic is “virtually absent” (Gurt et al., 2011: 110). As Eriksson summarizes the status quo of this line of research (Eriksson, 2011: 35, 36), “there are many indications of the importance of health promoting leadership but there are very few empirical studies of this leadership type, and there is no consensus on the definition of the concept.”

Our study aims at closing this relevant gap by theoretically deriving and empirically testing a new scale on health-focused leadership in the organizational context. More specifically, the purpose of this article is threefold. As a first objective, we strive to build the case for a two-dimensional construct of health-focused leadership. Therefore, we will integrate research from leadership and organizational psychology with research from the fields of public health and disability management in order to derive the two basic dimensions of health-focused leadership (HFL) – namely prevention and intervention. As a second objective, we want to demonstrate the utility of the two-dimensional HFL construct in predicting relevant follower outcomes. Thereby, we will distinguish HFL from leader-member exchange (LMX) as another leadership paradigm that was often associated with employees’ health. We will demonstrate that HFL and LMX differently relate to several important employee outcomes (including work ability, emotional exhaustion, supervisor satisfaction, organizational commitment, and turnover). Finally, as our third objective, we strive to develop and test an integrated model of health-focused leadership and show how prevention and intervention behaviors are related to employees’ emotional exhaustion and work ability, which in turn, are related to employees’ performance and turnover intentions.

2.3 Theory and Hypotheses Development

2.3.1 The Relationship between Leadership and Followers’ Health

The subject of leadership is potentially one of the best researched topics in organizational behavior. Yukl (2012: 66) recently summarized the essence of leadership in organizations as “influencing and facilitating individual and collective efforts to accom-
Study 1 – Health-Focused Leadership

plish shared objectives.” Driven by increasing sickness and absence rates among their employees – especially with regard to mental disorders (WHO, 2011) – more and more organizations evaluate their employees’ health and well-being as one of the core objectives of the organization. Consequently, the potential impact of appropriate leadership behavior on employees’ health is becoming an increasingly important topic for both research and practice.

As current reviews of the literature indicate (Kelloway & Barling, 2010; Kuoppala et al., 2008; Skakon et al., 2010), leadership indeed seems to correlate significantly with health-related constructs including work ability, stress, strain, burnout, or well-being. From a theoretical point of view, this finding is not surprising as leaders are in an ideal position to have a beneficial – or unfavorable – impact on followers’ health. On the one hand, they have considerable position power and can reward or penalize followers, with potentially significant impact on followers’ behavior (Kelloway & Barling, 2010). On the other hand, they have multiple ways to shape the work environment of their followers through their own actions. Leaders’ behavior can be classified into task-oriented activities (e.g., developing plans, determining schedules, clarifying goals, setting priorities, monitoring progress); relations-oriented activities (e.g., supporting, developing, and empowering employees); change-oriented activities (e.g., encouraging innovation, facilitating learning, and communicating a vision); as well as externally oriented activities (e.g., networking, representing, boundary spanning, etc.) (Yukl, 2006, 2012). Especially task- and relations-oriented behaviors seem likely to influence employees’ health and well-being. For instance, as leaders are responsible for assigning work objectives and related timelines to their employees, they can either demand an appropriate workload (enabling employees to accomplish their goals within the scheduled working hours) or they can create work overload (resulting in overtime or weekend work). In addition, leaders can decide how much support they attribute to a certain individual (e.g., by coaching or training them, providing guidance, etc.), making it easier or more difficult to accomplish his or her work tasks. Especially in the long run, such leadership behavior that affects both followers’ job demands and job resources should have a significant impact on their stress and burnout levels as well as on their well-being and physical health (Hetland et al., 2007; Van Dierendonck, Haynes, Borrill, & Stride, 2004). This view is also consistent with various models of burnout in the workplace – such as Hobfoll’s (1989; Hobfoll & Freedy, 1993) conser-
vation of resources (COR) theory or the Job Demands-Resources (JD-R) model of burnout (Demerouti et al., 2001).

From an empirical point of view, there is also plenty of support for a positive relationship between leader behaviors (such as providing support) and followers’ health outcomes. In their systematic literature review, Skakon and colleagues (2010) identified thirty papers that examined the relationship between leaders’ behaviors and followers’ stress and well-being. These behaviors included supportive behaviors (eleven studies), empowering behaviors (five papers), considerate behaviors (four studies), and leading with integrity (one paper). Outcomes included lower levels of employee stress (e.g., Offermann & Hellmann, 1996), reduced levels of burnout (e.g., Tourigny et al., 2005), as well as higher affective well-being (e.g., Gilbreath & Benson, 2004) and higher job satisfaction (e.g., Sellgren et al., 2008).

Moreover, besides distinct leader behaviors, a number of studies has pointed to the importance of the relationship quality between the supervisor and his or her followers for employee health. For instance, McGee, Goodson, and Cashman (1987) showed that a difficult leadership relationship is positively related to followers’ stress levels. Epitropaki & Martin (2005) as well as Mardanov, Heischmidt, and Henson (2008) showed that a positive leader-member exchange quality (LMX; Graen & Uhl-Bien, 1995) is positively related to employees’ job satisfaction and well-being. Rousseau and colleagues (2008) found a positive relationship between LMX and subjective well-being as well as a negative relationship with psychological distress. Similarly, Thomas and Lankau (2009) found a negative relationship between high levels of LMX and follower burnout. Taken together, the relationship quality between leader and follower (operationalized as LMX) seems to play a key role for employees’ stress and well-being (Skakon et al., 2010). Thus, it should be taken into account when analyzing the potential effect of health-focused leadership behaviors on followers’ health outcomes.

2.3.2 Health-Focused Leadership as an Example of Domain-Specific Leadership Behavior

Given the overall encouraging results on the relationship between leadership behaviors and health outcomes, it seems worthwhile to explore what health-focused leadership might contribute to followers’ health and well-being over and above more general...
leadership approaches such as LMX. As described above, there has recently been scholarly work on domain-specific leadership, i.e. leadership engagement in a particular field. As we know from plenty of studies on leadership, leaders have the opportunity to make followers’ “attitudes, values, and behavior consistent with what the manager wants from them” (Conger, Kanungo, & Menon, 2000: 749); they can direct their employees’ attention to certain issues and develop a shared agenda for specific topics (Bass & Avolio, 1993).

Barling and colleagues (2002) were among the first to build upon such processes and to develop an example of domain-specific leadership behavior: They specified transformational leadership behavior for the context of safety by modifying existing items from the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1990). This line of work was taken up by Gurt and colleagues (2011: 110) who proposed “health-domain specific leadership” as “the leaders’ explicit and therefore visible consideration of and engagement in employee health.” We build upon their work and extend it by introducing a two-dimensional health-focused leadership scale consisting of prevention and intervention as two key influencing mechanisms promoting followers’ health.

2.3.3 Prevention and Intervention as the two Dimensions of Health-Focused Leadership

In order to develop a sound theoretical understanding of health-focused leadership, we draw from various sources including research from the fields of medicine, public health, disability management, and social work. All these fields have in common that they regard prevention and (early) intervention as two building blocks of long-term population health and well-being (e.g., Harder & Scott, 2005; Pomeroy & Holleran Steiker, 2012; Reddy, Newman, De Thomas, & Chun, 2009; Vaughn & Jacquez, 2011).

Prevention is typically understood as the keeping of something (such as an illness, injury, or harmful behavior) from happening. It comprises actions or behaviors that aim at reducing risk factors and at enhancing protective factors with regard to the development of diseases or other unwanted, negative behaviors or states (such as substance abuse, etc.) (Hawkins, Catalano, & Arthur, 2002). Preventive medicine has traditional-
ly been described as comprising three levels of prevention – namely primary, secondary, and tertiary prevention (Jekel, Katz, Elmore, & Wild, 2007; Leavell & Clark, 1965; WHO, 2011). **Primary prevention** targets the general population (universal prevention programs) or selective groups with a higher-than-average risk for a certain health problem (selective prevention programs). It aims at promoting health and well-being by eliminating the potential causes of disease or by increasing one’s resistance to disease (Mrazek & Haggerty, 1994; Muñoz, Mrazek, & Haggerty, 1996). **Secondary prevention or early intervention** targets individuals in early stages of a certain illness or showing first signs of problematic behavior. It aims at interrupting the disease process and preventing its progression by counseling or treatment activities. **Tertiary prevention** targets individuals with existing health problems and aims at limiting the physical and social consequences of symptomatic disease through a dedicated treatment or rehabilitation strategy. This third type is also referred to as treatment intervention (Jekel et al., 2007).

In sum, prevention, early intervention, treatment, and rehabilitation activities build a continuum. Depending on the specific situation, the respective behavior (prevention/early intervention/treatment) should be chosen. To employ such a gradual intervention strategy comprising both prevention and early intervention activities has been proven successful in many empirical settings and with regard to various health-related issues, including posttraumatic stress disorder (e.g., Au, Silva, Delaney, & Litz, 2012), healthy child development (e.g., Watson, White, Taplin, & Huntsman, 2005), or disability management (e.g., Harder, 2003; Hoefsmit, Houkes, & Nijhuis, 2012).

We build upon these findings and transfer them to the field of leadership and organizational behavior. Consequently, health-focused leadership behavior should comprise both prevention and early intervention behaviors (reflecting the first two stages of primary and secondary prevention). Tertiary prevention (comprising treatment activities) is less suited to be addressed by leadership behavior as employees with significant health problems are mostly unable to work and should be taken care of by specially trained personnel such as medical doctors or therapists. How can prevention and intervention behaviors be transferred to the leadership perspective in an organizational context?

First, with regard to prevention, leaders should try their best to keep harmful, unhealthy influences away from their employees. In many cases, such harmful conditions
should be characterized by high levels of stress or overloading that need to be prevented whenever possible. In order to do so, leaders should make sure that employees have an appropriate workload that fits with their personal and organizational resources (Demerouti et al., 2001). Moreover, leaders should enable employees to achieve their work goals within acceptable work hours, without regular overtime, the abandonment of holidays, etc. Finally, supervisors should try to balance their followers’ workload, making sure that after periods of intensive engagement, there are opportunities for recovery and re-charging one’s energy levels (Bruch & Menges, 2010).

Second, in cases where employees show first signs of illness (including both physical and mental problems), leaders should demonstrate a clear intervention behavior, making sure that employees understand that his or her supervisor cares for them and their health. Therefore, leaders have to recognize employees’ health problems and react timely and appropriately. They clearly have to signal followers that they do not regard illness as a “sign of weakness” and that they understand their employees’ problems. They should communicate to employees that health is important and that recovery has top priority over short-term work goals. In cases of more severe health issues, they should try to find a joint solution with their employees on how to handle and improve the work situation in order to support recovery. This might include measures of workplace accommodation, the restructuring of work tasks or work time, etc.

Taken together, based on findings from related research fields on the advantages of prevention and intervention behaviors for long-term health and well-being as well as our transfer of these results to the field of leadership, we propose the following:

Hypothesis 1. Health-focused leadership, as a construct, consists of the two distinguishable dimensions prevention and intervention.

2.3.4 The Scale Development Process

After having defined the HFL construct, we developed a measurement. Concerning the scale validation process, we deployed the steps proposed by Hinkin (1998). It consisted of five phases, which are illustrated in Table 2.1. The item development process followed a deductive approach, which is recommended when “researchers possess a working knowledge of the phenomena under investigation” (Hinkin, 1998: 107). According to Cronbach and Meehl (1955: 282), “content validity is ordinarily to be
Table 2.1 Overview of the Scale Development Process

<table>
<thead>
<tr>
<th>Phase</th>
<th>Study</th>
<th>Step of Scale Development</th>
<th>Sample</th>
<th>Outcome/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-Study 1</td>
<td>Literature review and identification of two dimensions of health-focused leadership</td>
<td></td>
<td>Initial item pool</td>
</tr>
<tr>
<td>2</td>
<td>Pre-Study 2</td>
<td>Generation of a preliminary pool of items; content validity assessment</td>
<td>Colleagues working in the same or a similar field of research</td>
<td>Item pool was reduced to 20 items</td>
</tr>
<tr>
<td>3</td>
<td>Pre-Study 3</td>
<td>Content validity assessment</td>
<td>Experts in the field of health and leadership</td>
<td>Item refinement; final item pool of 18 items</td>
</tr>
<tr>
<td>4</td>
<td>Study A</td>
<td>Exploratory factor analysis (EFA); dimensionality and reliability assessment</td>
<td>n = 96 members of the working population in Germany</td>
<td>Item pool reduced to 10 items; evidence for distinctiveness from LMX construct; evidence for a two-factor solution</td>
</tr>
<tr>
<td>5</td>
<td>Study B</td>
<td>Confirmatory factor analysis (CFA); concurrent and discriminant validity; reliability assessment</td>
<td>n = 1,277 employees of a German public service organization</td>
<td>Final health-focused leadership scale</td>
</tr>
</tbody>
</table>
established deductively, by defining a universe of items and sampling systematically within this universe to establish the test.” Thus, in the first phase, the items were generated based on our literature review (Pre-Study 1). In the second phase, Pre-Study 2, we discussed the full item pool with several colleagues from the same or a related field of research. As a result, the initial item pool was reduced to 20 items. In the third phase, we discussed and refined these 20 items with the help of experts in the field of health and leadership (Pre-Study 3). This process led to a drop of another two items. We then conducted Study A to empirically test the construct validity of our 18 remaining items. By following recommendations of Hinkin (1998), we further captured the LMX construct in order to link the new measure to a well-established one, which is related though distinct from ours. We provided evidence for the distinctiveness of the two dimensions of HFL as well as LMX by running an additional EFA that revealed three distinct factors. In the fifth phase, we conducted a confirmatory factor analysis (CFA) to validate the scale in a new sample (Study B). Moreover, we tested the separate as well as the simultaneous influence of LMX and HFL on different outcomes to establish concurrent and discriminant validity. Ensuring concurrent validity is part of the criterion-oriented validation process (Cronbach & Meehl, 1955).

2.3.5 The Relationship of Health-Focused Leadership and LMX

As outlined above, there is empirical evidence that a high relationship quality between leaders and their subordinates (LMX) is positively related to followers’ physiological and psychological health (e.g., Rousseau et al., 2008; Thomas & Lankau, 2009). From a theoretical point of view, this link is meaningful as LMX theory postulates that leaders develop different levels of relationship quality with their followers (Graen & Uhl-Bien, 1995; Sparrowe & Liden, 1997). Employees in high-quality LMX relationships benefit from increased levels of trust, emotional support, liking, as well as interaction and communication with their supervisor compared to their colleagues in low-quality LMX relationships (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Uhl-Bien, Graen, & Scandura, 2000; Wayne, Shore, & Liden, 1997). Moreover, they tend to receive more job-related information and greater job direction (Gerstner & Day, 1997). In line with the JD-R model (Demerouti et al., 2001), such a higher relationship quality can be regarded as a job resource, fostering employees’ well-being and preventing
negative health issues such as burnout. Given this positive relationship of high LMX levels with followers’ health and well-being, we expect that LMX shares explanatory variance with health-focused leadership in predicting followers’ outcomes.

A positive relationship between HFL and LMX might also be explained by a higher likelihood of supervisors to engage in HFL activities towards followers with whom they share a high-quality relationship. As outlined above, high LMX relationships are characterized by higher levels of support, trust and mutual loyalty (Cropanzano & Mitchell, 2005; Uhl-Bien & Maslyn, 2003). Consequently, supervisors seem likely to care more for the health of their in-group followers, compared to their subordinates with whom they only have low-quality relationships. This should also hold true for supervisors’ prevention and intervention leadership behaviors.

First, with regard to prevention, supervisors might privilege their closer followers with work tasks that better fit with their interests and capabilities. Moreover, as they regard the exchange relationship with their in-group employees as more long-term and reciprocal (Liden, Sparrowe, & Wayne, 1997; Uhl-Bien & Maslyn, 2003), they might prevent them more effectively from work overload and try to compensate intensive work periods with opportunities for regeneration. Second, with regard to intervention, supervisors spend more time and interact more closely with followers of their in-group (Wayne et al., 1997). Consequently they have a greater chance to perceive first indications of health problems. Also, it is more likely that they take this “early warning indicators” seriously and react accordingly, e.g., by looking for a joint problem solution together with their employee.

In spite of this positive relationship between HFL and LMX, both constructs are clearly distinct from each other. While LMX refers to the overall relationship quality between leader and follower, HFL is a domain-specific leadership style focusing on employees’ health and consisting of prevention and intervention behaviors. We define HFL as a specific supervisor behavior targeted at protecting an employee’s health. It is characterized by concrete actions that set the ground for implementing health-focused working conditions. First, risk factors of physical and mental health are purposefully diminished. Second, when first signs for a decline of an employee’s health status emerge, appropriate measures are taken. By doing so, the importance of health is demonstrated by the supervisor and reinforced by specific health-promoting behaviors.
Taken together, we hypothesize that there is a positive relationship between HFL and LMX, yet that both constructs are empirically distinct from each other.

_Hypothesis 2. Health-focused leadership is positively related to, yet theoretically and empirically distinct from LMX._

### 2.4 Study A

#### 2.4.1 Methods Study A

**2.4.1.1 Sample and Data Collection**

In Study A, we administered a survey to 150 members of the working population in Germany as this sample is representative of our population of interest. The final sample consisted of 96 participants which equaled a response rate of 64%. The descriptives and correlations of Study A are presented in Table 2.2. About half of the sample was male (49%), half female (51%). The age ranged from 23 to 63 years with a mean age of 35.21. Tenure was assessed in years with a mean of 6.66 (range: 1-39). Over half of our sample was employees without personnel responsibility and 11% were either CEO or members of the executive board of their company. About a third of the survey participants worked in a company with more than 2,000 employees. Hierarchy and firm size were assessed with 5 categories each. We collapsed two categories in each of these variables due to only a small number of cases, resulting in 4 categories for hierarchy and firm size. Thus, we created 3 dummies for both variables. For hierarchy, the dummy variables “CEO or member of the executive board,” “middle management,” and “team leader” were created. Being an employee without personnel responsibility was treated as the baseline category. For firm size, dummies for the categories 1-20, 21-500, 501-2000 employees were created. The category tapping companies with more than 2,000 employees served as the baseline category. Most of the survey participants worked full-time, with a mean of 88.54 percent working time.
**Table 2.2 Descriptive Statistics of and Correlations among Focal Variables of Study A**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>s.d.</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>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gender(^b)</td>
<td>0.51</td>
<td>0.50</td>
<td></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.</td>
<td>Age</td>
<td>35.21</td>
<td>9.15</td>
<td>-0.02</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>3.</td>
<td>Tenure</td>
<td>6.66</td>
<td>8.25</td>
<td>-0.04</td>
<td>0.73(^{***})</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Firm size(^c) (1-20)</td>
<td>0.19</td>
<td>0.39</td>
<td>-0.10</td>
<td>-0.31(^{**})</td>
<td>-0.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Firm size (21-500)</td>
<td>0.30</td>
<td>0.46</td>
<td>0.15</td>
<td>-0.04</td>
<td>-0.27(^*)</td>
<td>-0.31(^{**})</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Firm size (501-2000)</td>
<td>0.16</td>
<td>0.37</td>
<td>-0.02</td>
<td>0.02</td>
<td>0.04</td>
<td>-0.21(^*)</td>
<td>-0.29(^{**})</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Hierarchy(^d) (CEO/executive board)</td>
<td>0.11</td>
<td>0.31</td>
<td>-0.24(^*)</td>
<td>0.15</td>
<td>0.05</td>
<td>0.03</td>
<td>0.03</td>
<td>-0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Hierarchy (Middle Mgmt)</td>
<td>0.18</td>
<td>0.39</td>
<td>-0.10</td>
<td>0.32(^{**})</td>
<td>0.40(^{***})</td>
<td>-0.23(^*)</td>
<td>-0.19</td>
<td>0.09</td>
<td>-0.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Hierarchy (Team leader)</td>
<td>0.15</td>
<td>0.36</td>
<td>-0.01</td>
<td>-0.17</td>
<td>-0.13</td>
<td>0.19</td>
<td>-0.01</td>
<td>0.14</td>
<td>-0.15</td>
<td>-0.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Working hours</td>
<td>88.54</td>
<td>17.72</td>
<td>0.01</td>
<td>0.23(^*)</td>
<td>0.23(^*)</td>
<td>-0.23(^*)</td>
<td>-0.10</td>
<td>0.06</td>
<td>0.22(^*)</td>
<td>0.15</td>
<td>-0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>HFL_prevention</td>
<td>2.77</td>
<td>0.89</td>
<td>0.01</td>
<td>-0.23(^*)</td>
<td>-0.22(^*)</td>
<td>0.05</td>
<td>0.02</td>
<td>0.01</td>
<td>0.06</td>
<td>-0.18</td>
<td>0.15</td>
<td>-0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>HFL_intervention</td>
<td>3.57</td>
<td>0.90</td>
<td>-0.20</td>
<td>-0.10</td>
<td>-0.10</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.08</td>
<td>-0.03</td>
<td>-0.05</td>
<td>0.15</td>
<td>-0.16</td>
<td>0.56(^{***})</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>HFL_overall</td>
<td>3.18</td>
<td>0.79</td>
<td>-0.11</td>
<td>-0.19</td>
<td>-0.18</td>
<td>0.03</td>
<td>0.01</td>
<td>-0.04</td>
<td>0.02</td>
<td>-0.13</td>
<td>0.17</td>
<td>-0.13</td>
<td>0.88(^{***})</td>
<td>0.89(^{***})</td>
</tr>
<tr>
<td>14.</td>
<td>LMX</td>
<td>3.37</td>
<td>0.93</td>
<td>-0.01</td>
<td>-0.27(^*)</td>
<td>-0.19</td>
<td>0.02</td>
<td>0.06</td>
<td>-0.13</td>
<td>0.07</td>
<td>-0.05</td>
<td>0.14</td>
<td>0.02</td>
<td>0.57(^{***})</td>
<td>0.54(^{***})</td>
</tr>
</tbody>
</table>

\(^a\) n = 96. \(^b\) For gender, 0 = “male,” 1 = “female.”
\(^c\) For firm size (4 categories), baseline category = “over 2000.”
\(^d\) For hierarchy (4 categories), baseline category = “employee without personnel responsibility.”

All correlations were tested two-tailed.

* \(p < .05\)
** \(p < .01\)
*** \(p < .001\)
2.4.1.2 Measures

Besides the measurement of the demographic variables, we assessed the 18 items of our newly developed HFL scale as well as LMX. We used the widely-used and well-established LMX7 scale (Scandura & Graen, 1984) and adjusted the wording according to Liden, Wayne, and Stilwell (1993). We followed the suggestions made by Bauer and Green (1996) as well as by Tangirala, Green, and Ramanujam (2007) and split one of the items of LMX7 (“Do you usually feel that you know where you stand/do you usually know how satisfied your immediate supervisor is with what you do?”), capturing slightly different facets of LMX, into two separate items (“I usually know where I stand with my immediate supervisor” and “I usually know how satisfied my immediate supervisor is with me”). Thus, we used 8 items to capture the LMX construct. HFL and LMX were measured on a 5-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree.” All items included in the respective scales are displayed in Appendix 6.1.

2.4.2 Results Study A

2.4.2.1 Exploratory Factor Analysis

We conducted an EFA in four stages using the principal components method. The number of factors was not specified. Since we expected the two dimensions of health-focused leadership to be correlated, we chose an oblique rotation as the preferred type of rotation, namely promax (Brown, 2006). For the ease of interpretation, we used the pattern matrix, conveying the unique relationship between a factor and an indicator. Pattern matrices are interpreted in the same fashion as partial regression coefficients (Brown, 2006). In standard multiple regression, the coefficient reflects the relationship between predictor and outcome when all other predictors are controlled for; in the pattern matrix, the coefficient represents the association between the latent factor and the indicator while controlling for all other latent factors.

For all four stages, we used the heuristic proposed by Hinkin (1998) for the selection of the health-focused leadership items. Thus, all items that were included had to have a
loading of at least .4 on the appropriate factor and, in addition, the loading had to be twice as strong on the appropriate factor as on any other factor.

In the first stage, we ran an EFA with all newly developed health-focused leadership items. Contrary to our theoretical assumptions, the EFA revealed a three factor solution. Two of our items loaded on a third factor. When looking at the items’ content, we concluded that this could be a “communication factor.” The two items were deleted from the item pool. Further, we removed four more items since they showed pretty high cross-loadings on inappropriate factors. In sum, we deleted six inappropriately loading items in this first stage of analysis.

In the second stage, we repeated the analysis with the remaining items to confirm the factorial structure. As expected, two factors with eigenvalues greater than 1 emerged. This two-factorial structure was also indicated by a scree test. Both factors explained 66.20% of variance. Thus, Hypothesis 1 gained empirical support by our data.

In the third stage, we added the eight LMX items. The rationale to already include a different construct at this early stage of analysis is the intent to make sure that the items of the newly developed health-focused leadership style also demonstrate empirical distinctiveness from mere relationship quality and to ensure the discriminant validity of our measure. “To know what the construct is (convergent validity) we have to have some knowledge of what it is not (discriminant validity)” (McGrath, 1981: 205). Since two intervention items loaded on an unintended factor in stage three, they were excluded from the item pool.

In sum, the initial item pool of 18 items was reduced to 10 as our final item pool.

In the fourth and final EFA stage, we reran the analysis with the 10 selected items as well as the 8 LMX items. The results and final items are displayed in Table 2.3. They confirmed our theoretical assumptions and revealed three factors, one for each dimension of health-focused leadership and an additional third factor for LMX.
### Table 2.3 EFA Results for the Two Dimensions of the Health-Focused Leadership Scale and LMX with Oblique Rotation (Study A*)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prev_1</td>
<td>My direct supervisor regularly demands too much of his/her employees. (R)</td>
<td>-.02</td>
<td>-.10</td>
<td>.82</td>
</tr>
<tr>
<td>Prev_2</td>
<td>My direct supervisor makes sure that the workload of his/her employees is appropriate.</td>
<td>.03</td>
<td>.26</td>
<td>.68</td>
</tr>
<tr>
<td>Prev_3</td>
<td>My direct supervisor makes sure that there are possibilities for regeneration following phases of high workload.</td>
<td>.01</td>
<td>-.02</td>
<td>.76</td>
</tr>
<tr>
<td>Prev_4</td>
<td>My direct supervisor tries to keep away factors that may negatively impact the health of his/her employees (prevention of work overload, stress, etc.)</td>
<td>-1.10</td>
<td>.02</td>
<td>.94</td>
</tr>
<tr>
<td>Prev_5</td>
<td>My direct supervisor ensures that the regular working hours are usually met (through avoiding overtime, taking leave, etc.)</td>
<td>.05</td>
<td>-.07</td>
<td>.83</td>
</tr>
<tr>
<td>Interv_1</td>
<td>When an employee is absent due to illness, my direct supervisor interprets it as a sign of lacking resilience. (R)</td>
<td>-.24</td>
<td>.86</td>
<td>.08</td>
</tr>
<tr>
<td>Interv_2</td>
<td>When an employee is in poor health, my direct supervisor shows understanding for his/her situation.</td>
<td>.03</td>
<td>.89</td>
<td>-.12</td>
</tr>
<tr>
<td>Interv_3</td>
<td>When an employee has health problems, my direct supervisor responds appropriately.</td>
<td>.03</td>
<td>.85</td>
<td>.00</td>
</tr>
<tr>
<td>Interv_4</td>
<td>When an employee is in poor health, my direct supervisor tries to work together with him/her to find a joint solution.</td>
<td>.23</td>
<td>.73</td>
<td>-.01</td>
</tr>
<tr>
<td>Interv_5</td>
<td>When an employee is sick, my direct supervisor clearly communicates that “health comes first” and that he/she should fully recover from the illness before coming back to work.</td>
<td>.01</td>
<td>.81</td>
<td>-.02</td>
</tr>
<tr>
<td>LMX_1</td>
<td>I usually know where I stand with my direct supervisor.</td>
<td>.89</td>
<td>-.12</td>
<td>.02</td>
</tr>
<tr>
<td>LMX_2</td>
<td>I usually know how satisfied my direct supervisor is with me.</td>
<td>.86</td>
<td>.01</td>
<td>-.07</td>
</tr>
<tr>
<td>LMX_3</td>
<td>My direct supervisor understands my problems and needs.</td>
<td>.58</td>
<td>.09</td>
<td>.33</td>
</tr>
<tr>
<td>LMX_4</td>
<td>My direct supervisor recognizes my potential.</td>
<td>.91</td>
<td>.02</td>
<td>-.20</td>
</tr>
<tr>
<td>LMX_5</td>
<td>My direct supervisor has enough confidence in me that he/she would defend and justify my decisions if I were not present to do so.</td>
<td>.90</td>
<td>-.07</td>
<td>.04</td>
</tr>
<tr>
<td>LMX_6</td>
<td>Regardless of how much power he/she has built into his/her position, my direct supervisor would be personally inclined to use his/her power to help me solve problems in my work.</td>
<td>.76</td>
<td>-.07</td>
<td>.05</td>
</tr>
<tr>
<td>LMX_7</td>
<td>I can count on my direct supervisor to “bail me out,” even at his or her own expense, when I really need it.</td>
<td>.57</td>
<td>.10</td>
<td>.11</td>
</tr>
<tr>
<td>LMX_8</td>
<td>I characterize my working relationship with my direct supervisor as extremely effective.</td>
<td>.78</td>
<td>.07</td>
<td>.01</td>
</tr>
</tbody>
</table>

*a n = 96.

**Note:** (R) = reverse coded.
2.4.2.2 Internal Consistency Assessment

There is no need to establish the validity of a scale if it is not reliable. Reliability is a necessary condition for construct validity (APA, 1999). More specifically, validity is affected by reliability in the way that the maximum validity between two constructs “is equal to the square root of the product of their reliabilities” (Kaplan & Saccuzzo, 2008: 154). Reliability is defined as the accuracy or dependability of a scale (Cronbach, 1951). The most common measure of reliability that is used in field studies is internal consistency, employing Cronbach’s alpha (Cohen et al., 2003). We found good internal consistency reliabilities for both dimensions of HFL as well as for the overall scale and LMX8 (presented in Table 2.4). Hinkin (1998) recommends the elimination of items that do not contribute to a high reliability of the scales. Because of high inter-item-correlations of all of the items as well as no scope for further improving the reliability coefficients, we did not eliminate any item in this stage of assessment.

Table 2.4 Cronbach’s Alpha for the Health-Focused Leadership Dimensions and Overall Scale

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sub-Construct</th>
<th>Number of Items</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health-Focused Leadership</td>
<td>Prevention</td>
<td>5</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>Intervention</td>
<td>5</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>10</td>
<td>.90</td>
</tr>
<tr>
<td>LMX</td>
<td></td>
<td>8</td>
<td>.92</td>
</tr>
</tbody>
</table>

*a n = 96.

2.4.2.3 Descriptive Results

As depicted in Table 2.2, the two dimensions of the HFL construct correlate with \( r = .56 \) (\( p < .001 \)). The relationship between prevention and age \( (r = -.23, p < .05) \) as well as between prevention and tenure \( (r = -.22, p < .05) \) was significantly negative. LMX was also significantly negatively related to age \( (r = -.27, p < .05) \).
2.4.2.4 Relationship of HFL and LMX

To test Hypothesis 2, postulating a significant positive relationship between HFL and LMX, we conducted bivariate correlations between LMX and the two sub-dimensions of HFL as well as the overall construct. The results are also displayed in Table 2.2. LMX positively and significantly correlated with prevention \( (r = .57; p < .001; \text{two-tailed}) \), intervention \( (r = .54; p < .001; \text{two-tailed}) \), and overall HFL \( (r = .62; p < .001; \text{two-tailed}) \). Thus, Hypothesis 2 gained support.

2.4.3 Discussion Study A

In our pre-studies, we engaged in an extensive literature search and ensured the content validity of the HFL measure. In Study A, we provided evidence for the construct validity and appropriateness of HFL, consisting of the two dimensions prevention and intervention (Hypothesis 1). In addition, the high Cronbach’s alpha of the overall scale supported the idea of an overall HFL construct. Moreover, we theoretically and empirically demonstrated the distinctiveness of HFL and LMX. Finally, we showed the positive relationship between the two constructs (Hypothesis 2).

2.5 Study B

Study B is subdivided in three parts. In the first part, we provide further evidence for the construct validity of our newly developed health-focused leadership measure and test its factorial structure. In the second part, we investigate the separate as well as simultaneous influence of HFL and LMX on several important work-related outcomes to establish the concurrent and discriminant validity of the HFL construct. Therefore, we develop and test hypotheses in which we relate LMX and HFL to work ability, emotional exhaustion, supervisor satisfaction, organizational commitment, and turnover intention. In the third part of Study B, we extend the predictor-outcome models and incorporate the two HFL dimensions into an overall framework of occupational health.
2.5.1 Study B, Part 1: Confirmatory Factor Analysis and Factorial Structure of the HFL Construct

In order to quantitatively test the identified factor structure of the EFA, CFA is considered to be the method of choice (Hinkin, 1998). We compared the fit of two models with different factor structures. The first model was a one factor model, where all 10 items were used as indicators of one larger health-focused leadership factor. The second model was a first-order factor model, in which we used the two sub-dimensions of health-focused leadership as first-order factors, namely prevention and intervention. The two sub-dimensions were allowed to intercorrelate. The fit statistics of the two models are displayed in Table 2.5. The results indicate that the best-fitting model is the first-order factor model. The fit statistics demonstrate a notable improvement in the chi-square, CFI, SRMR, and AIC over the one-factor model, and thus, illustrate that the first-order factor model is superior.

Table 2.5 Comparison of Alternative Models of the Health-Focused Leadership Scale

<table>
<thead>
<tr>
<th>Structure</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>CFI</th>
<th>SRMR</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-Order Factor Model</strong></td>
<td>347.83</td>
<td>34</td>
<td></td>
<td>1</td>
<td>.964</td>
<td>.050</td>
<td>389.83</td>
</tr>
<tr>
<td>(correlated first-order factors)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>One-Factor Model</strong></td>
<td>2050.57</td>
<td>35</td>
<td>1702.74***</td>
<td>1</td>
<td>.768</td>
<td>.091</td>
<td>2090.57</td>
</tr>
<tr>
<td>(all 10 items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $n = 1,277$; CFI = Comparative fit index; SRMR = Standardized root mean square residual; AIC = Akaike information criterion.
** $= Chi-square-difference statistic $p < .001$ compared to the first-order factor model.
The lowest value of the AIC indicates the best fitting model.

2.5.2 Study B, Part 2: Establishing Concurrent and Discriminant Validity of the HFL Construct

2.5.2.1 The Relationship of LMX/HFL with Followers’ Work Ability

Given the ongoing demographic change in most developed countries as well as the related health challenges of an aging workforce (Dychtwald et al., 2004; Ilmarinen &
Rantanen, 1999), the concept of work ability has recently attracted considerable scholarly and practical attention. Based on work by researchers from the Finnish Institute of Occupational Health (Ilmarinen & Rantanen, 1999; Tuomi, 1997), work ability has been defined “as the ability of a worker to perform his/her job, taking into account the specific work demands, individual health condition, and mental resources” (De Zwart, Frings-Dresen, & Van Duivenbooden, 2002: 177).

Among the factors fostering work ability to the greatest extent, Tuomi and colleagues (Tuomi, Ilmarinen, Martikainen, & Klockars, 1997a) identified the reduction of repetitive work, an increase in physical exercises, and improving supervisor attitudes. The important role of supervisors for followers’ work ability has been confirmed by the work of Tuomi, Huuhtanen, Nikiri, and Ilmarinen (2001) who found poor management, uninspiring work, and lack of freedom to decrease work ability.

Given its positive relationship with various health-related outcomes, we propose that high levels of LMX are also positively related with followers’ work ability. It can be expected that those followers experiencing a high quality relationship with their supervisors profit from higher levels of empowerment and freedom to act, more interesting work assignments, and generally lower levels of negative stress and strain (Aryee & Chen, 2006; Dulebohn et al., 2012; Liden et al., 1997), which in turn, should positively relate to their work ability. Based on these assumptions, we propose the following hypothesis:

**Hypothesis 3a. LMX is positively related with followers’ work ability.**

The work ability of employees should be strongly related to supervisors’ HFL behaviors as well. In general, preventive HFL behaviors aim at a positive balance between health-related risk factors and protective factors in the workplace. Most importantly, preventive leaders try to avoid continuous work overload and make sure that their employees are not exposed to negative workplace factors such as constant stress. Based on findings from Tuomi and colleagues (2001) that a restless work environment, work overload, and dissatisfaction with the worktime system negatively affect employees’ work ability, we assume that prevention behaviors, which are specifically targeted at reducing such negative factors, are positively related to followers’ work ability.

In addition, intervention behaviors ensure an individual’s long-term work ability in situations when first health problems arise. Research has demonstrated that in cases of
sickness absence, early interventions are an effective tool to foster employees’ return-to-work and long-term work ability (e.g., Hoefsmit et al., 2012). Moreover, low leader support was found to correlate positively with the duration of work disability (Janssen et al., 2003; Krause, Dasinger, Deegan, Rudolph, & Brand, 2001). Together, these findings clearly build a case for the effectiveness of intervention behaviors of leaders – such as discussing health issues with employees who experience health problems or trying to find joint solutions for work task adjustments or workplace accommodations – in order to reinstate followers’ work ability. Based on these arguments, we propose the following:

**Hypothesis 3b.** Prevention and intervention are positively related with followers’ work ability.

Finally, we investigate the interplay of LMX and prevention/intervention when work ability is simultaneously regressed on the predictors. While LMX as a measure of relationship quality between supervisor and follower should positively affect work ability through more general processes like increased feelings of empowerment, reduced levels of stress, and a more satisfying and mutual exchange relationship (Liden et al., 1997), HFL should impact followers’ work ability more directly and thus, strongly. This assumption is in line with the premises of domain-specific leadership, arguing for a stronger effect of leadership engagement in a specific field compared to a more general one (Barling et al., 2002; Gurt et al., 2011). Consequently, we propose the following:

**Hypothesis 3c.** When entered simultaneously, both the prevention and the intervention dimension of health-focused leadership relate positively and stronger than LMX to followers’ work ability.

### 2.5.2.2 The Relationship of LMX/HFL with Followers’ Emotional Exhaustion.

HFL should not only positively affect followers’ physical health and work ability but also their psychological health. One of the most intensively researched outcomes in terms of psychological health is emotional exhaustion, referred to as “feelings of being overextended and exhausted by the emotional demands of one’s work” (Demerouti et al., 2001: 499; Maslach, 1982). According to Maslach, Schaufeli, and Leiter (2001:
emotional exhaustion is the “central quality of burnout and the most obvious manifestation of this complex syndrome.”

Based on well-established models of employee burnout such as the COR (Hobfoll, 1989) and the JD-R model (Demerouti et al., 2001), we expect that LMX is negatively related to emotional exhaustion by providing followers with additional work and social resources (such as increased job guidance, feedback, role clarity, etc.) for handling job-related demands. There is also empirical support for such a negative relationship between LMX and emotional exhaustion as demonstrated by Thomas and Lankau (2009). Finally, for stress as a potential antecedent of emotional exhaustion, there is also plenty of support for a negative relationship with LMX (e.g., Lagace, Castleberry, & Ridnour, 1993; Rousseau et al., 2008). Based on these arguments, we propose the following hypothesis:

**Hypothesis 4a. LMX is negatively related with followers’ emotional exhaustion.**

According to the JD-R model (Demerouti et al., 2001; Schaufeli & Bakker, 2004), job demands that exceed one’s capabilities (such as constant work overload and chronic time pressure) cause a health impairment process in which course job demands overtax employees’ energy resources and may thus lead to emotional exhaustion and sick leave (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Bakker, Demerouti, & Euwema, 2005).

We propose that prevention behaviors are particularly well-suited to affect and inhibit this health impairment process. For instance, prevention-oriented leaders will proactively adapt the workload according to their followers’ abilities to reduce the risk of burnout. Moreover, they will assure that employees get opportunities to recover after work-intensive time periods, avoiding permanent work pressure that depletes employees’ available resources. In sum, prevention-oriented supervisors can be expected to regard psychological health as an important, long-term resource that should not be sacrificed for obtaining short-term business goals. Hence, they will proactively make sure that job demands stay within a healthy range.

Also intervention behaviors seem likely to positively affect followers’ psychological health when first signs of emotional exhaustion arise. Health-focused leaders will intervene by providing additional resources to employees, the second building block of the JD-R model (Maslach & Leiter, 2008; Schaufeli & Bakker, 2004). First and fore-
most, they will show understanding for the employee and will try to change the situa-
tion (e.g., by restructuring work tasks, setting priorities, etc.). In contrast, leaders
showing low levels of health-focused leadership might interpret signs of emotional
exhaustion as a personal problem and weakness of the respective follower and miss the
chance to intervene, ultimately leading to a further increase in emotional exhaustion
due to missing supervisor support. Taken together, we propose the following hypothe-
sis:

_Hypothesis 4b. Prevention and intervention are negatively related with followers’
emotional exhaustion._

In line with Hypothesis 3c and the potential advantages of domain-specific leadership
styles for achieving results in particular fields such as health, we expect prevention and
intervention to relate more strongly and negatively with followers’ emotional exhaus-
tion than LMX. More specifically, we propose that the prevention dimension of HFL
should show the strongest negative relationship with emotional exhaustion, given its
clear focus on the prevention of too excessive job demands.

_Hypothesis 4c. When entered simultaneously, both the prevention and intervention
dimension of health-focused leadership relate negatively and stronger than LMX with
followers’ emotional exhaustion. Prevention relates the most strongly and negatively
with emotional exhaustion._

HFL should be a strong predictor of both physical and psychological health. However,
it should also relate to important, yet not directly health-related outcomes such as su-
ervisor satisfaction, organizational commitment, and turnover intention. Again, we
first hypothesize the relationship of LMX with these outcomes, followed by the rela-
tionship with HFL, and the interplay of all three predictors.

### 2.5.2.3 The Relationship of LMX/HFL with Followers’ Supervisor Satisfaction,
Organizational Commitment, and Turnover Intention

To argue for positive relationships of LMX with desirable follower outcomes, scholars
typically rely on social exchange theory (Blau, 1964; Erdogan & Liden, 2002; Liao,
Liu, & Loi, 2010). Whereas low quality LMX relationships are based on more formal-
ized and immediate economic exchange processes (pay for labor supply), high quality
LMX relationships are characterized by more long-term, mutual, and social exchange
processes (Liden et al., 1997). Based on the norm of reciprocity (Gouldner, 1960), followers who profited from the advantages of a high quality LMX relationship should feel obliged to also help those who have helped them, i.e., their supervisor and their organization. Consequently, followers perceiving a high quality LMX relationship are typically expected to show a higher level of supervisor satisfaction, a higher organizational commitment to their organization, as well as lower turnover intentions. In contrast, employees perceiving a low LMX relationship quality can be expected to receive much less support from their supervisor, negatively affecting their feelings of obligation towards their leader and their organization. This, in turn, should also decrease their supervisor satisfaction and their commitment while it should increase their turnover intentions.

From an empirical point of view, there is plenty of support for this view. In their meta-analysis on LMX, Gerstner and Day (1997) found significant and strong associations between LMX and satisfaction with supervision (corrected $r = .71$), organizational commitment (corrected $r = .42$), and turnover intentions (corrected $r = -.31$). A recent meta-analysis on LMX by Dulebohn and colleagues (2012) supported these findings with regard to all three outcomes of LMX. Based on these arguments, we hypothesize the following:

*Hypothesis 5a. LMX is positively related with followers’ supervisor satisfaction.*

*Hypothesis 6a. LMX is positively related with followers’ organizational commitment.*

*Hypothesis 7a. LMX is negatively related with followers’ turnover intentions.*

Health-focused leadership that comprises prevention and intervention behaviors seems suitable to have a positive effect on followers’ satisfaction with their supervisors as these take a credible interest in their followers. They are willing to set aside short-term business objectives for the sake of the health of their followers, e.g., by sending sick employees home and communicating that health comes first. Through this care for their employees’ health, they clearly signal that they are interested in the long-term well-being of the individual and not only in the short-term manpower that the respective employee provides. This should increase followers’ satisfaction with their supervisor.

Moreover, health-focused leaders will try to proactively align their employees’ job tasks with their physical and psychological capabilities in order to prevent feelings of
constant overload, stress and strain. By doing so, they will create positive work experiences for their employees as these will perceive their leader and indirectly their organization to be supportive and caring. In their meta-analysis on antecedents and outcomes of organizational commitment, Meyer and colleagues (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002) identified such positive work experiences, and more specifically experiences of being supported, as one of the strongest predictors of commitment. This is also in line with the central arguments of Eisenberger and colleagues’ theory of perceived organizational support (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). Such health-related support by their leaders should become especially obvious and important to employees in cases of actual health problems. If leaders engage in early intervention behaviors, show understanding for their employees’ health challenges and try to find joint solutions, this might be an especially strong trigger of followers’ organizational commitment.

Similarly, prevention and intervention behaviors should also reduce followers’ turnover intention as they demonstrate leaders’ support for their employees’ health and long-term well-being. Meta-analytical findings by Humphrey, Nahrgang, and Morgeson (2007) indicate that social characteristics in the workplace (including social support) explain as much as 24% of incremental variance in employees’ turnover intentions. Based on these arguments, we propose the following hypotheses:

Hypothesis 5b. Prevention and intervention are positively related with followers’ supervisor satisfaction.

Hypothesis 6b. Prevention and intervention are positively related with followers’ organizational commitment.

Hypothesis 7b. Prevention and intervention are negatively related with followers’ turnover intentions.

When LMX, prevention, and intervention are considered jointly regarding their relationships with supervisor satisfaction, organizational commitment, and turnover intentions, we expect LMX to have the strongest impact. The reason for this assumption is that LMX is a measure for the overall relationship quality between supervisor and follower which should explain much variance in employees’ overall satisfaction with both their leader and their workplace. While HFL as a domain-specific leadership style should have clear advantages in predicting followers’ health-related outcomes, LMX
Hypothesis 5c. When entered simultaneously, LMX relates most strongly and positively with followers’ supervisor satisfaction.

Hypothesis 6c. When entered simultaneously, LMX relates most strongly and positively with followers’ commitment.

Hypothesis 7c. When entered simultaneously, LMX relates most strongly and negatively with followers’ turnover intentions.

2.5.3 Study B, Part 3: An Overall Model of Occupational Health

In part 3 of Study B, we develop and test an overall model of occupational health in which HFL behaviors relate both directly and indirectly to followers’ job performance and turnover intention through the mediation of emotional exhaustion and work ability. The overall model is depicted in Figure 2.1. Relationships of HFL with work ability, emotional exhaustion, and turnover intention were already argued for in Hypotheses 3b, 4b, and 7b. The remaining relationships will be established in the following section.

2.5.3.1 The Relationship of HFL with Followers’ Job Performance

Various processes might account for positive performance effects of HFL. First, in line with our Hypotheses 6b and 7b which argued for a positive relationship of HFL with followers’ organizational commitment and a negative relationship with their turnover intention, we propose that high levels of HFL make it more likely for employees to feel supported by their supervisor and their organization. Based on social exchange theory and a norm of reciprocity (Erdogan & Liden, 2002; Gouldner, 1960), employees perceiving such positive investments in their health should be more willing “to give back” to the organization by showing higher levels of engagement with ultimately positive effects for their individual job performance.

Second, and maybe more importantly, there should be performance-related effects of HFL transmitted through employees’ physical and psychological well-being. Employees in poor health states have been found to be less productive and to make lower qual-
ity work-related decisions (Danna & Griffin, 1999; Schultz & Edington, 2007; Vandenberg, Robroek, Plat, Koopmanschap, & Burdorf, 2011). Leaders engaging in prevention and intervention behaviors make it more likely that their employees are in good health states and have the necessary physical and psychological stamina to meet their job-related goals. With regard to prevention behaviors, HFL-oriented leaders will proactively manage their followers’ tasks in order to match them with their respective resources and to avoid excessive demands. With regard to intervention behaviors, leaders will intervene whenever first signs of health challenges arise. They will support their followers in their convalescence (e.g., through workplace accommodations and work re-design) and thereby reduce employees’ recovery time with potentially positive effects for their job performance.

Finally, by creating a health-conscious organizational climate, HFL-oriented leaders make it more likely that employees speak up whenever health challenges arise. Instead of putting energy into the concealment of problems, both supervisor and employees can invest in finding an appropriate solution, thereby fostering followers’ long-term job success and performance.

Hypothesis 8. Prevention and intervention are positively related with followers’ job performance.

2.5.3.2 The Relationship of Followers’ Emotional Exhaustion with their Job Performance and their Turnover Intention.

Among the most intensively discussed consequences of emotional exhaustion (or burnout) is a potential decrease in job performance (Maslach, 1982). From a theoretical point of view, employees experiencing high levels of emotional exhaustion are likely to lack the necessary energy resources necessary to accomplish work tasks successfully (Singh, Goolsby, & Rhoads, 1994). In addition, Bakker, Demerouti, and Verbeke (2004) describe that employees experiencing burnout might be trapped in negative, vicious spirals, making it impossible for them to ask for help or to change the work situation, resulting in negative effects for their job performance. Finally, emotional exhaustion might cause a deterioration of employees’ self-confidence and work-related self-efficacy, again with negative effects for the accomplishment of work tasks and their related job performance (e.g., Bakker, Demerouti, Taris, Schaufeli, &
Schreurs, 2003). While being intuitively intriguing, empirical evidence for such a negative relationship of burnout with job performance is comparably limited (Halbesleben & Buckley, 2004; Wright & Bonett, 1997), though existent (e.g., Bakker et al., 2004; Cropanzano, Rupp, & Byrne, 2003; Maslach & Leiter, 2008; Parker & Kulik, 1995). In sum, based on the arguments presented above, we propose the following.

**Hypothesis 9a. Followers’ emotional exhaustion is negatively related with their job performance.**

Emotional exhaustion should also make it more likely that employees withdraw from the organization, resulting in a higher turnover intention (Cropanzano et al., 2003; Lapointe, Vandenbergh, & Panaccio, 2011; Westman & Eden, 1997). In general, the experience of emotional exhaustion describes a perceived lack of personal resources. Consequently, employees suffering from emotional exhaustion might feel unable to meet their work goals and decide to rather leave the organization voluntarily instead of being dismissed because of a drop in performance. In addition, emotionally exhausted employees seem likely to engage in avoidance and withdrawal behaviors in order to protect themselves from further damages to their health (Cole & Bedeian, 2007; Swider & Zimmerman, 2010; Wright & Cropanzano, 1998). Also from an empirical point of view, there is plenty of support for a positive relation between emotional exhaustion and both, turnover intention and actual turnover (e.g., Geurts, Schaufeli, & De Jonge, 1998; Lee & Ashforth, 1996; Swider & Zimmerman, 2010).

**Hypothesis 9b. Followers’ emotional exhaustion is positively related with their turnover intention.**

2.5.3.3 *The Relationship of Followers’ Work Ability with their Job Performance and their Turnover Intention*

Similar to emotional exhaustion, a low work ability describes an employee’s health state in which he or she lacks the necessary physical or mental resources to perform his/her job adequately. Such poor health will make it more likely that an employee a) cannot longer fulfill specific aspects of his/her job (especially in the case of physical labor as in production work) and b) that due to the poor health, personal energy is distracted from accomplishing work tasks with negative effects for job performance. Indeed, ample empirical research has demonstrated that impaired health correlates posi-
tively with productivity losses at work (Schultz & Edington, 2007). Various studies report productivity losses up to 60 percent with an average ranging between 12 percent and 34 percent (Alavinia, Molenaar, & Burdorf, 2009; Goetzel et al., 2004; Lötters, Meerding, & Burdorf, 2005). With regard to the specific construct of work ability, Van den Berg and colleagues (2011) have shown in a sample of 10,592 employees from 49 companies that a low general work ability is associated with a 32 percent increase in likelihood of productivity losses at work. Similarly, Tuomi and colleagues (2001) found a significant relationship between work ability and job performance, with high productivity and a high quality of work being 1.5 times more common in the group of employees reporting an excellent work ability compared to the group reporting a poor work ability.

**Hypothesis 10a. Followers’ work ability is positively related with their job performance.**

Moreover, work ability should relate negatively to followers’ turnover intention. On the one hand, a lack in work ability makes it more likely that employees quit their job voluntarily in order to protect their health and their remaining physical and emotional capabilities. In line with this assumption, Camerino and colleagues (2006) found a positive association between a low work ability index and the intention to leave the job/profession in a sample of nurses from 10 countries. Similarly, Tuomi and colleagues (2001) found a positive association between work ability and the enjoyment to stay in one’s job.

On the other hand, employees in poor health states are also more at risk to drop out of the workforce completely, just because they are no longer able to perform in a regular work environment. In this regard, Alavinia and colleagues (Alavinia, De Boer, Van Duivenbooden, Frings-Dresen, & Burdorf, 2009) showed that employees’ work ability has high predictive power for future disability status, which often goes together with leaving the labor force.

**Hypothesis 10b. Followers’ work ability is negatively related with their turnover intention.**
2.5.3.4 Emotional Exhaustion and Work Ability as Mediators of the HFL-Job Performance/Turnover Intention Link

In Hypothesis 8, we predict a positive relationship of HFL with job performance and in Hypothesis 3b a negative one with turnover intention. According to Hypotheses 3b and 4b, HFL is expected to be positively associated with followers’ work ability and negatively with followers’ emotional exhaustion. Moreover, in Hypotheses 9a and 9b, we propose a negative relationship between emotional exhaustion and job performance and a positive one with turnover intention. Finally, in Hypotheses 10a and 10b, we propose a positive influence of work ability on job performance and a negative one on turnover intention. Taken together, these hypotheses indicate both a direct and an indirect effect of HFL on job performance and turnover intention via emotional exhaustion and work ability. Based on this rationale, we suggest the following mediation hypotheses:

Hypothesis 11a. The relationship between HFL and job performance is mediated through followers’ emotional exhaustion.

Hypothesis 11b. The relationship between HFL and turnover intention is mediated through followers’ emotional exhaustion.

Hypothesis 12a. The relationship between HFL and job performance is mediated through followers’ work ability.

Hypothesis 12b. The relationship between HFL and turnover intention is mediated through followers’ work ability.

2.5.4 Methods Study B

2.5.4.1 Sample

The data for Study B were collected in a German public service organization. 1,277 persons participated, which corresponded to a response rate of approximately 40 percent.
2.5.4.2 Measures

All questionnaire items were translated into German by professional translators following a double-blind back-translation procedure to ensure semantic equivalence with the original English wording (Schaffer & Riordan, 2003).

LMX, HFL, emotional exhaustion, supervisor satisfaction, and commitment were measured on a 6-point Likert scale ranging from 1 “strongly disagree” to 6 “strongly agree.”

**LMX.** LMX was measured according to Study A. We ran a CFA, indicating an appropriate model fit. Our results were: $\chi^2 = 789.74$, $df = 20$; CFI = .920; SRMR = .041.

**HFL.** We used our 10 final HFL items (5 per dimension; see Table 2.3).

**Emotional Exhaustion.** Emotional exhaustion was measured with the 8 items of the Oldenburg Burnout Inventory (Demerouti & Bakker, 2008). Our results indicated sufficient model fit properties for this measurement: $\chi^2 = 522.95$, $df = 20$; CFI = .891; SRMR = .065.

**Satisfaction with Direct Supervisor.** Satisfaction with direct supervisor was tapped by a single-item measure of the Job Descriptive Index (JDI; Smith, Kendall, & Hulin, 1969), asking the respondents how satisfied they were with their supervisor.

**Organizational Commitment.** We used four items from Mowday, Steers, and Porter (1979) to capture organizational commitment. The measure possessed good model fit properties ($\chi^2 = 22.83$, $df = 2$; CFI = .992; SRMR = .015).

**Work Ability.** Work ability was measured with the first item of the Work Ability Index (De Zwart et al., 2002; Tuomi et al., 2001). Respondents were asked to rate their current state of health in comparison to their lifetime best health. The response scale ranged from 0 to 10, with 10 signifying work ability at its best. Ample empirical research has established the reliability and validity of the Work Ability Index (WAI) – a self-administered questionnaire used to assess an individual’s work ability (e.g., De Zwart et al., 2002; Ilmarinen & Tuomi, 1993; Ilmarinen, Tuomi, & Klockars, 1997).

**Turnover Intention.** As done in prior studies (e.g., Côté & Morgan, 2002; Harris, Kacmar, & Witt, 2005), we assessed employees’ turnover intention with a single-item measure developed by Spector, Dwyer, and Jex (1988). Employees were asked on a
six-point scale (1 = never; 6 = very often) how often they have seriously considered quitting their job in the last six months.

**Job Performance.** Job performance was assessed by one item, asking the respondents to indicate their most recent performance assessment. The performance assessment was realized by the supervisor and captured by an independent data source, i.e., a standardized assessment procedure typically used in German agencies. This tool ensures that the allocation of all performance appraisals follows a normal distribution, which is checked by a special committee in each organizational entity. The grades are represented by letters from A to E; A representing the best and E the worst grade. The committee makes sure that no more than 5% of the employees get an A and no more than 25% a B. We transformed the letters of the performance assessment into a numerical scale ranging from 1 (worst performance) to 6 (best performance).

**Control Measures.** We assessed the following variables to rule out alternative explanations.

**Gender.** Data were recoded, so that 0 corresponds to male and 1 to female.

**Age.** Age was measured with four categories: (1 = under 30 years; 2 = 30-40 years; 3 = 41-50 years; 4 = over 50 years). These four categories were recoded into three dummies. “Over 50” was treated as the baseline category since it contained most of the cases (34%).

**Tenure.** Tenure was assessed in years.

**Hierarchy.** Hierarchy was tapped with the use of three categories: supervisor, employee, and apprentice/trainee/student. Since the last category was too small, containing only 19 cases, we merged apprentice/trainee/student with the employee category to build the baseline. We created the dummy-variable “supervisor” (1 = supervisor, 0 = employee).

**Working Hours.** The working hours were assessed by percent of employment with 100 percent being full-time employed.

**Temporary Employee.** Being temporarily employed is captured by a dummy variable that was recoded so that being temporarily employed was assigned a 1 (yes) and not being temporarily employed a 0 (no).
Function. We classified the sample in five areas of functions: (1) agency/counseling, (2) IT, (3) benefits, (4) service center, and (5) administration and special services. We coded four dummy variables and treated agency/counseling as the baseline category, being represented by half of the cases (51%).

2.5.4.3 Data Analysis

We applied structural equation modeling (SEM) applying maximum likelihood estimation. We used the statistical package AMOS 20.0 (Arbuckle, 2011). Pairwise deletion and full information maximum likelihood estimation (FIML) have been demonstrated to be superior compared to listwise deletion in dealing with missing data (Enders & Bandalos, 2001). Thus, we used a correlation matrix based on pairwise deletion for our analyses. In addition, we ran all of our analyses with FIML for missing data imputation (Arbuckle, 2011) based on raw data to check the robustness of our findings (results not reported but available upon request).

Concerning the evaluation of the goodness of fit of SEM models, researchers encourage the use of several fit indices (Hu & Bentler, 1999). Thus, we chose a combination of chi-square ($\chi^2$), the Comparative Fit Index (CFI), and the standardized root mean square residual (SRMR) to evaluate our proposed models. We defined the cut-off value for the CFI to be higher than .90 (Meyers, Gamst, & Guarino, 2006) and for the SRMR to be smaller than .08 (Hu & Bentler, 1999). For model comparisons, we additionally took the Akaike Information Criterion (AIC) into account and tested model differences with the chi square difference test.

When testing Hypotheses 3a to 12b, we followed the two-step approach of Anderson and Gerbing (1988) by evaluating the measurement model before estimating the structural model. Thus, in the first step, we conducted a simultaneous CFA for all variables included in the respective model. In a second step, we combined the measurement with the structural model, considering the proposed relationships of Hypotheses 3a to 12b. The steps and tests for alternative models for the measurement as well as for the structural model are only reported for the overall occupational model of health (Hypotheses 8-12b; results for Hypotheses 3a-7c are available upon request). Moreover, we followed recommendations by Richardson and Vandenberg (2005) and regressed each outcome construct, namely work ability, emotional exhaustion, supervisor satisfaction,
commitment, turnover intention, and job performance on the control variables, namely gender, age, tenure, hierarchy, working hours, being temporarily employed, and function. This procedure was conducted for all our hypotheses of Study B.

To further investigate the findings of our overall mediation model (third part of Study B), we additionally applied bootstrapping techniques to assess the significance level and confidence intervals of the predicted direct and indirect effects (Cheung & Lau, 2008).
### Table 2.6 Descriptive Statistics of and Correlations among Focal Variables of Study B

<table>
<thead>
<tr>
<th>Mean</th>
<th>s.d.</th>
<th>Gender</th>
<th>Age (under 30)</th>
<th>Age (30 to 40)</th>
<th>Age (41 to 50)</th>
<th>Tenure</th>
<th>Hierarchy (supervisor)</th>
<th>Working hours</th>
<th>Temporarily employed</th>
<th>Function (IT)</th>
<th>Function (Benefits)</th>
<th>Function (Service Center)</th>
<th>Function (Administration)</th>
<th>HFL_prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.63</td>
<td>0.48</td>
<td></td>
<td>0.14</td>
<td>0.23</td>
<td>0.28</td>
<td>18.57</td>
<td>0.11</td>
<td>91.15</td>
<td>0.08</td>
<td>0.02</td>
<td>0.15</td>
<td>0.64</td>
<td>0.26</td>
<td>3.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.10**</td>
<td>-.14***</td>
<td>-.25***</td>
<td>0.01</td>
<td>-.12***</td>
<td>.21***</td>
<td>.02</td>
<td>-.10***</td>
<td>-.05</td>
<td>.24***</td>
<td>-.08**</td>
<td>.07**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.43***</td>
<td>-.35***</td>
<td>-.07*</td>
<td>-.11***</td>
<td>.07*</td>
<td>-.14***</td>
<td>-.09**</td>
<td>-.09**</td>
<td>.12***</td>
<td>-.08**</td>
<td>-.08**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.50***</td>
<td>-.38***</td>
<td>-.04</td>
<td>.04</td>
<td>.02</td>
<td>-.14***</td>
<td>-.06*</td>
<td>-.11***</td>
<td>.06*</td>
<td>-.05</td>
<td>-.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
<td>.04</td>
<td>.04</td>
<td>-.14***</td>
<td>-.03*</td>
<td>-.05</td>
<td>.06*</td>
<td>-.03</td>
<td>-.11***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.08**</td>
<td>.08*</td>
<td>.06**</td>
<td>-.07**</td>
<td>-.11***</td>
<td>-.11***</td>
<td>.09**</td>
<td>-.15***</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Study 1 – Health-Focused Leadership

<table>
<thead>
<tr>
<th></th>
<th>HFL intervention</th>
<th>LMX</th>
<th>Work ability</th>
<th>Emotional exhaustion</th>
<th>Supervisor satisfaction</th>
<th>Commitment</th>
<th>Turnover</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td>4.47</td>
<td>1.22</td>
<td>.02</td>
<td>.00</td>
<td>-.01</td>
<td>-.07*</td>
<td>.05</td>
<td>.03</td>
</tr>
<tr>
<td>15.</td>
<td>4.32</td>
<td>1.21</td>
<td>.00</td>
<td>-.02</td>
<td>.02</td>
<td>.02</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>16.</td>
<td>3.84</td>
<td>1.13</td>
<td>.04</td>
<td>-.10***</td>
<td>-.10**</td>
<td>-.15***</td>
<td>.05</td>
<td>.03</td>
</tr>
<tr>
<td>17.</td>
<td>3.72</td>
<td>1.04</td>
<td>-.01</td>
<td>-.06*</td>
<td>-.02</td>
<td>.09**</td>
<td>-.02</td>
<td>-.05</td>
</tr>
<tr>
<td>18.</td>
<td>4.35</td>
<td>1.34</td>
<td>.02</td>
<td>.01</td>
<td>-.04</td>
<td>-.04</td>
<td>-.02</td>
<td>-.01</td>
</tr>
<tr>
<td>19.</td>
<td>3.79</td>
<td>1.25</td>
<td>.05</td>
<td>.06*</td>
<td>.00</td>
<td>.01</td>
<td>-.13***</td>
<td>.07*</td>
</tr>
<tr>
<td>20.</td>
<td>1.87</td>
<td>1.40</td>
<td>-.06*</td>
<td>.04</td>
<td>.02</td>
<td>-.13***</td>
<td>.04</td>
<td>.06*</td>
</tr>
<tr>
<td>21.</td>
<td>3.95</td>
<td>0.72</td>
<td>.01</td>
<td>-.04</td>
<td>.03</td>
<td>.04</td>
<td>.16***</td>
<td>.05</td>
</tr>
</tbody>
</table>

---

- **n = 1,277.** Alpha reliabilities are in italic on the diagonal.
- **For gender,** 0 = “male,” 1 = “female.”
- **For age, hierarchy, and function,** dummies were coded.
- **For age (4 categories), baseline category = “over 50.”**
- **For hierarchy (2 categories), baseline category = “employee.”
- **For function (5 categories), baseline category = “agency/counseling.”**
- All correlations were tested two-tailed.

- **p < .05**
- **p < .01**
- **p < .001**
2.5.5 Results Study B

2.5.5.1 Descriptive Results

Table 2.6 presents means, standard deviations, and bivariate correlations for all study variables including the control variables. The Cronbach’s alpha reliability coefficients are displayed in italic on the diagonal.

Correlations of Predictor and Outcome Variables. Prevention and intervention positively correlated with $r = .65$ ($p < .001$). As expected and in line with Hypothesis 2, which was tested in Study A, the prevention dimension of HFL was positively related to LMX ($r = .64$; $p < .001$). Accordingly, the intervention dimension was also positively associated with LMX ($r = .69$; $p < .001$).

Prevention was positively related to work ability ($r = .28$; $p < .001$), satisfaction with supervisor ($r = .62$; $p < .001$), and commitment ($r = .30$; $p < .001$); it was negatively associated with emotional exhaustion ($r = -.45$; $p < .001$) and turnover intention ($r = -.26$; $p < .001$).

Intervention correlated significantly positively with work ability ($r = .30$; $p < .001$), satisfaction with supervisor ($r = .66$; $p < .001$), and commitment ($r = .29$; $p < .001$); it correlated significantly negatively with emotional exhaustion ($r = -.30$; $p < .001$) and turnover intention ($r = -.23$; $p < .001$). Both prevention and intervention had a slightly positive but non-significant relationship with job performance.

LMX was positively related to work ability ($r = .23$; $p < .001$), satisfaction with supervisor ($r = .82$; $p < .001$), commitment ($r = .33$; $p < .001$), and job performance ($r = .16$; $p < .001$); it had a negative relationship with emotional exhaustion ($r = -.28$; $p < .001$) and turnover intention ($r = -.26$; $p < .001$).

Correlations of Controls with Central Study Variables. Prevention was slightly positively related to being under the age of 30 ($r = .07$; $p < .05$) and to being temporarily employed ($r = .08$; $p < .01$); it was negatively associated with tenure ($r = -.06$; $p < .05$). Compared to the baseline category agency/counseling, we found small significant relationships between prevention and several functions (IT, benefits, and service center).
Study 1 – Health-Focused Leadership

Intervention was significantly negatively related to tenure (r = -.07; p < .05) and to working in the benefits compared to working in the agency/counseling function (r = -.15; p < .001); it was positively related to the service center function compared to the baseline category (r = .06; p < .05).

LMX was significantly and slightly negatively related to working in the benefits compared to working in the agency/counseling function (r = -.07; p < .05). Work ability was positively associated with the age categories of being under 30 as well as being between 30 and 40 compared to the baseline category of being over 50 (r = .10; p < .001 for both categories); it was negatively related to organizational tenure (r = -.15; p < .001). Emotional exhaustion was negatively correlated with the age category of being under 30 (r = -.06; p < .05) and with working in the service center function (r = -.08; p < .01); it was positively associated with tenure (r = .09; p < .01), working hours (r = .07; p < .05), and working in IT (r = .06; p < .05). Supervisor satisfaction had a positive relationship with being temporarily employed (r = .06; p < .05), and a negative one with working in IT (r = -.07; p < .05) as well as with working in the benefits function (r = -.08; p < .01). Organizational commitment was positively associated with being under 30 compared to being over 50 (r = .06; p < .05), with being a supervisor (r = .07; p < .05), and with working in the service center compared to the baseline category (r = .08; p < .01); it was negatively related to organizational tenure (r = -.13; p < .001) and to working in the benefits function (r = -.09; p < .01). Turnover intention was negatively correlated with gender (r = -.06; p < .05) as well as with tenure (r = -.13; p < .001) and positively with working hours (r = .06; p < .05) and being temporarily employed (r = .13; p < .001). Job performance was positively associated with being a supervisor compared to being an employee (r = .16; p < .001) and negatively with being temporarily employed (r = -.08; p < .05).

Since all of our control variables showed significant correlations with one or more central study variables, we included them in all further analyses by regressing each outcome construct on the control variables (Richardson & Vandenbergh, 2005).
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predictors</th>
<th>Outcome</th>
<th>β (C.R.)</th>
<th>χ²</th>
<th>df</th>
<th>CFI</th>
<th>SRMR</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a</td>
<td>LMX</td>
<td>Work ability</td>
<td>.24 (8.78)</td>
<td>***</td>
<td>963.16</td>
<td>111</td>
<td>.929</td>
<td>.022 H3a confirmed</td>
</tr>
<tr>
<td>3b</td>
<td>HFL_prevention</td>
<td>Work ability</td>
<td>.16 (3.85)</td>
<td>***</td>
<td>503.85</td>
<td>138</td>
<td>.967</td>
<td>.027 H3b confirmed</td>
</tr>
<tr>
<td></td>
<td>HFL_intervention</td>
<td></td>
<td>.19 (4.50)</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3c</td>
<td>LMX</td>
<td>Work ability</td>
<td>n.s.</td>
<td></td>
<td>1746.67</td>
<td>327</td>
<td>.936</td>
<td>.033 H3c confirmed</td>
</tr>
<tr>
<td></td>
<td>HFL_prevention</td>
<td></td>
<td>.16 (3.51)</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HFL_intervention</td>
<td></td>
<td>.19 (3.82)</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td>LMX</td>
<td>Emotional exhaustion</td>
<td>-.31 (-9.18)</td>
<td>***</td>
<td>1969.02</td>
<td>271</td>
<td>.900</td>
<td>.040 H4a confirmed</td>
</tr>
<tr>
<td>4b</td>
<td>HFL_prevention</td>
<td>Emotional exhaustion</td>
<td>-.48 (-9.53)</td>
<td>***</td>
<td>1541.46</td>
<td>312</td>
<td>.924</td>
<td>.042 H4b partially confirmed</td>
</tr>
<tr>
<td></td>
<td>HFL_intervention</td>
<td></td>
<td>n.s.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4c</td>
<td>LMX</td>
<td>Emotional exhaustion</td>
<td>n.s.</td>
<td></td>
<td>2898.70</td>
<td>557</td>
<td>.914</td>
<td>.042 H4c partially confirmed</td>
</tr>
<tr>
<td></td>
<td>HFL_prevention</td>
<td></td>
<td>-.49 (-9.06)</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HFL_intervention</td>
<td></td>
<td>n.s.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a</td>
<td>LMX</td>
<td>Supervisor satisfaction</td>
<td>.85 (44.87)</td>
<td>***</td>
<td>1080.31</td>
<td>123</td>
<td>.929</td>
<td>.024 H5a confirmed</td>
</tr>
</tbody>
</table>
## Study 1 – Health-Focused Leadership

<table>
<thead>
<tr>
<th></th>
<th>HFL_prevention</th>
<th>HFL_intervention</th>
<th>Supervisor satisfaction</th>
<th>Commitment</th>
<th>Turnover intention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5b</strong></td>
<td>HFL_prevention</td>
<td>HFL_intervention</td>
<td>.32 (10.06)</td>
<td>.45 (12.62)</td>
<td>***</td>
</tr>
<tr>
<td><strong>5c</strong></td>
<td>LMX</td>
<td>HFL_prevention</td>
<td>HFL_intervention</td>
<td>Supervisor satisfaction</td>
<td>.77 (26.73)</td>
</tr>
<tr>
<td><strong>6a</strong></td>
<td>LMX</td>
<td>Commitment</td>
<td>.34 (11.63)</td>
<td>***</td>
<td>1125.11</td>
</tr>
<tr>
<td><strong>6b</strong></td>
<td>HFL_prevention</td>
<td>HFL_intervention</td>
<td>Commitment</td>
<td>.28 (6.41)</td>
<td>.10 (2.37)</td>
</tr>
<tr>
<td><strong>6c</strong></td>
<td>LMX</td>
<td>HFL_prevention</td>
<td>HFL_intervention</td>
<td>Commitment</td>
<td>.21 (4.20)</td>
</tr>
<tr>
<td><strong>7a</strong></td>
<td>LMX</td>
<td>Turnover intention</td>
<td>-.27 (-9.79)</td>
<td>***</td>
<td>966.53</td>
</tr>
<tr>
<td><strong>7b</strong></td>
<td>HFL_prevention</td>
<td>HFL_intervention</td>
<td>Turnover intention</td>
<td>-.21 (-5.19)</td>
<td>-.10 (-2.49)</td>
</tr>
<tr>
<td><strong>7c</strong></td>
<td>LMX</td>
<td>HFL_prevention</td>
<td>HFL_intervention</td>
<td>Turnover intention</td>
<td>-.13 (-2.74)</td>
</tr>
</tbody>
</table>

* $p < .05$  
** $p < .01$  
*** $p < .001$  

*n.s.* = not significant. We tested one-tailed
2.5.5.2 Results and Discussion of the HFL/LMX-Outcome Relationships

The results of our tests of Hypothesis 3a to Hypothesis 7c are presented in Table 2.7. In our Hypotheses H3a, H3b, and H3c, we formulated our expectations about the relationships of LMX, prevention, and intervention with work ability, a core indicator of physical health. In line with our Hypotheses H3a and H3b, both LMX as well as HFL were significantly and positively related to followers’ work ability. Most interestingly for our study, however, is the test of H3c which showed that, when entered simultaneously, LMX showed an insignificant relationship with work ability, while both prevention and intervention remained significant predictors of followers’ physical health. This finding clearly points to the advantages of domain-specific leadership behavior with regard to health promotion, as argued by Eriksson and colleagues (Eriksson, Axelsson, & Axelsson, 2011) as well as Gurt and colleagues (2011). Moreover, both prevention and intervention explained significant variance in followers’ work ability, with intervention behaviors showing a slightly stronger relationship. This supported our view of the need for a coordinated, gradual intervention strategy that a) continuously promotes health by prevention behaviors and b) is able to intervene efficiently when first signs of health problems arise.

Second, we investigated emotional exhaustion – a core indicator of psychological health – as an outcome variable. Again, supporting H4a, LMX showed a significant negative relationship with emotional exhaustion. For Hypothesis 4b, we found partial support as prevention behaviors were a significant predictor of emotional exhaustion, while intervention behaviors were not. We obtained a similar pattern of results for H4c, with prevention behaviors being a strong negative predictor of emotional exhaustion, while LMX and intervention were not significantly related when considering all predictors simultaneously. On the one hand, this further supports our arguments for the advantages of health-focused leadership, as LMX as a more general leadership approach lost its predictive power on emotional exhaustion as soon as prevention behaviors were considered. On the other hand, intervention behaviors were not significantly related to emotional exhaustion, partly contradicting Hypotheses 4b and 4c. A potential explanation for this finding can be derived from established models of employee burnout such as the JD-R model (Demerouti et al., 2001) which predicts that job demands (such as work overload) should be the strongest predictor of emotional exhaus-
tion (following the “health impairment process;” Bakker et al., 2005; Schaufeli & Bakker, 2004). Prevention behaviors clearly aim at proactively shaping healthy job demands with positive and direct effects for exhaustion prevention. Intervention behaviors, in contrast, focus on effective leaders’ responses in cases of beginning and symptomatic health challenges. Consequently, intervention behaviors might come too late in the case of emotional exhaustion, making it more difficult for the leader to intervene and “to still reach the employee,” compared to physical health issues for which it might be easier to find appropriate interventions and accommodations.

Third, we were interested in the relationship of LMX/HFL with more general follower outcomes including supervisor satisfaction, organizational commitment, and turnover intention. In line with social exchange theory (Erdogan & Liden, 2002; Gouldner, 1960) and ample prior research (Dulebohn et al., 2012; Gerstner & Day, 1997), LMX was significantly related with all three outcomes, supporting our Hypotheses 5a, 6a, and 7a. In addition, in line with our Hypotheses 5b, 6b, and 7b, both prevention and intervention were significantly related with all three outcomes. These findings indicate that followers appreciate their supervisor’s engagement for their health and that health-focused leadership has important organizational implications over and above employees’ health.

Finally, with regard to H5c, H6c, and H7c, the data partially supported our hypotheses. While LMX was by far the strongest predictor of supervisor satisfaction, prevention behaviors were equally strong with regard to the prediction of commitment and turnover intentions. Intervention had a small positive effect on supervisor satisfaction, but was not significantly related to commitment and turnover intention when all three predictors (LMX, prevention, and intervention) were simultaneously investigated. The reason for this might be that prevention behaviors have a more immediate impact on all followers’ work environment (as preventive leaders make sure that employees face a health-promoting workplace with an appropriate workload, possibilities for regeneration, the prevention of too excessive stress, and chronic overtime, etc.). Intervention behaviors, in contrast, might be more relevant for employees actually facing health challenges. For this group of employees – which might be significantly smaller in size – intervention behaviors are likely to contribute significantly to their organizational commitment and the reduction of turnover intentions, given that they are directly affected.
2.5.5.3 Results of the Overall Model of Occupational Health

Measurement Model. In a first step, we tested the measurement model, containing three latent constructs (prevention, intervention, and emotional exhaustion) and three one-item measures (work ability, turnover, and job performance). The prevention as well as the intervention dimension of health-focused leadership had 5 indicators each and the emotional exhaustion construct 8.

As outlined above, we chose a combination of the CFI and the SRMR to evaluate the measurement model. We set the cut-off value for the CFI to .90 (Meyers et al., 2006) and for the SRMR to < .08 (Hu & Bentler, 1999). According to our defined cut-off values, our measurement model demonstrated a good overall model fit ($\chi^2 = 1198.86$, $df = 177$; CFI = .929; SRMR = .050).

We tested for the discriminant validity of our measures by specifying alternative models and comparing them to our proposed measurement model. An overview of the fit properties of the proposed and alternative measurement models is presented in Table 2.8. Since emotional exhaustion and work ability are conceptually related, we first tested for an alternative measurement model, in which the work ability item and the indicators of emotional exhaustion were combined to build one overall latent factor (Alternative Model 1). Second, we specified an alternative model, in which the items of the independent and mediator variables loaded on one common factor (Alternative Model 2). Third, all items from all constructs were used as indicators of one common factor (Alternative Model 3). As indicated by the chi square test as well as by the AICs, all alternative models had a significantly worse fit compared to our proposed model.
**Table 2.8 Measurement Model Comparison**

<table>
<thead>
<tr>
<th>Model</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>( \Delta \chi^2 )</th>
<th>( \Delta df )</th>
<th>CFI</th>
<th>SRMR</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized Measurement Model</td>
<td>1198.86</td>
<td>177</td>
<td>.929</td>
<td>.050</td>
<td>1306.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alternative Model 1:</strong> Emotional exhaustion and work ability as one factor</td>
<td>1244.48</td>
<td>181</td>
<td>45.63***</td>
<td>4</td>
<td>.926</td>
<td>.053</td>
<td>1344.48</td>
</tr>
<tr>
<td><strong>Alternative Model 2:</strong> Independent variables and mediators as one factor</td>
<td>6375.51</td>
<td>188</td>
<td>5176.65***</td>
<td>11</td>
<td>.572</td>
<td>.135</td>
<td>6461.51</td>
</tr>
<tr>
<td><strong>Alternative Model 3:</strong> All items as one factor</td>
<td>6376.12</td>
<td>189</td>
<td>5177.27***</td>
<td>12</td>
<td>.572</td>
<td>.135</td>
<td>6460.12</td>
</tr>
</tbody>
</table>

*Note: n = 1,277; CFI = Comparative fit index; SRMR = Standardized root mean square residual; AIC = Akaike information criterion.*

*** = Chi-square-difference statistic p < .001 compared to the hypothesized measurement model.
The lowest value of the AIC indicates the best fitting model.

**Structural Model.** After having established the appropriateness of our measurement model, we tested the structural model (Anderson & Gerbing, 1988). The results are presented in Figure 2.1. As noted above, we followed recommendations by Richardson and Vandenberg (2005) and regressed each dependent construct, namely emotional exhaustion, work ability, turnover intention, and job performance, on the control measures.

As proposed by Taylor, MacKinnon, and Tein (2008), we included all proposed direct and indirect effects in the structural model. However, we excluded the path between intervention and emotional exhaustion because – as the results of Hypothesis 4b demonstrated – intervention is not significantly related to emotional exhaustion when both prevention and intervention are predictors of emotional exhaustion. Our model indicated a sufficient model fit (\( \chi^2 = 1969.03, df = 360; CFI = .906; SRMR = .052 \)). As can be seen in Figure 2.1, the direct paths from prevention to both outcome variables, i.e., job performance and turnover intention, were not significant. Furthermore, the direct path from intervention to job performance was insignificant as well. Thus, Hy-
Hypothesis 8 did not gain support. In line with Hypothesis 7b, intervention was significantly negatively related to turnover intention (β = -.10; p < .01) in our model.

According to Hypothesis 4b, prevention is negatively related to emotional exhaustion, which was also supported by the overall model (β = -.47; p < .001). In line with Hypothesis 3b, prevention was positively related to work ability (β = .19; p < .001). Contrary to Hypothesis 9a, the direct relationship between emotional exhaustion and job performance was insignificant. However, emotional exhaustion was positively associated with turnover intention (β = .32; p < .001), which supported Hypothesis 9b. Work ability was significantly positively associated with job performance (β = .09; p < .01) and negatively with turnover intention (β = -.07; p < .01). This is in line with Hypotheses 10a and 10b.

Since a direct effect between predictor and outcome variable is not a necessary condition for the presence of a mediation effect (Karpur & Bruyère, 2012), we further examined the mediation of emotional exhaustion on the relationship between prevention and job performance (i.e., our “reduced” Hypothesis 11a because we did not postulate the intervention-emotional exhaustion link anymore due to our prior finding that intervention and emotional exhaustion are not related when both HFL dimensions are used as predictors) as well as on the relationship between prevention and turnover intention (“reduced” Hypothesis 11b) by applying bootstrapping techniques (Cheung & Lau, 2008). In addition, we further investigated the proposed mediation of work ability on the relationship between both HFL dimensions and performance (Hypothesis 12a) as well as on the relationship between HFL and turnover intention (Hypothesis 12b).

We found a significant positive indirect effect from prevention to performance (β = .04; CI: .01 - .07; p < .05) as well as a significant negative indirect effect to turnover intention (β = -.16; CI: -.20 - -.13; p < .001). Moreover, the results supported a small indirect effect from intervention to performance via work ability (β = .01; CI: .00 - .03; p < .01) as well as one from intervention to turnover intention (β = -.01; CI: -.03 - -.00; p < .01) via work ability. These results support our (“reduced”) Hypotheses 11a, 11b, 12a, and 12b.

In addition, we also confirmed the negative relationship between intervention and turnover intention by applying the bootstrapping procedure (Cheung & Lau, 2008) (β = -.10; CI: -.17 - -.02; p < .01).
As recommended by James, Mulaik, and Brett (2006) we added tests of alternative causal models to test our proposed model against other plausible models, increasing the confidence of our findings. An overview is presented in Table 2.9. First, we examined a model with indirect effects only (Alternative Model 1), which differed from our proposed model with regard to the direct links between prevention/intervention and job performance as well as turnover intention. All direct links were fixed to zero. Al-
ternative Model 1 demonstrated slightly worse fit properties ($\Delta \chi^2 = 21.14; \Delta df = 4; p < .001$). Second, we specified a model that contained only direct effects (Alternative Model 2). Hereby, we tested the direct effects of prevention/intervention on job performance and turnover and fixed all other relationships to zero. Alternative Model 2 showed a significant worse fit compared to our proposed model ($\Delta \chi^2 = 528.38; \Delta df = 7; p < .001$). Finally, we investigated a model without any control variables (Alternative Model 3). In this model, we fixed all relationships between controls and other variables to zero. Again, this alternative model indicated a significantly worse fit than the proposed one ($\Delta \chi^2 = 230.12; \Delta df = 48; p < .001$). Thus, our results increased the confidence in the appropriateness of our hypothesized structural model.

Table 2.9 Structural Model Comparison

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
<th>CFI</th>
<th>SRMR</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized Structural Model</td>
<td>1969.03</td>
<td>360</td>
<td></td>
<td></td>
<td>.906</td>
<td>.052</td>
<td>2371.03</td>
</tr>
<tr>
<td>Alternative Model 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect effects only</td>
<td>1990.17</td>
<td>364</td>
<td>21.14***</td>
<td>4</td>
<td>.905</td>
<td>.052</td>
<td>2384.17</td>
</tr>
<tr>
<td>Alternative Model 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct effects only</td>
<td>2497.42</td>
<td>367</td>
<td>528.38***</td>
<td>7</td>
<td>.875</td>
<td>.11</td>
<td>2885.42</td>
</tr>
<tr>
<td>Alternative Model 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No controls</td>
<td>2199.16</td>
<td>408</td>
<td>230.12***</td>
<td>48</td>
<td>.895</td>
<td>.056</td>
<td>2505.16</td>
</tr>
</tbody>
</table>

Note: $n = 1,277$; CFI = Comparative fit index; SRMR = Standardized root mean square residual; AIC = Akaike information criterion.

*** = Chi-square-difference statistic $p < .001$ compared to the hypothesized structural model.
The lowest value of the AIC indicates the best fitting model.

2.5.6 Limitations and Future Research Directions

In spite of several methodological strengths (e.g., two independent data samples), the current study has several limitations that restrict the interpretation and generalization of our findings. First, our study was cross-sectional in nature with leadership behaviors and outcomes measured at the same time. Therefore, no final conclusion about causality can be drawn. Future studies should overcome this weakness by applying longitudinal and quasi-experimental research designs (Shadish et al., 2002). Besides causality issues, a longitudinal design would also be useful to investigate potential differences in the reception of HFL behaviors between employees with and without prior health
problems. As indicated above, followers with existent, symptomatic health restrictions might value the intervention dimension of HFL more than employees without health problems, i.e., intervention might contribute stronger to their satisfaction and their commitment than it does for “healthy” employees.

A second limitation concerns the self-assessed measurement of work ability as one of our outcome variables. Although the work ability index as a self-administered questionnaire is potentially one of the best validated occupational health instruments with a high relationship between the subjective results of the WAI and objective health measurements (e.g., Eskelinen, Kohvakka, Merisalo, Hurri, & Wägar, 1991; Nygård, Eskelinen, Suvanto, Tuomi, & Ilmarinen, 1991) as well as proven predictive validity for disability and mortality (e.g., Liira et al., 1997; Tuomi et al., 1997b), it still would be desirable to include second source, objective health data in future studies. For instance, individual health reports of company physicians or data based on health check-ups would be interesting (including cardiovascular assessments of heart rate and blood pressure, biochemical measures of blood sugar, steroid hormones such as cortisol, serum cholesterol, etc.; Danna & Griffin, 1999). Strict data protection laws with regard to health-related information in most organizations will make this very difficult, though.

Third, although the study used two samples of the general working population and employees of a public agency, the generalizability of its findings is limited because the data came from only one cultural environment, namely Germany. As prior leadership research indicated, there is evidence for different leadership preferences and effects in different cultural backgrounds (e.g., Dorfman, Javidan, Hanges, Dastmalchian, & House, 2012; Rockstuhl, Dulebohn, Ang, & Shore, 2012). Therefore, future studies should aim at replicating our results using different cultural backgrounds.

In sum, we hope that our study’s findings make a valuable contribution to the leadership and organizational health literature and that it provides a solid base on which many future studies targeting the theoretically and practically relevant issue of health-focused leadership can build on.
3 Study 2 – Job Satisfaction of Employees with Disabilities: The Role of Perceived Structural Flexibility

3.1 Abstract

With this paper, we contribute to the inclusion of employees with disabilities in the workplace. Based on Stone and Colella’s (1996) model of factors affecting the treatment of employees with disabilities in organizations, we concentrate on the investigation of job satisfaction as a focal affective response. Besides examining job satisfaction differences between employees with and without disabilities, we focus on perceived flexibility as an organizational boundary condition, arguing for its influence on the job satisfaction of employees with disabilities. We introduce perceived centralization and formalization, representing different indicators of flexibility, as moderators of the disability-job satisfaction relationship. Regression analysis using data from 110 small and medium-sized companies with 4,141 employees reveals that employees with disabilities are less satisfied than their colleagues without disabilities in highly centralized environments. As predicted, a decentralized organizational context relates to higher job satisfaction levels for all employees, but especially for those having a disability. Contrary to our hypothesis, perceived formalization does not significantly influence the relationship between having a disability and job satisfaction. However, our results clearly indicate the need for companies and especially human resource departments to better adapt to the needs of people with disabilities by creating flexible working environments.

Keywords: Disability, Job Satisfaction, Organizational Flexibility, Formalization, Centralization

3.2 Introduction

Companies and human resource managers face an increasingly diverse workforce (e.g., Lorbiecki & Jack, 2000), of which people with disabilities comprise an important

---

4 This chapter is based on: Baumgärtner, M. K., Dwertmann, D. J. G., Böhm, S. A., & Bruch, H. (under review at Human Resource Management). “Job Satisfaction of Employees with Disabilities: The Role of Perceived Structural Flexibility.” A prior version of the paper was presented at the 2010 European Academy of Management Conference; Rome, Italy.
but still largely overlooked group (Lengnick-Hall, Gaunt, & Kulkarni, 2008). The World Health Organization (WHO) defines disability as “[…] the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual’s contextual factors (environmental and personal factors)” (WHO, 2011: 4). Approximately 15 percent, or more than a billion people in the world have some form of disability (WHO, 2011). In other words, people with disabilities are the world's largest minority (United Nations, 2006).

These numbers and the consequent importance of this minority group as employees, customers, and stakeholder is not reflected in the attention of companies and scholars yet. Moore and colleagues (Moore et al., 2011) stated just recently that disability status as a diversity attribute is not only underrepresented in practice, but also in research on diversity management. Despite an increase of research following the enactment of the Americans With Disabilities Act (ADA) of 1990 especially in the fields of law, sociology, economics, and rehabilitation, studies investigating the effects of disabilities in the workplace are still underrepresented in the literature of industrial and organizational psychology (Colella & Bruyère, 2011; Colella & Varma, 2001; Ren et al., 2008). This situation is especially staggering against the background that the number of diversity studies has almost doubled every five years (time frame: 1988-2007; Harrison & Klein, 2007) and disability is typically considered to be one of the main diversity dimensions (e.g., Bell, 2012; Shore et al., 2009).

When investigating the effects of disability in the workplace, scholars have been particularly interested in detecting and explaining potential differences between employees with and without disabilities (e.g. with regard to perceived LMX quality; Colella & Varma, 2001; or human resource judgments; Ren, Paetzold, & Colella, 2008). When companies realize and understand such differences in workplace perceptions, they can create organizational conditions that foster a fair treatment and a successful vocational inclusion of all employees – including those with disabilities.

Based on Stone and Colella’s (1996) model of factors affecting the treatment of employees with disabilities in organizations, our study strives to advance this field of research by addressing two gaps: (1) investigating job satisfaction differences between employees with and without disabilities and, by following the recent call of Colella and Bruyère (Colella & Bruyère, 2011) (2) examining moderators of the effects of dis-
ability on work-related outcomes. Job attitudes are “one of the most useful pieces of information an organization can have about its employees” (Harrison et al., 2006, pp. 320-321). Hereby, job satisfaction is “the most focal employee attitude” (Saari & Judge, 2004, p. 395), and related to several productivity criteria (Riketta, 2008).

Consequently, organizations interested in both the long-term inclusion of all employees as well as their financial success must make sure that they understand if and why the job satisfaction of various groups of employees differ and what they can do to raise the satisfaction levels of these groups. Therefore, they have to analyze both demographic main effects (e.g. the influence of having a disability on job satisfaction) as well as potential boundary conditions that moderate such job satisfaction differences.

According to the literature, the relationship between having a disability and job satisfaction is still unclear. There are several theoretical reasons for a positive as well as a negative relationship, which is also reflected by inconsistent empirical findings. In order to further examine such potential job satisfaction differences, we build upon Stone and Colella’s (1996) model as our central theoretical framework. As one group of influencing factors, they identify organizational characteristics, which comprise organizational policies and practices as one parameter. Among them, we consider structural flexibility to be especially important for the organizational responsiveness to specific needs of people with disabilities. A central outcome of the model are the responses of individuals with disabilities. We conceptualize job satisfaction as one focal affective response, which is influenced by structural flexibility as a central organizational characteristic.

Since people with disabilities have certain health limitations, they tend to have specific needs (Stone & Colella, 1996). These needs can many times be met with suitable accommodations such as workplace adjustments or flexible schedules (Kulkarni & Lengnick-Hall, 2011; Wooten, 2008). In a recent study, Schur and colleagues (2009) provided evidence for the role of corporate culture for the job satisfaction of employees with disabilities. They revealed that differences in job satisfaction between people with and without disabilities decreased when worksites were rated high in terms of justice and responsiveness to employee concerns. In addition, Wooten (2008) as well as Kulkarni and Lengnick-Hall (2011) emphasize the importance of organizational flexibility (e.g., flexible working hours) for the successful inclusion of people with disabilities in the workplace. Building on these findings, we investigate the role of an
organization’s perceived structural flexibility as a possible boundary condition of the relationship between having a disability and job satisfaction.

### 3.3 Theory and Hypotheses Development

#### 3.3.1 Differences in Job Satisfaction between Employees with and without Disabilities

According to Locke (1976), job satisfaction is “[…] a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1300). Job satisfaction is not only related to social inclusion (Curry, Wakefield, Price, & Mueller, 1986), but also to important employee outcomes which, in turn, secure an organization’s productive functioning (e.g., Ironson et al., 1989). Among these outcomes are performance (e.g., Judge, Parker, Colbert, Heller, & Ilies, 2001a; Judge et al., 2001b), absenteeism (Harrison & Martocchio, 1998; Scott & Taylor, 1985), organizational commitment (Tett & Meyer, 1993), organizational citizenship behavior (Organ & Ryan, 1995), and turnover (Tett & Meyer, 1993).

Results of empirical research on differences in job satisfaction between employees with and without disabilities support two contradictory conclusions. The first view on the relationship between having a disability and job satisfaction has found that employees with disabilities demonstrate higher levels of job satisfaction. In the literature, reasons such as lower expectations of people with disabilities due to their disadvantaged position in the labor market are mentioned (e.g., Pagán & Malo, 2009). Drawing from the theoretical perspective of lower expectations among members of disadvantaged groups (e.g., Clark, 1997), people with disabilities are assumed to be happy to have a job at all, and thus are expected to have greater job satisfaction.

On the empirical side, there is some evidence for this theoretical rationale. Pagán and Malo (2009), for instance, have found that after controlling for other variables, such as productivity differences, the initial negative relationship between having a disability and job satisfaction becomes positive. Perry and colleagues (2000) also found marginally greater levels of job satisfaction among college students with physical disabilities, compared to their peers, when controlled for access discrimination.
According to the second perspective, having a disability is negatively associated with job satisfaction. Cox and Blake (1991) stated that minorities in general possess lower levels of job satisfaction. Furthermore, research has shown that when people with disabilities are part of the workforce, they face several work-related challenges which may be reflected in lower levels of job satisfaction. Among them are disability-related restrictions, especially as a consequence of non-optimal or non-granted accommodations (Stone & Colella, 1996), less economically and psychologically rewarding positions (Yelin & Trupin, 2003), and less positive working experiences as a result of discrimination (Colella & Stone, 2005; Stone & Colella, 1996). According to a recent study by Snyder and colleagues (2010), employees with disabilities reported more overt and subtle discrimination and more procedural injustice than did their non-disabled colleagues. Since studies demonstrate the negative relationship between discrimination and job satisfaction (Redman & Snape, 2006), the job satisfaction level of people with disabilities might be lower than that of their peers without disabilities.

In addition, studies find a positive relationship between health and job satisfaction (Clark, Oswald, & Warr, 1996; Clark & Oswald, 1996; Faragher, Cass, & Cooper, 2005). When people have health restrictions, their overall well-being presumably decreases, making them less satisfied with life. Consequently, as many employees with disabilities might have a poorer health status than their colleagues without disabilities, they might also show less job satisfaction in general (Pagán & Malo, 2009).

There is also empirical evidence for this second view on the relationship between having a disability and job satisfaction. Uppal (2005) found that Canadian workers with disabilities show less job satisfaction than do other workers (with the exception of those with speech impairments). Burke (1999) compared the work experiences of Canadian women with and without disabilities. He found that women with disabilities were less satisfied with their jobs. Renaud (2002) also found that having a disability is negatively related to job satisfaction. Witte and colleagues (1998) investigated differences in job satisfaction between college graduates with and without learning disabilities. Although they did not find significant group differences in terms of work, supervision, and colleague satisfaction, students with learning disabilities reported less satisfaction with pay and promotion opportunities, as well as less total job satisfaction. McAfee and McNaughton (1997) found strong dissatisfaction with pay and slight dissatisfaction with promotion among workers with disabilities. More recently, Schur and
colleagues (2009) illustrated that negative attitudes towards and discrimination against people with disabilities is associated with less job satisfaction among employees with disabilities. Against the background of these two conflicting views and mixed empirical findings, there is no clear indication for one specific direction of the disability-job satisfaction relationship. Therefore, we formulate the following research question:

**Research Question 1: What is the association between having a disability and job satisfaction?**

Beyond investigating a potential main effect of disability on job satisfaction, it is our main goal to shed more light on potential boundary conditions moderating this relationship. The inconsistent empirical evidence gathered to date indicates that research has overlooked the role of such boundary conditions. We believe that the organizational context has the potential for explaining the differing effects of having a disability on job satisfaction.

### 3.3.2 The Moderating Role of Perceived Flexibility for the Relationship between Having a Disability and Job Satisfaction

Job satisfaction is mainly explained by need-satisfaction models (Salancik & Pfeffer, 1977). They assume that the fulfillment of needs leads to job satisfaction. Furthermore, meeting professional and personal needs is considered as an effective mechanism to break barriers for inclusion (Wooten, 2008). Employees with disabilities tend to have specific needs that people without disabilities may not have, for example with regard to workspace adjustments and special working time systems (Cleveland, Barnes-Farrell, & Ratz, 1997; Stone & Colella, 1996). Since most organizations tend to be oriented towards the needs of average, “non-disabled” employees in terms of working schedules, career models, and the like, the specific needs of employees with disabilities may often be disregarded. We know from research investigating the work-specific needs of women as another workplace minority, that they value flexibility, such as flexible work hours (Muehle, Gehrlein, & Hoegl, 2012). Moreover, Wooten (2008) emphasized the important role of flexible policies to accommodate employees’ needs. Thus, an important driver of job satisfaction might be the provision of appropriate solutions for employees with disabilities (Colella & Bruyère, 2011; Stone & Colella, 1996).
This assumption is in line with Stone and Colella’s (1996) theoretical model of disability in the workplace which points to the role of organizational policies and practices for subsequent affective responses of employees with disabilities. More specifically, in organizations with supportive practices – such as organizational flexibility with regard to task or workplace redesign – employees with disabilities should benefit in various ways, including the possibility to perform more adequate jobs which should ultimately lead to more positive affective and behavioral responses such as an increased job satisfaction.

Research has demonstrated that the successful implementation and sustainment of such individualized solutions depends on the “extent to which there was flexibility in the work and the work environment” (Gewurtz & Kirsh, 2009, p. 40). In other words, the more flexible an organization is, the more likely it seems that it does a good job in recognizing, approving, and implementing custom-made un-bureaucratic solutions which seem particularly important for employees with disabilities. In a recent study, Kulkarni and Lengnick-Hall (2011) identified the provision of work and time flexibility as one central practice empowering people with disabilities and helping them to adjust more successfully to an organizational context.

Stone and Colella (1996) name four other consequences of an organization that values flexibility, which are (1) that employees with disabilities are more likely to be viewed as qualified for jobs, (2) are more included in group activities, (3) are supported by supervisors and (4) get promoted. These consequences, in turn, are also assumed to increase their job satisfaction.

Organizational flexibility has often been studied in terms of formalization and centralization (Brass, 1984). We build upon these constructs and operationalize high flexibility as low formalization and low centralization. We argue that high perceived flexibility represents a boundary condition which is especially beneficial for people with disabilities.

### 3.3.2.1 Formalization and Having a Disability

The first construct, representing a facet of organizational flexibility, is low perceived formalization. Formalization is the degree to which rules, procedures, instructions, and communications are written down (Jansen, Van Den Bosch, & Volberda, 2006; Pugh,
Hickson, Hinings, & Turner, 1968). “In highly formalized systems, little flexibility exists in determining how a decision is made or what outcomes are due in a given situation; procedures and rewards are dictated by the rules” (Schminke, Ambrose, & Cropanzano, 2000, p. 296).

The traditional view on the role of formalization on employees’ behaviors has been rather negative by assuming conflict between administrative imperatives and professional norms (Organ & Greene, 1981). For people with disabilities, a relatively rigid organization of procedures seems to be disadvantageous as well. A direct supervisor, for instance, to whom a great deal of influence on workplace adjustments is attributed to (Cunningham, James, & Dibben, 2004), may not be able to respond personally to an accommodation request of one of his/her subordinates, since he or she is obliged to comply with organizational regulations. This is supported by March and Simon (1958), who state that rules impede experimentation and ad-hoc problem solving. As a consequence, employees with disabilities may believe that their request for an individualized solution is not being handled promptly, or well enough, creating the impression that barriers are not being removed. This is consistent with the theoretical argumentation of Stone and Colella (1996, p. 373), who state that “it is more likely that coworkers will resent personalized treatment of the disabled in bureaucratic organizations than in more flexible, supportive organizations.” Evidence in this vein is found in a study by Rumrill and colleagues (2004), investigating job satisfaction among employees with multiple sclerosis. They found a negative relationship between barriers encountered at the workplace and job satisfaction.

Taken together, employees with disabilities need individualized solutions (e.g., accommodations). Therefore, high perceived structural flexibility should be more important for people with disabilities than for those without. More specifically, in organizations that are perceived to be less formalized, we assume that employees with disabilities are more satisfied than in organizations that are perceived to be highly formalized and therefore rather inflexible. Thus, we postulate the following hypothesis:

_Hypothesis 2a: Formalization has a moderating effect on the relationship between disability status and job satisfaction such that, relative to people without disabilities, people with disabilities experience comparatively less job satisfaction when formalization is high._
3.3.2.2 Centralization and Having a Disability

The second key construct representing a different facet of flexibility is low perceived centralization. Centralization relates to the distribution of power within an organization (Hage & Aiken, 1967). Hage and Aiken (1967) distinguished two components of centralization: participation in decision-making and hierarchy of authority. The former focuses on control over organizational resources and influence on policies or procedures, while the latter refers to control over work decisions (Hage & Aiken, 1967). When decision-making power is shifted to the top of the hierarchy, employees have very little possibilities to participate in decision-making (Melcher, 1976). Concerning the approval and implementation of individualized solutions for employees with disabilities, direct supervisors tend to have less autonomy and fewer opportunities for action as well. Most likely, they have to approach people higher in the corporate hierarchy. Since supervisors cannot promptly respond to an employee’s needs, this may lead to delays. Moreover, suboptimal decisions might be taken because the decision maker does not have direct contact with the employee who is requesting the accommodation and therefore, does not know his/her specific needs. In some situations, this would mean that a supervisor’s hands are tied if the organizational resources to accommodate a person with disabilities are denied from a decision maker higher in the hierarchy. Furthermore, research shows a negative relationship between centralization and perceived procedural fairness (Schminke et al., 2000), especially for the dimension hierarchy of authority. As a consequence, we assume that high levels of centralization are especially disadvantageous for people with disabilities and their job satisfaction. Low organizational centralization, in contrast, is associated with scope for decision-making and leeway for executing tasks. A further stream of research underlining our assumption are studies demonstrating the positive relationship between participative decision making and job satisfaction (Van der Westhuizen, Pacheco, & Webber, 2012). In addition, a recent study of Lange (2012) provides evidence for the important role of autonomy and independence in predicting job satisfaction.

Recent research has revealed that employees with disabilities are significantly less satisfied with their participation in decisions (Schur et al., 2009). This may either be a hint that they are actually less involved in decision-making processes or that they have a higher but unmet need for involvement in decisions. Consequently, for people with disabilities, the perception of a decentralized organizational structure implying high
individual autonomy in decision-making seems to be of great importance. Therefore, we assume that low centralization is an especially beneficial context factor for the job satisfaction of people with disabilities. We postulate that:

**Hypothesis 2b:** Centralization has a moderating effect on the relationship between disability status and job satisfaction such that, relative to people without disabilities, people with disabilities experience comparatively less job satisfaction when centralization is high.

The proposed conceptual model is presented in Figure 3.1.

**Figure 3.1 Research Model Study 2: The Relationship between Having a Disability and Job Satisfaction, Moderated by Formalization and Centralization**
3.4 Methods

3.4.1 Sample and Data Collection

Data were collected in Germany. The survey was conducted in cooperation with an agency focusing on benchmarking small to medium-sized companies. The role of this agency was to approach companies and ask for their participation. In addition, companies could also approach the agency when they decided to participate in the study. The agency was responsible for the operative management of the study. The participation in the study was voluntary and based on two criteria: (1) the company had to be located in Germany and (2) the size of the company must not exceed 5,000 employees. Each organization was promised a detailed technical benchmarking report in return for their participation. Overall, 110 companies took part in the survey. The firms came from several industrial sectors: services (65%), manufacturing (20%), trade (10%), and finance and insurance (6%). This information as well as the size of the company was reported by the HR departments. To assess the other constructs, employees were sent a standardized email invitation through their HR departments (if applicable) or through a top management team member’s email address. The email described the study’s purpose and provided a link to a web-based survey. Employees who had no web access were provided a paper version of the questionnaire. However, the huge majority used the online version (97.4%). Both versions consisted of identical items. Respondents were assured full anonymity. A total of 4,141 employees completed the questionnaire, yielding an overall response rate of approximately 55%. Overall, our sample is largely representative for the German labor market. We compared the characteristics of our sample with information from the Federal Statistical Office concerning economic sectors, company size, regional distribution, and demographics of the employees (detailed information is available from the first author upon request).

All questionnaire items were translated into German by professional translators following a double-blind back-translation procedure to ensure semantic equivalence with the original English wording (Schaffer & Riordan, 2003).

117 participants (approximately 3% of the sample) reported having a disability. Thereby, our sample is again largely representative for the German labor market in which employees with disabilities account for 2.8 percent of all employees within
German private sector companies with a size of up to 40 employees and for 4.2 percent within companies with a size between 250-500 employees (BIH, 2012). Nearly the same percentage of women and men completed the survey (53 % male), and respondents were, on average, 39 years old (SD = 10.82). On average, the participants worked for their company since 9.29 years (SD = 1.97). Regarding educational attainment, study participants averaged 3.87 (SD = 1.97) on a scale ranging from 1 = no degree to 7 = university degree. Due to missing data, the final number of respondents for the hypothesis testing would have been 2,542 applying listwise deletion. Missing cases existed primarily for the control variable age (1,337 cases). Therefore, we ran several analyses with different forms of missing data handling as robustness checks. A more detailed elaboration would go beyond the scope of this paper, but the results stayed mainly the same, only varying in magnitude (detailed information is available from the first author upon request). In this manuscript we report the results from an expectation-maximization algorithm (Graham, 2009) imputation which resulted in a final sample of 3,235 employees.

3.4.2 Measures

Job Satisfaction. We assessed job satisfaction by 5 items. Each of the items represented one facet of job satisfaction: (1) work, (2) coworkers, (3) supervision, (4) promotion, and (5) pay. These 5 facets equal those of the best validated measure of job satisfaction (Judge et al., 2001a; Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002), the Job Descriptive Index (JDI; Smith et al., 1969). Respondents were asked to indicate their level of satisfaction with the JDI facets. In their meta-analysis of 79 unique correlates and 1,863 correlations, Kinicki and colleagues (2002) concluded that the JDI possessed good construct validity. All items were measured on a 7-point Likert scale ranging from 1 “very dissatisfied” to 7 “very satisfied.” Cronbach’s alpha was .82, indicating sufficient reliability. In addition, we ran a confirmatory factor analysis (CFA). Based on recommendations by Hu and Bentler (1999), we chose a combination of different types of fit indices to assess the appropriateness of our CFAs. More specifically, we chose the comparative fit index (CFI) as an incremental fit index, and the standardized root mean squared residual (SRMR) as an absolute fit index. According to the suggestions by Hu and Bentler (1999), a CFI value above .95 indicates a good and a value above .90 a satisfactory fit. They recommend values below .08 as cutoff values
for the SRMR. Our results were: $\chi^2 = 368.4$, $df = 5$; $CFI = .942$; $SRMR = .045$, which indicated a sufficient fit.

**Formalization.** The formalization construct was assessed by 5 items developed by Desphandé and Zaltman (1982) and adapted by Jansen and colleagues (Jansen et al., 2006). All items were measured on a 7-point Likert scale ranging from 1 “do not agree at all” to 7 “totally agree.” A sample item is “Rules and procedures occupy a central place in the organization.” Cronbach’s alpha was .65, and therefore, below the value of .76 reported by Desphandé and Zaltman (1982), .74 reported by Jansen et al. (2006), and .80 reported by Walter and Bruch (2010). To confirm the appropriateness of our measurement, we ran a CFA. Results indicated a sufficient fit ($\chi^2 = 203.3$, $df = 5$; $CFI = .934$; $SRMR = .049$), and thus, measurement of the formalization construct.

**Centralization.** The centralization construct was assessed by 5 items developed by Hage and Aiken (1967). Items were measured on a 7-point Likert scale, ranging from 1 “do not agree at all” to 7 “totally agree.” A sample item is “Even small matters have to be referred to someone higher up for a final decision.” Cronbach’s alpha was .93. Results of the CFA confirmed a good fit ($\chi^2 = 342.0$, $df = 5$; $CFI = .980$; $SRMR = .019$).

**Disability.** Disability was measured by one item. The item asked the respondents whether or not they had a German disability identification card. Possible answers were “0 - no” and “1 - yes.” This identity card is issued after a thorough declaratory procedure, in which the degree of a disability is assessed based on detailed diagnostic and medical reports. Thus, the measurement of disability is rather objective (Dwertmann, Baumgaertner, & Böhm, 2011).

**Control Variables.** We assessed control variables to rule out alternative explanations. The following variables were taken into account in the subsequent analyses because previous studies demonstrated that they might be related to our focal study variables.

*Company* was captured by one item, asking the respondent to indicate the name of the company he or she works for.

*Firm size* was measured by one item. In addition, we controlled for industry type (four dummy variables: production, retail, service, finance & insurance). The answers were provided by the HR departments of the participating companies.
Department type was measured by one item. Employees were asked to indicate the department they are working in because departments can differ widely in their tasks, operational procedures, and educational backgrounds of their members. The 18 answer categories included departments such as “research and development,” “marketing,” “IT,” “finance and controlling,” and “other.” To control for the categorical variables company and department type, we applied a fixed-effects approach (e.g., Carpenter & Fredrickson, 2001). Thus, we included dummy variables which indicated the individuals belonging to a certain company or department type.

As research has illustrated, job satisfaction varies as a function of hierarchy level (Gagné & Deci, 2005). Therefore, we included it in our analysis. Hierarchy was assessed by one item with the nine answer categories: “managing director,” “assistant managing director or management board member,” “middle management,” “group leader,” “employee without personnel responsibility,” “apprentice/intern,” “freelancer,” “temporary/contract worker,” and “other group.”

Firm tenure was measured by one item. We asked the respondents to indicate the year when they started working for their current employer. To measure educational attainment, we asked the employees for the highest degree they obtained. The 7 categories ranged from no degree to university degree.

Research has shown mixed findings concerning the relationship between gender and job satisfaction (Mason, 1997). Some authors have found women to be more satisfied than men (Sloane & Williams, 2000), but others have found the opposite (Arnold & Feldman, 1982; Uppal, 2005), or no relationship at all (Brooke & Price, 1989). Consequently respondents were asked to indicate their gender (1 = male, 2 = female).

Age has been found to be related to job satisfaction (Bedeian, Ferris, & Kacmar, 1992; Hunt & Saul, 1975). Because of these findings, we controlled for relationships of age with the focal variables. People were asked to indicate their year of birth to calculate their exact age.
### Table 3.1 Descriptive Statistics and Correlations among the Variables Used in Study 2

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>s.d.</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>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Company size</td>
<td>178.74</td>
<td>301.29</td>
<td></td>
<td></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. Hierarchy</td>
<td>4.82</td>
<td>1.40</td>
<td>0.00</td>
<td></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>3. Female</td>
<td>1.48</td>
<td>0.50</td>
<td>-0.01</td>
<td>0.00</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>4. Education</td>
<td>3.87</td>
<td>1.97</td>
<td>-0.17**</td>
<td>-0.04</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>5. Age</td>
<td>39.36</td>
<td>10.82</td>
<td>-0.12**</td>
<td>0.04</td>
<td>0.08**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Tenure at firm</td>
<td>9.29</td>
<td>1.97</td>
<td>-0.08**</td>
<td>0.01</td>
<td>-0.10**</td>
<td>0.53**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Production</td>
<td>0.15</td>
<td>0.36</td>
<td>0.12**</td>
<td>-0.02</td>
<td>0.01</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.03</td>
<td>0.01</td>
<td>-0.09**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Retail</td>
<td>0.06</td>
<td>0.23</td>
<td>0.02</td>
<td>-0.00</td>
<td>0.03</td>
<td>0.01</td>
<td>0.01</td>
<td>-0.09**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Service</td>
<td>0.67</td>
<td>0.47</td>
<td>-0.04</td>
<td>0.01</td>
<td>-0.08**</td>
<td>-0.14**</td>
<td>-0.05*</td>
<td>-0.48**</td>
<td>-0.36**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Finance &amp; insurance</td>
<td>0.20</td>
<td>0.40</td>
<td>-0.19**</td>
<td>-0.01</td>
<td>0.04</td>
<td>0.06*</td>
<td>0.23**</td>
<td>0.17**</td>
<td>-0.20**</td>
<td>-0.10**</td>
<td>-0.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Disability</td>
<td>0.03</td>
<td>0.17</td>
<td>0.04</td>
<td>0.01</td>
<td>0.00</td>
<td>-0.00</td>
<td>0.14**</td>
<td>0.09**</td>
<td>-0.02</td>
<td>0.04</td>
<td>-0.06**</td>
<td>-0.06**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Centralization</td>
<td>3.65</td>
<td>1.51</td>
<td>-0.12**</td>
<td>-0.03</td>
<td>-0.17**</td>
<td>-0.00</td>
<td>0.05*</td>
<td>-0.07**</td>
<td>0.02</td>
<td>-0.00</td>
<td>-0.03</td>
<td>0.05*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Formalization</td>
<td>4.30</td>
<td>1.12</td>
<td>-0.10**</td>
<td>0.05*</td>
<td>0.00</td>
<td>-0.15**</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.10**</td>
<td>-0.02</td>
<td>0.04</td>
<td>0.12**</td>
<td>0.03</td>
<td>0.38**</td>
<td></td>
</tr>
<tr>
<td>14. Job satisfaction</td>
<td>5.09</td>
<td>1.18</td>
<td>0.02</td>
<td>-0.06**</td>
<td>0.03</td>
<td>0.04</td>
<td>-0.04</td>
<td>-0.11**</td>
<td>0.05*</td>
<td>-0.01</td>
<td>-0.00</td>
<td>-0.01</td>
<td>-0.04</td>
<td>-0.43**</td>
<td>-0.12**</td>
</tr>
</tbody>
</table>

*Note: n = 1,890. All correlations were tested two-tailed. The control variables company and department type are categorical. Production, retail, service, and finance & insurance are industry dummies.

* p < .05

** p < .01
3.5 Results

3.5.1 Descriptive Statistics

Table 3.1 displays the descriptive statistics and intercorrelations among our study variables. The mean job satisfaction was 5.09, with a standard deviation of 1.18. Mean formalization was 4.30, with a standard deviation of 1.12. Mean centralization was 3.65 with a standard deviation of 1.51. Job satisfaction was significantly negatively correlated with formalization (-.12; p < .01) and centralization (-.43; p < .01). However, the slightly negative relationship with disability was not significant (-.04; p > .05). Disability was significantly correlated with perceptions of centralization (.05; p < .05).

3.5.2 Tests of Hypotheses

We used hierarchical regression analysis as proposed by Baron and Kenny (1986) and Frazier, Tix, and Barron (2004) to test our hypotheses. First, all control variables were added to the model. The disability multiplied by formalization and disability multiplied by centralization interaction term was added to the models after the associated variables. All continuous predictor variables were standardized (in all subsequent analyses). This was done to deal with multicollinearity (Frazier et al., 2004).

With respect to research question 1, we found that there is no significant relationship between having a disability and job satisfaction. In step two of our hierarchical regression, disability was not significantly related to job satisfaction (b = .00, p > .05).

Hypothesis 2a states a moderation of formalization on the relationship between having a disability and job satisfaction. For high perceived levels of formalization, we expected a negative relationship between disability and job satisfaction. Under the condition of low perceived formalization, in contrast, having a disability should be unrelated to job satisfaction. Results of the regression analysis for formalization are displayed in Table 3.2. Formalization was found to be significantly positively related to job satisfaction (b = .16; p < .01). However, the interaction term of formalization and having a disability was not significant (b = -.13; p > .05). Thus, Hypothesis 2a is not supported.
### Table 3.2. Hierarchical Regression Results of the Centralization and Formalization Moderation of the Relationship between Having a Disability and Job Satisfaction – Missing Data Imputation Using the EM Algorithm

<p>| Variables                     | Job Satisfaction | Controls |  |  |  |
|-------------------------------|------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                               |                  |         | Model 1         | Model 2         | Model 3         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                               |                  |         | Hierarch      y | Gender          | Education       | Age          | Tenure at firm | Firm size     | Production    | Retail          | Service        | Finance &amp; insurance |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Controls                      |                  |         |                   |                 |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Hierarchy                     | -0.05** (-3.44)  |         | -0.01 (-0.76)    |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Gender                        | 0.05 (1.79)      |         | 0.02 (1.02)      |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Education                     | 0.01 (0.58)      |         | -0.01 (-0.95)    |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Age                           | 0.00 (0.65)      |         | 0.00 (0.75)      |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Tenure at firm                | -0.02** (-4.53)  |         | -0.01** (-4.66)  |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Firm size                     | 0.00** (2.71)    |         | 0.01** (4.90)    |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Production                    | -0.31** (-4.11)  |         | -0.21** (3.36)   |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Retail                        | 0.39 (1.45)      |         | 1.24** (4.06)    |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Service                       | 0.15** (2.38)    |         | 0.18** (3.13)    |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Finance &amp; insurance           | 0.31 (1.31)      |         | 1.10** (3.92)    |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Main effects                  |                  |         |                  |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Disability                    | 0.00 (0.01)      |         | 0.06 (0.73)      |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Formalization                 | 0.16** (4.90)    |         | 0.16** (5.16)    |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Centralization                | -0.53** (-20.11) |         | -0.53** (-19.76) |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |
| Interactions                  |                  |         |                  |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| Disability X formalization    |                  |         |                  |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  | -0.13 (-1.00) |
| Disability X centralization   |                  |         |                  |                   |                 |               |               |              |              |                |               |                 |                  |                  |                  |                  |                  |                  |                  |                  | -0.24* (-2.38) |</p>
<table>
<thead>
<tr>
<th></th>
<th>Study 2 – Job Satisfaction and Structural Flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>0.130</td>
</tr>
<tr>
<td>ΔR²</td>
<td>0.144</td>
</tr>
<tr>
<td>F value</td>
<td>37.31**</td>
</tr>
<tr>
<td></td>
<td>129.46**</td>
</tr>
<tr>
<td></td>
<td>6.65**</td>
</tr>
</tbody>
</table>

Note: n = 3,235. Unstandardized coefficients are reported. Two-tailed testing. Figures in parentheses are t values. We included additional dummy variables to control for company and department type and calculated clustered standard errors. We used the EM algorithm to impute values for missing data.

* p < .05

** p < .01
Hypothesis 2b predicts that centralization moderates the relationship between having a disability and job satisfaction. Under conditions of high perceived centralization, employees with disabilities should be less satisfied with their job than their colleagues without disabilities. Under conditions of low perceived centralization, the level of job satisfaction should be the same for both groups. Results of the regression analysis for centralization are displayed in Table 3.2. Centralization was found to be significantly negatively related to job satisfaction ($b = -.53; p < .01$). The interaction term of centralization and disability was significant ($b = -.24; p < .05$). To further test this relationship, we conducted a simple slopes analysis (Aiken & West, 1991). The relationship between centralization and job satisfaction was significant for both, people with disabilities ($\beta = -.67; t = -2.31; p < .05$) and people without disabilities ($\beta = -.53; t = -19.44; p < .01$).

To examine the relationship further, we plotted the interaction. Figure 3.2 displays the results for employees with and without disabilities. The link between centralization and job satisfaction is stronger for people with disabilities. This is consistent with the prediction, so Hypothesis 2b gained support.

In total, the model including the control variables, all predictor variables, and both interaction terms accounted for approximately 28% of variance in job satisfaction. To test the robustness of the results, we ran an additional model without control variables, but with employees’ company affiliation and the focal variables (i.e., disability, formalization, centralization, job satisfaction) of the study (Stone-Romero, 2007). The results differed only slightly in magnitude.

Since our study variables were all assessed via self-reports, common method bias could be an issue in our study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Therefore, we conducted an explanatory factor analysis with all items of our focal constructs: job satisfaction, formalization, and centralization. This so called Harman’s single-factor test (Podsakoff et al., 2003) resulted in a three factor solution, based on the Kaiser criteria. The first factor accounted for 37 percent of the variance. All centralization items loaded highly positive on the factor (above .77). The formalization items showed only medium to small loadings and the job satisfaction items loaded negatively on the factor. Therefore, we assume that our results are unlikely to be largely affected by a potential monomethod bias.
3.6 Discussion

3.6.1 Discussion of Findings

The purpose of our study was to add evidence to the limited number of attitudinal studies investigating effects of having a disability and thereby, providing companies with knowledge on how to adapt their HR-systems to foster the inclusion of people with disabilities as one important minority group within diverse organizations.

Given the contradicting theoretical assumptions and mixed empirical evidence for the relationship between having a disability and job satisfaction, we posed an open research question. Our results indicate that there is no significant main effect between both constructs, suggesting that the overall level of job satisfaction of employees with disabilities does not substantially differ from those of their colleagues without disabilities. For organizations, this finding is positive as it shows that employees with disabilities are not less satisfied with their job.

The main goal of the present study was, however, to investigate possible boundary conditions of the relationship between having a disability and job satisfaction. Stone and Colella (1996) were among the first to point towards the role of organizational characteristics for affective responses of employees with disabilities. Building upon
and further specifying this seminal theoretical model, we explored the role of organizational flexibility (as one key organizational characteristic) for the job satisfaction (as one key response) of employees with disabilities. More specifically, we tested two facets of perceived organizational flexibility: perceived formalization and perceived centralization as moderating variables.

On the one hand, we investigated the role of perceived centralization and provided evidence that low perceived centralization significantly moderated the relationship between having a disability and job satisfaction. Under conditions perceived as highly centralized, employees with disabilities were less satisfied than employees without disabilities. Under conditions of perceived low centralization, in contrast, employees with disabilities tended to be even slightly more satisfied than their colleagues. These findings are in line with Schur et al.’s study (2009) which found that differences in attitudes between employees with and without disabilities vary across worksites but disappear in corporate cultures that are rated as highly fair and responsive. Whereas they used measures of fairness and responsiveness, we focused on perceived organizational flexibility as a moderator of the relationship between disability and job satisfaction.

In addition, we found that low levels of centralization seem to be a beneficial context factor for all groups of employees, being positively related to the job satisfaction of both employees with and without disabilities. These findings are in line with more recent research, providing evidence for a negative view on the effects of centralization on organizational outcomes (e.g., Walter & Bruch, 2010). To sum up, low levels of centralization are positive for everybody’s job satisfaction but more important for employees with disabilities.

On the other hand, our results did not support Hypothesis 2a, postulating a moderation of perceived organizational formalization. We argued that formalization would lead to rather standardized and rigid problem solving processes, impeding the provision of timely and uncomplicated solutions to the specific needs of employees with disabilities. Thus, we hypothesized that consequences of high formalization would be rather disadvantageous especially for people with disabilities, leading to a decrease in job satisfaction. Our empirical results indicate, however, that the role of formalization on employees’ attitudes might be more complex. We found that formalization is positively related to job satisfaction for all employees. As recent research suggests, there is a
positive side of formalization (e.g., Walter & Bruch, 2010) that might compensate for the potential negative effects described in Hypothesis 2a. Formalized structures contribute to organizational efficiency through the provision of written rules, procedures, and regulations (Hetherington, 1991). They provide guidance, clarify responsibilities, and reduce role ambiguity (Adler & Borys, 1996), and lead to better coordination, communication, and increased organizational efficiency (Hetherington, 1991; Organ & Greene, 1981). Having certain rules and procedures in place could, for instance, lead to a systematic way of dealing with accommodation requests. Further, Organ and Greene (1981, p. 250) state that “formalization may facilitate access to a resource and knowledge base.” In other words, having certain standardized procedures in place may provide the necessary guidelines to overcome insecurities of how to deal with certain situations. Moreover, formal rules might be especially beneficial to raise awareness for the needs of minority groups (including employees with disabilities) as these might be more likely to speak up and to demand their rights under conditions of formalized personnel policies (Konrad & Linnehan, 1995).

In sum, there might be both negative and positive consequences of formalization for people with disabilities. Thus, arguing that formalization is in general negative for people with disabilities might seem too simplistic in hindsight. Taking a more differentiated look at possible consequences of perceived formalization seems to be warranted in order to identify possible positive as well as negative processes resulting from high levels of formalization. In line with Adler and Borys (1996), an additional influencing factor besides the degree of formalization may be the type of formalization, such as the differentiation between “enabling” and “coercive” formalization.

3.6.2 Limitations and Future Research Directions

Although we were able to shed light on the relationship between having a disability and job satisfaction, as well as on perceived organizational flexibility as a boundary condition, some limitations need to be mentioned when interpreting the findings of our study. First, we used a non-experimental design, which prevents us from drawing causal inferences (Cohen et al., 2003; Stone-Romero & Rosopa, 2011). Although we hope to have provided convincing theoretical arguments for the described directions of relationships, future research should aim at overcoming this limitation by applying experimental or longitudinal research designs.
Second, although we started with more than 4,000 employees, the number of employees with disabilities in our sample was relatively small. However, this reflects the actual situation of the labor market (European Commission, 2011b) and is therefore the reality that we face in the field of disability research. This limited number of people with disabilities in the workforce decreased the power of our analyses, and therefore, made it difficult to detect existing relationships. However, the fact that we were still able to find differences between people with and without disabilities and detected a moderation of perceived organizational centralization indicates that there is indeed a reasonable relationship between these constructs.

Third, a common source bias could be a limitation, since all of the investigated variables were measured by a self-report survey (Podsakoff et al., 2003). However, since we measured having a disability by asking if the respondent possessed a disability identification card (based on detailed medical reports and issued by a central government agency), we gained a rather objective measurement of this variable which should not be affected by processes leading to a common source bias (Spector, 2006). In addition, having a disability, as a demographic characteristic, and job satisfaction, as an attitude, are unlikely to have the same sources of bias. Therefore, we do not expect inflated relationships (Podsakoff et al., 2003). Moreover, as Evans (1985) demonstrated with a Monte Carlo study, the probability of drawing incorrect conclusions from common method variance when testing for interaction terms is low. Furthermore, as outlined in the results section we also conducted a Harman’s single-factor test (Podsakoff et al., 2003), which did not indicate a bias.

Beyond these limitations, our study offers several interesting directions for future research. Stone and Colella’s (1996) theoretical framework that we employed for our study offers numerous routes to follow.

First, it might prove valuable to investigate how further organizational characteristics might impact the job satisfaction level of employees with disabilities. While flexibility seems to be an important determinant, there might be other equally relevant characteristics such as organizational norms and values. The literature on diversity climate within organizations (Kossek & Zonia, 1993; Mor Barak, Cherin, & Berkman, 1998) might be fruitful here, as research has demonstrated that a strong diversity climate is an especially helpful organizational characteristic for minority groups (McKay et al., 2007).
Second, we should bear in mind that we assessed perceptions of low centralization and formalization as a proxy for organizational willingness and ability to react to specific needs of employees with disabilities (i.e. by granting and effectively implementing accommodation requests). Future research might want to test this assumption that flexible organizations are more effective in responding to diverse employees’ specific needs more directly.

Third, individuals might belong to several minority groups at the same time, e.g. having a disability and belonging to an ethnic minority group. As prior research has indicated (Nelson & Probst, 2004), such multiple minority employees might be especially prone to negative experiences at the workplace (including perceptions of discrimination), leading to potentially lower levels of job satisfaction. Therefore, future research should investigate such potential “double whammy” or even “triple whammy” effects including combinations of disability, age, gender, race, or sexual orientation.

Fourth, future research might explore the potential impact of observers’ treatment of individuals with disabilities for the link between organizational characteristics and the job satisfaction of employees with disabilities. As we know from research on workplace accommodations, colleagues’ reactions to and support of accommodation requests plays a decisive role for the resulting job satisfaction and commitment of employees with disabilities (Colella, 2001; Colella et al., 2004; Paetzold et al., 2008). Consequently, one might expect that colleagues’ reactions to flexible solutions for employees with disabilities might also influence their overall satisfaction level. In addition, leadership behavior might be another important moderator of the disability-job satisfaction link. If supervisors support flexible solutions for employees with disabilities, that should amplify the positive impact of such organizational practices.
4 Study 3 – Job Performance of Employees with Disabilities: Interpersonal and Intrapersonal Resources Matter

4.1 Abstract

We follow the call of researchers to take intrapersonal resources into account when trying to understand the influence of interpersonal resources by investigating the interplay of social support as an interpersonal resource and self-efficacy as an intrapersonal resource in predicting the job performance of people with disabilities.\(^5\) Data were collected in an Israeli call center employing mostly people with disabilities. The independent and moderator variables were assessed by an employee survey. To avoid common source bias, job performance was rated by the supervisors four weeks after conducting the survey. Hierarchical regression analysis was used to test our hypotheses. The first main effect hypothesis, stating a positive relationship between social support and job performance was conditionally supported \((p = .06)\). The relationship between self-efficacy and job performance did not gain support. In line with the extended support buffer hypothesis, the job performance of low self-efficacious employees increased with increasing levels of social support. The interference hypothesis, postulating a negative effect of social support under the condition of high levels of self-efficacy, was not supported. Our results implicate that employees with disabilities differ in the level of social support they need in order to reach high levels of job performance. Instead of a one-size-fits-all-approach, organizations should take individual levels of self-efficacy into account and offer support accordingly in order to unleash the full working potential. This is the first known empirical investigation examining the role of individual differences in the need of social support among employees with disabilities.

\(^5\) This chapter is based on: Baumgärtner, M. K., Böhm, S. A., & Dwertmann, D. J. G. (under review at Equality, Diversity and Inclusion. An International Journal). “Job Performance of Employees with Disabilities: Interpersonal and Intrapersonal Resources Matter.” A prior version of the paper was presented at the 2012 Academy of Management Conference; Boston, USA.
Keywords: Disability, Job Performance, Self-Efficacy, Social Support, Support Buffer Hypothesis, Interference Hypothesis

4.2 Introduction

Approximately 15 percent, or more than a billion people in the world have some form of disability (WHO, 2011), which makes this demographic group the largest minority of the world. There are several reasons why employees with disabilities are particularly relevant for companies. First, due to the ongoing demographic change, leading to an extension of the working age (Dychtwald, Erickson, & Morison, 2006; Tempest et al., 2002), and the correlation between age and disability (United Nations, 1993), the number of employees with health restrictions or disabilities is increasing in most organizations. At the same time, as a result of low birth rates, firms expect a lack of talent in the future (Michaels et al., 2001), yielding a need to use the potential of alternative demographic groups such as older employees or employees with disabilities (Lengnick-Hall et al., 2008). Second, both scholars and practitioners have repeatedly pointed to the potentially positive effects of a diverse workforce (Robinson & Dechant, 1997), especially since customers are getting increasingly diverse as well. Finally, there are legal (Lalive et al., 2013) and moral (Markel & Barclay, 2009) obligations to employ and retain people with disabilities. Beyond the imperative for companies to include people with disabilities, there are also strong positive implications of employment for people with disabilities themselves. The active participation in the labor market as well as the full utilization of one’s skills is associated with the fulfillment of basic human needs, an improved well-being, and higher life satisfaction (Konrad, Moore, Doherty, Ng, & Breward, 2012; Konrad, Moore, Ng, Doherty, & Breward, 2012).

While the need for a better vocational inclusion of people with disabilities is generally acknowledged, comparably little is known about the success factors of a sustainable inclusion in firms (Gilbride, Stensrud, Vandergoot, & Golden, 2003; Schur et al., 2009). However, companies can capitalize on the skills of people with disabilities only if they provide them with the required conditions allowing them to perform at their best. Moreover, demonstrating good job performance is extremely important for the long-term inclusion of people with disabilities since, if they cannot live up to their full potential, employers may come to think that they are a poor investment and will not
consider this demographic group for future positions (Colella, 1994). Thus, it is critical to foster positive employment outcomes of employees with disabilities (Bjelland et al., 2010), of which job performance is a central one.

Which factors influence the job performance of people with disabilities? This study investigates the interplay of interpersonal and intrapersonal resources to predict the job performance of people with disabilities. Hereby, we theoretically build on the *support buffer hypothesis* (Schwarzer & Leppin, 1991) and on the *interference hypothesis* (Schröder, 1997). Whereas the support buffer hypothesis postulates positive effects of social support (LaRocco et al., 1980), the interference hypothesis focuses on the downside of social support, postulating that it might interfere with high intrapersonal resources, such as self-efficacy, leading to detrimental effects such as a decline in autonomy (Schröder, 1997; Warner et al., 2011). Following the call of researchers to account for intrapersonal resources when aiming to understand the influence of interpersonal resources (Warner et al., 2011), we apply these hypotheses to explain interactive effects between social support as an interpersonal and self-efficacy as an intrapersonal resource. In addition, we extend this theoretical framework by applying it to the employment of people with disabilities. Moreover, instead of predicting a negative outcome, such as strain or sickness, we predict a positive outcome, which is especially important for the inclusion of people with disabilities, namely job performance.

As an interpersonal resource, we explore the role of social support. Social support “refers to the function and quality of social relationships, such as perceived availability of help or support actually received” (p. 284) (Schwarzer & Knoll, 2010). It is associated with an employee’s ability to manage work demands (Lysaght, Fabrigar, Larmour-Trode, Stewart, & Friesen, 2012). As demonstrated by various studies on supported employment, social support is considered to be a key success factor for people with disabilities when it comes to job performance (Burns et al., 2007; Gutman et al., 2009; Tsang et al., 2010). However, despite the fact that social support is considered to be important, there is limited research on its actual impact on work-related outcomes (Lysaght et al., 2012). We address this research gap and investigate job performance as an outcome variable.

As an intrapersonal resource, we investigate self-efficacy, which is considered to be one of the most important ones (Judge & Bono, 2001; Judge, Locke, & Durham, 1997). Self-efficacy is defined as people’s beliefs in their capabilities to produce cer-
tain effects by their actions (Bandura, 1997). It has been identified as one of four core self-evaluation traits (Judge & Bono, 2001; Judge et al., 1997) that regulate behavior. Self-efficacy beliefs determine not only which behaviors will be initiated, but also whether the effort to carry them out will be increased or decreased (Bandura, 1977). The positive link between self-efficacy and performance is well established for people without disabilities (e.g., Bandura & Jourden, 1991; e.g., Judge & Bono, 2001). In contrast, less is known about self-efficacy in people with disabilities (O’Sullivan, Strauser, & Wong, 2012). More specifically, there are some studies investigating performance-relevant outcomes in samples of people with disabilities (e.g., Brouwer et al., 2009), but, to the knowledge of the authors, there is no study directly relating self-efficacy and job performance.

In sum, over and above expected main effects of self-efficacy and social support, we particularly focus on the interplay of both types of resources by following the research question asking if more social support is always better for the job performance of all employees with disabilities or if there are individual differences with regard to the need for social support.

### 4.3 Theory and Hypotheses Development

The World Health Organization (WHO) defines disability as “[…] the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual’s contextual factors (environmental and personal factors)” (WHO, 2011). One important context for every person is work. Creating a culture which fosters social support is one option for companies to create an enabling context for employees with disabilities and support them to show their full working ability.

#### 4.3.1 The Construct of Social Support

For the purpose of this study, it seems beneficial to differentiate between different types of social support and address issues related to the perception of social support by the receiver. First, the difference between constructive support and over-support, such as paternalism needs to be acknowledged (Braithwaite & Eckstein, 2003; Proot, ter Meulen, Abu-Saad, & Crebolder, 2007). Whereas constructive support is targeted at
practically assisting with a problem, over-support is viewed as rather counterproductive. Indeed, when social support is related to negative outcomes, it is often perceived as an intervention that restricts a person’s freedom (e.g., Brehm & Cole, 1966), providing unsolicited social support which is interpreted as implied incompetence by the receiver (Smith & Goodnow, 1999).

Second, it is important to further conceptually differentiate between the different types of social support which are assumed to differently relate to certain outcomes. House (1981), for example, assumes that there are at least four aspects of social support: (1) instrumental aid, (2) information, (3) appraisal, and (4) emotional sustenance. Similarly, Schwarzer differentiates between instrumental, informational, and emotional support (BSSS, Schwarzer & Schulz, 2000). Instrumental support is defined as practically assisting with a problem, such as providing concrete help. Informational social support refers to giving advice, making suggestions, etc. Emotional social support covers the emotional side of support, such as comforting and cheering up.

For the purpose of this study, we use the construct of instrumental social support since we consider this kind of help to be most important in facilitating job performance due to its reference to an action orientation. Having social support of supervisors and colleagues available if help is actually needed can be viewed as a central coping resource (Schulz & Schwarzer, 2004; Schwarzer & Knoll, 2007), which leads to adaptive and proactive behaviors (Schröder, Schwarzer, & Konertz, 1998).

4.3.2 The Relationship between Social Support and Job Performance

We base our theoretical reasoning on two arguments explaining why social support leads to job performance. First, social support facilitates coping with work-related problems; second, it is important for the organizational socialization.

First, when employees with disabilities have access to social support, they can rely on the help of their social environment, including job coaches, supervisors, and colleagues. This provides them with a supporting network in case they need help, for instance, when encountering challenging situations at work. Having the possibility to seek out for instrumental help, they avoid making mistakes or being stuck in a work-related problem for a longer time without finding an appropriate solution. Thus, they tend to be more efficient and productive in what they are doing and can focus on per-
formance-relevant behaviors. Further theoretical and empirical support for a positive relationship between social support and job performance stems from the research field of supported employment. Various studies have demonstrated that supported employment is an effective rehabilitation method for employees with disabilities that fosters their long-term job performance by providing on-the-job support (e.g., Burns et al., 2007; Gutman et al., 2009; Tsang et al., 2010).

Second, social support plays a significant role when it comes to organizational socialization, “the process by which newcomers make the transition from being organizational outsiders to being insiders” (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007: 707). In her longitudinal study, Fisher (1985) provided evidence for the importance of social support for organizational adjustment. Major, Kozlowski, Chao, and Gardner (1995) provided evidence for the role of leader-member and team-member exchange for socialization outcomes. A more recent study of Jokisaari and Nurmi (2009) also underlined the importance of supervisor support for socialization outcomes. According to Fisher (1985: 39), the final step of socialization is adjusting to an organization “by learning both how to do the job and how to function in the social/cultural environment of the organization.” This learning, in turn, is related to outcomes such as information acquisition (Ostroff & Kozlowski, 1993; Ostroff & Kozlowski, 1992) and job performance (Fisher, 1985; Mulford, Klonglan, & Warren, 1972; Reio & Callahan, 2004). The socialization process influences “how well an individual masters the required knowledge, skills, and abilities” (Chao, O’Leary-Kelly, Wolf, Klein, & Gardner, 1994: 731). Colella (1994) emphasizes that being fully socialized in an organization in order to ensure full participation is especially important for people with disabilities since they encounter more barriers than people without disabilities.

Moreover, among people without disabilities, social support has been found to have positive effects on health outcomes (Frese, 1999). Cohen and Wills (1985) (p. 310) conclude that “social support is a causal contributor to well-being.” In contrast to health-related or psychological outcomes, performance outcomes have received less attention (Hauck, Snyder, & Cox-Fuenzalida, 2008). However, the limited number of studies investigating the relationship between social support and performance usually finds a positive relationship between the two variables in samples of people without disabilities (Fisher, 1985; Hauck et al., 2008). Sarason and Sarason (1986) experimentally provided social support and showed that high social support is associated with
higher performance in an anagram problem-solving task. Besides laboratory studies, there are also several studies using a field setting: In a study investigating the performance of book dealers, for instance, Beehr and colleagues (2000) found a positive though weak relationship between social support and performance. Global functional support had a positive effect on a monetary sales indicator as well as on the cumulative number of demonstrations of the books to customers. In a longitudinal study, Fisher (1985) provided evidence of a main effect of social support on performance in a sample of nurses. The positive relationship between social support and performance was also demonstrated by studies within the context of professional sportsmen (Freeman, Rees, & Hardy, 2009; Rees & Freeman, 2010).

Based on the aforementioned theoretical reasoning as well as on empirical evidence from related studies on social support, we assume that:

Hypothesis 1. Instrumental social support is positively related to job performance for people with disabilities.

4.3.3 The Relationship between Self-Efficacy and Job Performance

Researchers have differentiated specific versus general self-efficacy (Chen, Gully, & Eden, 2001). Whereas specific self-efficacy is perceived as a motivational state, general self-efficacy is viewed as a motivational trait (e.g., Eden, 1988; Judge et al., 1997). Since specific self-efficacy predicts specific outcomes best (Bandura, 1997), we chose to operationalize self-efficacy as specific work-related self-efficacy.

“An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the outcomes” (p. 193) (Bandura, 1977). Self-efficacy is related to thought patterns, actions, and emotional arousal (Bandura, 1982); it impacts choices and aspirations (Bandura, 1977; Bandura & Jourden, 1991). For instance, self-efficacy positively influences directing resources towards a goal (Vancouver, More, & Yoder, 2008), work effectiveness, and the ability to cope (Staples, Hulland, & Higgins, 1999). Self-efficacy beliefs not only determine which behaviors will be initiated, but also whether the effort to carry them out will be increased or decreased and how long the person persists in the face of difficulties (Bandura, 1977). Perseverance, in turn, is related to high performance (Bandura, 1982). “Strong self-efficaciousness intensifies
and sustains the effort needed for optimal performance, which is difficult to realize if one is beleaguered by self-doubts” (p. 123) (Bandura, 1982).

To sum up, high self-efficacious individuals believe in their abilities and are motivated to utilize them to achieve good work-related results. They tend to be persistent in achieving their work-related goals, which has been demonstrated to positively relate to their job performance. Low self-efficacious individuals, in contrast, lack confidence in their abilities, which leads to mechanisms that are counterproductive for a good job performance.

Empirically, the link between self-efficacy and performance is well established for people without disabilities. In an extensive number of studies, Bandura (e.g., Bandura & Jourden, 1991) and other researchers (e.g., Judge & Bono, 2001) provide evidence for a positive relationship between the two constructs. Results of a meta-analysis performed by Judge and Bono (2001) identified a true score correlation of .23 between generalized self-efficacy and performance. A further meta-analysis revealed a weighted average correlation between self-efficacy and work-related performance of .38 (Stajkovic & Luthans, 1998). In sum, self-efficacy is considered to be among the best dispositional predictors of job performance (Bandura & Jourden, 1991; Judge & Bono, 2001).

In contrast to samples of people without disabilities, less is known about self-efficacy in people with disabilities (O’Sullivan et al., 2012). To the knowledge of the authors, there is no study investigating the relationship between self-efficacy and job-related performance in a sample of people with disabilities. However, there are studies focusing on people with disabilities that provide evidence for the usefulness of the self-efficacy construct in determining other related outcomes, such as health (Arnstein, 2000; Costa, Maher, McAuley, Hancock, & Smeets, 2011), disease management (Clark & Dodge, 1999; Dolce, 1987), and functional capacity evaluation (Asante, Brintnell, & Gross, 2007; Kaivanto, Estlander, Moneta, & Vanharanta, 1995). Self-efficacy believes play an important role in terms of independent-living skills and confidence in one’s abilities to set and achieve goals (Block, Vanner, Keys, Rimmer, & Skeels, 2010), as well as in keeping their perceived autonomy (Warner et al., 2011). In a similar vein, self-efficacy relates to recovery from surgeries (Schwarzer & Schröder, 1997), return to work (Richard, Dionne, & Nouwen, 2011) as well as to time to return to work (Brouwer, Reneman, Bültmann, van der Klink, & Groothoff, 2010).
To sum up, theoretical reasons mainly support a positive relationship between self-efficacy and work-related outcomes, which is widely supported by empirical results in cross-sectional studies using samples of people without disabilities. Moreover, studies using samples of people with disabilities demonstrate a positive effect of self-efficacy on health, self-determination, and return-to-work outcomes. Thus, we postulate the following hypothesis:

**Hypothesis 2.** Work-related self-efficacy is positively related to job performance for people with disabilities.

### 4.3.4 The Moderating Role of Self-Efficacy on the Relationship between Social Support and Performance

While the positive effects of social support and self-efficacy on job performance seem apparent when investigated separately, the picture becomes more complex when researchers strive for a simultaneous investigation of both performance antecedents. We theoretically draw from the *support buffer hypothesis* (also referred to as the *compensation hypothesis*) (Schwarzer & Leppin, 1991) and from the *interference hypothesis* (Schröder, 1997) to explain the assumed interaction between social support as an interpersonal resource and self-efficacy as an intrapersonal resource. The two different hypotheses predict opposite consequences of social support; whereas the support buffer hypothesis assumes a positive influence of social support, the interference hypothesis postulates adverse effects and thus, the need for a more fine-grained analysis of relevant boundary conditions.

Recent work on both hypotheses stems from Warner and colleagues (2011) who investigated the effects of social support on perceived autonomy of older individuals with multiple illnesses. They showed that older individuals low in self-efficacy profited from social support and showed higher autonomy levels, corroborating the support buffer (compensation) hypothesis. However, they also found support for the interference hypothesis, as receiving social support was not beneficial for such older individuals with high levels of self-efficacy. For those, perceiving unnecessary social support negatively affected their autonomy. In other words, social support as an interpersonal resource interfered with their high self-efficacy as an intrapersonal resource. In sum,
their study provided support for both hypotheses and highlighted the need to account for self-efficacy as a moderator of the social support-outcome relationship.

4.3.4.1 The Support Buffer (Compensation) Hypothesis

The support buffer hypothesis has originally been developed to explain the positive effect of social support on the stressor-strain relationship (LaRocco et al., 1980). It assumes that social support attenuates the negative influence of perceived job stress on job-related strain and health. We extend the original hypothesis and argue that social support buffers a lack of intrapersonal resources, i.e., low levels of self-efficacy, by providing the necessary interpersonal resources.

Employees with disabilities with low levels of self-efficacy are less convinced that they possess the necessary skills to do a good job. As a consequence, less coping behavior is initiated, especially in the face of obstacles. When work-related barriers, such as an inadequate accommodation or stereotyping, emerge, they rather tend to give in than try to remove it. Further, low self-efficacious individuals usually avoid work-related activities they feel would exceed their capabilities (Bandura, 1982). For low self-efficacious employees, it is therefore especially helpful to be supported by supervisors and colleagues providing feedback, encouragement, and concrete advice. This provides them with a supporting network in case they need help, for instance, when encountering challenging situations at work. Being instrumentally supported serves as a guideline function, facilitating the proactive solution of perceived difficulties instead of being stuck in a work-related problem. Instead of making mistakes or becoming resigned about it, they can reach out for instrumental help. This enables employees with low levels of self-efficacy to be more efficient and productive in what they are doing and prevent them from avoiding challenging but performance-relevant situations at work. Hence, social support is assumed to compensate intrapersonal deficiencies in self-efficacy.

Empirical evidence for the application of the support buffer hypothesis to the interaction of social support and self-efficacy is scarce. As described above, Warner et al. (2011) found evidence for the support buffer hypothesis by showing that social support compensated lower levels of self-efficacy when predicting autonomy in a group of
older people with illnesses. Following the outlined theoretical arguments and the empirical evidence, we postulate that:

_Hypothesis 3a. Self-efficacy moderates the relationship between social support and performance in such a way that under the condition of low self-efficacy, social support and performance is positively related._

### 4.3.4.2 The Interference Hypothesis

Schröder (1997) introduced the interference hypothesis, referring to the potential downside of social support. The interference hypothesis postulates that “receiving social support threatens the adjustment to illness in individuals higher in self-efficacy” (p. 5) (Warner et al., 2011). We build upon and extend this theoretical framework and argue that the interference hypothesis also applies to the job performance of people with disabilities.

We assume that employees with disabilities high in work-related self-efficacy dispose enough internal resources to fulfill job-related tasks at a high level. Since they expect that they can successfully perform the tasks they need to do at work (Bandura, 1977; Schyns & von Collani, 2002), they will exert all the effort necessary to do a good job. When facing challenges or difficult situations at work, they will rather expand their efforts and persist until the task is finished. Because they rely on their capabilities, they are able to mobilize constructive coping strategies (Bandura, 1977). Thus, they do not need instrumental support from others. Moreover, we assume that under such conditions of high self-efficacy, social support is even detrimental for their job performance because it negatively interferes with their intrapersonal resources. Due to their strong confidence in their own abilities, the provision of social support is assumed to disturb the positive motivational processes related to their high self-efficacy. We assume that they will either feel bothered by the provision of support or not invest as much own effort in performance-relevant behaviors as they would if there was provided less social support; consequently, their job performance is expected to decline.

_Hypothesis 3b. Self-efficacy moderates the relationship between social support and performance in such a way that under the condition of high self-efficacy, social support and performance is negatively related._

Our research model summarizing the proposed relationships is presented in Figure 4.1.
4.4 Methods

4.4.1 Sample and Data Collection

The data were collected in an Israeli call center which provides outsourcing services. Most employees have some form of disabilities. The call center is specifically adapted to their needs by providing accommodations like technological solutions and flexible working hours as well as professional support staff. The investigated call center is not only a social but also a business venture, competing successfully on the primary labor market.

In order to circumvent potential problems arising from common source bias (Campbell & Fiske, 1959; Podsakoff et al., 2003), data for this study were collected from three different groups of informants. First, 117 employees were surveyed. All questionnaire items were translated into Hebrew by professional translators following a double-blind back-translation procedure to ensure semantic equivalence with the original English wording (Schaffer & Riordan, 2003). The survey was administered online. During their working time, the call center employees were given the possibility to participate by filling out the survey on two specific computers, which were positioned in a separate room. The code for the questionnaire was provided by our research group. Re-
Study 3 – Interpersonal and Intrapersonal Resources on Job Performance

Respondents were assured full anonymity. 89 employees out of 117 participated in the survey, resulting in a response rate of 76 percent. Second, we collected demographic information about the sample, which was provided by the HR manager. Third, four weeks later, we asked the direct supervisors to rate the respondents’ performance. With the help of a unique identifier for every employee, the three different data sources were matched. Out of the 89 survey participants, 51 cases with full information from all three sources were obtained. 55 % of the respondents were male and 45 % were female. The respondents were between 22 and 64 years old. The mean age was 38.67 (SD = 13.17). Their tenure was between 1 and 27 months with an average tenure of 13.37 months (SD = 8.81).

4.4.2 Measures

Instrumental Social Support. The perceived degree of instrumental social support was assessed by the 4-item Hebrew version of the “Berlin Social Support Scales (BSSS),” developed by Schwarzer and Schulz (2000). In the survey instructions, participants were asked to refer to their immediate work context when answering the items. Responses were given on a 5-point Likert scale ranging from 1 “strongly disagree” to 5 “strongly agree.” A sample item is “There are people who offer me help when I need it.” The Cronbach’s coefficient alpha was .91. In addition, we ran a confirmatory factor analysis (CFA). Based on recommendations by Hu and Bentler (1999), we chose a combination of different types of fit indices to assess the appropriateness of our CFAs. More precisely, we chose the comparative fit index (CFI) as an incremental fit index, and the standardized root mean squared residual (SRMR) as an absolute fit index. According to the suggestions by Hu and Bentler (1999), a CFI value above .95 indicates a good and a value above .90 a satisfactory fit. Further, the authors recommend values below .08 for the SRMR. Our results were: $\chi^2 = 9.5$, $df = 2$; CFI = .942; SRMR = .049, which indicated a satisfactory fit.

Occupational Self-Efficacy. The self-efficacy construct was captured by the occupational self-efficacy scale (OCCSEFF) developed by Schyns and von Collani (2002). The short version (OCCSEFF-8) was used, consisting of 8 items. The response scale ranged from 1 “strongly disagree” to 5 “strongly agree.” An exemplary item is “No matter what comes my way in my job, I’m usually able to handle it.” The applied occupational self-efficacy scale has been demonstrated to reliably capture a one-
Study 3 – Interpersonal and Intrapersonal Resources on Job Performance

dimensional construct (Schyns & von Collani, 2002). Its relations to personality construct and organizational variables were shown to possess acceptable construct and criterion validity (Schyns & von Collani, 2002). The coefficient alpha value of this scale was .84, indicating sufficient reliability. To confirm the appropriateness of our measurement, we ran a CFA. Results indicated a satisfactory fit and thus, measurement of the self-efficacy construct: \( \chi^2 = 34.6, \text{ df} = 20; \text{CFI} = .909; \text{SRMR} = .073. \)

**Job Performance.** We measured job performance with a four week time lag from the independent variables. The direct supervisors of the employees participating in the survey were asked to rate their employees’ job performance. A measure of in-role behavior developed by Williams and Anderson (1991) was used, consisting of 7 items. The employee performance was rated using a 7-point Likert scale ranging from 1 “strongly disagree” to 7 “strongly agree” A sample item is “This employee adequately completes assigned duties.” Cronbach’s Alpha was .85. The results of the CFA confirmed a good fit (\( \chi^2 = 10.1, \text{ df} = 9; \text{CFI} = .992; \text{SRMR} = .043. \))

**Disability.** The construct of disability was assessed by a third data source, which is a form filled in by the HR manager. Disability was assessed in detail by providing the information on the diagnosis as well as on accommodations, etc. For the purpose of this study, all employees with a disability were included in the analysis.

**Control Variables.** We assessed control variables to rule out alternative explanations. The following variables were taken into account: age, tenure, hours employed per month, and gender. Time-related variables such as a person’s age or tenure serve as proxies for knowledge and skills (Sturman, 2003).

*Age* was used because research indicates a relationship between age and performance in a negative, neutral, or positive direction (Ng & Feldman, 2008). Concerning core task performance, studies indicate that older employees have certain disadvantages when it comes to learning, cognitive speed, fluid intelligence, and short-term working memory. However, deductive reasoning and professional expertise is likely to increase with age. Thus, depending on the task, older employees perform the same or even better than younger ones.

*Tenure* was included because it is related to organization-specific experience and thus, may also be related to performance (Sturman, 2003).
The number of *hours employed per month* was included for similar reasons, since the number of hours employed may have an impact on the performance level.

In a recent meta-analysis investigating *gender* differences in job performance from field studies, Roth, Purvis, and Bobko (2012) found that the performance ratings of women were slightly higher than those of men. This is why we included gender as well.

### 4.4.3 Data Analysis

We used a hierarchical regression analysis, as proposed by Baron and Kenny (1986) and Frazier, Tix, and Barron (2004), to test our hypotheses. Since mean centering does not fully avoid the problem of non-independence between the interaction term and its constituent first-order variables, we applied the alternative approach of residual centering as proposed by Little Bovaird, and Widaman (2006). This technique ensures full orthogonality between the interaction term and its constituent first-order variables. Following this approach, we regressed the interaction term on its respective first-order effects and saved the standardized residuals. The residuals, in turn, represent the interaction effect.

### 4.5 Results

#### 4.5.1 Descriptive Statistics

Table 4.1 provides the means, standard deviations, and intercorrelations among the study variables. The mean job performance was 5.44, with a standard deviation of 1.00. Mean social support was 4.10, with a standard deviation of .81. Mean self-efficacy was 4.07 with a standard deviation of .62. Job performance was neither significantly positively correlated with social support nor with self-efficacy. Social support and self-efficacy were positively correlated (.34, p < .05).

Since none of our assessed control variables correlated significantly with our study variables, we did not include them in our subsequent analyses. Studies show that the inclusion of irrelevant controls diminishes the power of the analyses and may lead to biased parameter estimates (Becker, 2005; Bedeian, 2007).
Table 4.1 Descriptive Statistics and Correlations among the Variables Used in Study 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</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>38.67</td>
<td>13.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Tenure</td>
<td>13.37</td>
<td>8.81</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hours employed</td>
<td>107.57</td>
<td>31.23</td>
<td>.01</td>
<td>-.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Gender</td>
<td>.55</td>
<td>.50</td>
<td>.17</td>
<td>.04</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social support</td>
<td>4.10</td>
<td>.81</td>
<td>-.12</td>
<td>-.09</td>
<td>-.06</td>
<td>-.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Self-efficacy</td>
<td>4.07</td>
<td>.62</td>
<td>.06</td>
<td>-.01</td>
<td>.09</td>
<td>.19</td>
<td>.34*</td>
<td></td>
</tr>
<tr>
<td>7. Job performance</td>
<td>5.44</td>
<td>1.00</td>
<td>-.18</td>
<td>-.16</td>
<td>.09</td>
<td>-.18</td>
<td>.20</td>
<td>-.02</td>
</tr>
</tbody>
</table>

Note: All correlations were tested two-tailed.
* p < .05

4.5.2 Tests of Hypotheses

Results of the regression analysis are displayed in Table 4.2. Hypothesis 1 states a significant positive association between social support and performance. As demonstrated in the first step of the hierarchical regression (Model 1), this relationship was conditionally supported by the data (b = .27; p = .06). Hypothesis 2, proposing a positive effect of self-efficacy on job performance, was not supported (b = -.15; p > .05).

Hypotheses 3a and 3b refer to a moderation of self-efficacy on the relationship between social support and job performance. As demonstrated in the second step of the regression model, the interaction term of social support and self-efficacy was significantly related to job performance (b = -.41; p < .01). According to Hypothesis 3a, we expected a positive relationship between social support and job performance for low levels of self-efficacy. In contrast, Hypothesis 3b postulated a negative relationship between social support and job performance under the condition of high self-efficacy.

To further examine the nature of the relationships, we plotted the interaction model. Figure 4.2 displays the results for employees with high, medium, and low levels of self-efficacy. Under the condition of low self-efficacy, the graph shows a positive relationship between social support and job performance. In addition, we can see that the job performance of individuals high in self-efficacy slightly declines when social support increases. These trends correspond to our postulated moderation hypotheses.
Table 4.2 Results of Hierarchical Moderated Regression Analysis of Instrumental Social Support and Occupational Self-Efficacy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Job Performance</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td></td>
</tr>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social support</td>
<td>.27 (1.55) †</td>
<td>.27 (1.70) *</td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>-.15 (-.64)</td>
<td>-.15 (-.70)</td>
<td></td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social support X self-efficacy</td>
<td></td>
<td></td>
<td>-.41** (-3.27)</td>
</tr>
<tr>
<td>Percent of total variance explained</td>
<td>.050</td>
<td>.232</td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td>.050</td>
<td>.182</td>
<td></td>
</tr>
<tr>
<td>ΔF</td>
<td>1.202</td>
<td>10.686**</td>
<td></td>
</tr>
</tbody>
</table>
To further test under which conditions of self-efficacy the relationship between social support and job performance is significant, we conducted a simple slopes analysis (Aiken & West, 1991).

We tested the significance of the slope for low (one standard deviation below the mean) and high (one standard deviation above the mean) self-efficacy. The analysis revealed that the relationship between social support and job performance was significant for low self-efficacious individuals ($b = .55, t = 3.05; p < .01$). These results provided evidence for the first moderator hypothesis, namely the support buffer hypothesis (Hypothesis 3a). For the group of high self-efficacious individuals, the slope was not significant ($b = -.21; t = -.98; p = .34$). Hence, our data did not support the interference hypothesis (Hypothesis 3b).

In total, the model including all study variables accounted for approximately 23 % of variance in job performance.

To test the robustness of the overall regression model, we ran three additional models, one with all control variables, one with supervisor dummies, and one with controls and supervisor dummies. Results mainly stayed the same and the regression weights differed only slightly in magnitude.
4.6 Discussion

4.6.1 Discussion of Findings

First, our study investigated the relationship between social support and job performance of employees with disabilities. In line with prior research on employees without disabilities (e.g., Fisher, 1985) and research from the field of supported employment (e.g., Burns et al., 2007), the results of our data analyses showed that social support and job performance were positively related at the 10% significance level with a p-value of .06. We decided to relax the significance level due to our relatively small sample size and the resulting low power (Cohen, 1988). Thus, Hypothesis 1 gained conditional support.

Second, Hypothesis 2, stating a positive relationship between self-efficacy and performance, was not supported. Though extensive prior research provided evidence for a positive relationship in samples consisting of people without disabilities, this positive relationship was not reflected by our data. This is definitely a surprising finding that calls for additional future research. One potential explanation might be that the occupational self-efficacy in our sample was relatively high compared to other studies on employees without disabilities (e.g., Jaeckel, Seiger, Orth, & Wiese, 2011; Schyns & Sczesny, 2010). This fact could restrict the variance in self-efficacy, making it harder to detect effects. Future research should investigate if such high levels of self-efficacy can also be found in other samples of employees with disabilities or if this finding is unique to our empirical setting. From our point of view, both are possible. On the one hand, employees with disabilities that are employed in the first labor market can be expected to show higher levels of job-related self-efficacy than their colleagues without disabilities, given the oftentimes considerable difficulties to find employment and the related need for perseverance and high levels of self-confidence. On the other hand, the target company in our sample might have been successful in creating boundary conditions that foster particularly high levels of self-efficacy among employees, such as using special recruiting or training activities.

Third, we argued for the need of taking potential boundary conditions into account when analyzing the relationship between social support and job performance of people with disabilities. Even if prior research has shown the general importance of social
support for the job performance of people with disabilities, we hypothesized that intrapersonal resources, i.e. self-efficacy, may play a central role for shaping the social support-performance relationship. Our results supported this assumption. Employees with disabilities low in self-efficacy benefited indeed from social support. These findings add to prior research by supporting the compensation hypothesis (Warner et al., 2011). Social support seems to buffer performance differences between individuals high and low in self-efficacy. Moreover, under conditions of high social support, employees with low levels of self-efficacy even seem to outperform their colleagues with high levels of self-efficacy. This rather unexpected finding underlines the positive effect of social support as an adequate organizational intervention for individuals with low levels of confidence in their abilities.

As a second moderation hypothesis, we assumed that there may be a downside of social support for those individuals who already possess enough internal resources, i.e. self-efficacy. Although there was a slight trend showing that for those individuals high in self-efficacy, the relationship between social support and job performance was negative, it was not significant. Thus, our data did not confirm the interference hypothesis.

Our data clearly underlines the important interdependence between the two constructs for the prediction of job performance of people with disabilities. If we had looked at the influence of only one predictor variable at a time and not investigated both variables simultaneously, we would have overlooked the interaction effect between the two. In sum, the way social support relates to the outcome variable job performance depends on the level of self-efficacy. Thus, our study provides evidence for the importance to account for the interplay of inter- and intrapersonal resources when investigating the job performance of people with disabilities.

**4.6.2 Limitations and Future Research Directions**

As every empirical study, this study has strengths and weaknesses. First, there are some threats to the generalizability of our findings due to the comparably small sample size and the focus on one single company from Israel. However, there are very few organizations in the first labor market that actually employ larger groups of people with disabilities (e.g., Buciuniene & Kazlauskaite, 2010), which is one of the reasons
for the small number of empirical studies in this field of research (Colella & Bruyère, 2011). Because we are interested in the workplace inclusion of people with disabilities in the first labor market, we decided to do our study in a company that employs a relatively large number of people with disabilities. By striving to advance disability research from a first labor market perspective (and not relying on samples from sheltered workplaces), scholars mostly have to live with certain disadvantages in terms of sample size arising from the fact that people with disabilities are underrepresented in most companies. Our small sample size decreased the statistical power of our analyses as indicated, and therefore, made it difficult to detect existing relationships. However, the fact that we were still able to find a relationship between social support and job performance and detected a moderation of self-efficacy on the relationship between social support and job performance indicates that these effects are quite strong. Nevertheless, future studies should aim at replicating our findings, using a broader data base. In our case, we decided to relax the level of significance to 10%, however, future studies should provide further evidence for the social support-job satisfaction relationship. Moreover, we did not find the proposed positive relationship between self-efficacy and performance. It seems as if further research needs to take a closer look at the effects of self-efficacy in people with disabilities. In a study of Reneman and colleagues (2008), for example, the correlations between self-efficacy and functional capacity evaluation of persons with chronic back pain were also not significant (with one exception).

Second, we applied a cross-sectional survey design using three different data sources (employee survey, HR management survey, supervisor ratings). While these independent data sources avoid the occurrence of common source bias (Campbell & Fiske, 1959; Podsakoff et al., 2003), the data does not allow causal interpretation. Whereas it is impossible that our focal variables influenced the disability status of a person, it could be possible that (prior) performance has influenced the degree of social support provided to a person or her self-efficacy level. Therefore, even though we provided theoretical arguments for the described directions of relationships and measured performance with a time lag of four weeks, future research should aim at applying experimental or fully longitudinal research designs to the presented model. In her longitudinal study, however, Fisher (1985) provided evidence that performance is rather an outcome than an antecedent of social support.
In this study, we provided evidence for the importance of boundary conditions when studying the relationship of social support for people with disabilities and their job performance. We investigated the role of self-efficacy, an intrapersonal resource, as a moderator of social support and performance. Future research should investigate further moderators since we believe that other groups of variables may influence the effects of interpersonal resources on job performance as well. Future research should try to investigate further variables such as organizational culture, organizational climate, or organizational structure. Whether the organizational culture is perceived as open and inclusive, or as formalistic and bureaucratic could strongly affect the relationship between providing social support for people with disabilities and their job performance. For example, in a highly competitive environment and the resulting pressure for success, receiving social support could be viewed as being “weak,” indicating that a person is not able to contribute to goal achievement, thus putting a negative label on this person. In contrast, we would not expect this negative connotation in an inclusive and appreciative organizational environment (Nishii, in press).

However, also three-way interaction processes could occur. One example is the study of Stetz, Stetz, and Bliese (2006) in which they tested whether the moderating effect of social support on the stressor-strain relationship depends on the individual’s self-efficacy. In sum, it seems as if the relationship between interpersonal resources and job performance is way more complicated than sometimes assumed.
5 Overall Discussion and Conclusion

The purpose of this chapter is to add a broader perspective to my dissertation by integrating and discussing the findings of the different studies on a meta-level. First, I will summarize and integrate the main contributions of all three studies. Second, I will provide practical implications. Third, I will outline methodological limitations that apply to all of the studies and ways to address them in future research. I will also present some general ideas for future research. Finally, I will draw a conclusion of my dissertation project.

5.1 Summary of Key Research Findings

My dissertation is driven by two current health developments, which put at risk the most important resource of an organization: its employees (Dibble, 1999). My intention is to address some of the most pressuring challenges: First, the promotion of health and prevention of disabilities; second, the accommodation of employees who have developed a disability in order to keep them as productive members in the workforce. I refer to the first challenge by focusing on a leader’s core role in the process of occupational health management in my first study. The second challenge is touched by the two further studies, explicitly investigating the minority group of people with disabilities. On the one hand, I examine differences between people with and without disabilities and on the other, I specifically look at a sample of people with disabilities to address differences concerning their on-the-job-success.

First, from the studies of my dissertation, it appears that the emergence of health and disability as well as dealing with the associated challenges is a complex phenomenon. Health and disability status as well as work-related outcomes are influenced by multiple factors, such as individual and contextual ones (see Figure 1.4), or, in the WHO-terminology, personal and environmental factors (WHO, 2011) (Chapter 1.2.1). These different sources and levels of determinants must be acknowledged when searching for underlying mechanisms of health-related phenomena. For my dissertation, I derive relevant research questions, which address certain aspects of the overall picture. One is the conceptualization of HFL as well as its important role in association with health-related variables. Another is the investigation of the interaction between individual and
contextual factors for the prediction of job outcomes (Figure 1.4). One example for this interplay can be derived from the findings of Study 2, in which the influence of organizational flexibility is stronger associated with the job satisfaction of employees with disabilities compared to employees without disabilities. In Study 3, the effect of interpersonal resources depends on intrapersonal resources. These findings altogether indicate how many interrelated processes take place at the same time and how complex the phenomenon of health and disability is.

Second, adequately dealing with health issues and people with disabilities pays off for an organization. In all three studies, I investigate mechanisms through which individual and organizational effectiveness can be fostered. In Study 1, indicators of productive functioning are work ability, emotional exhaustion, supervisor satisfaction, commitment, turnover intention, and – within the overall model of occupational health – job performance. In Study 2, job satisfaction is investigated. In Study 3, job performance is in the focus of interest. All studies show that effectively dealing with health and disability is associated with performance-relevant variables.

Third, boundary conditions matter. In line with the diversity perspective, people with disabilities can be a valuable organizational resource since they make a company’s employee base more diverse. Whether the positive effects of this potential resource can be realized, depends on how well it is managed (Bell, 2007; Cox & Blake, 1991). People with health conditions/disabilities are a specific diversity group in terms of their particular needs (e.g., accommodation needs) (compare 1.3.2). Thus, an organization can realize the positive diversity effects and the full performance potential of this group only if it creates an enabling working environment. In this dissertation, I examine boundary conditions as explaining mechanisms in two different scenarios. In Study 2, I ask how organizational structure is related to workplace experiences of people with disabilities. I investigate perceived flexibility as an enabling condition of job satisfaction, a central outcome that relates to several benefits of organizational effectiveness (Ironson et al., 1989). Demonstrating that people with disabilities can exhibit the same positive job attitudes in a decentralized organization as their colleagues without disabilities indicates that organizational structure is a significant boundary condition. In Study 3, I take a look at an instrumental form of helping behavior as a contextual factor and its effect on job performance. In sum, my studies identify two contextual factors, namely organizational flexibility and helping behavior, as starting points for
making the work lives of people with disabilities more rewarding and – at the same time – realizing benefits for the organization. All of my findings imply important practical implications, which will be presented in the following chapter.

5.2 Practical Implications

Over and above the theoretical contributions, I aim at providing practitioners with a guideline for health and disability management. Moreover, I decided to go beyond the empirical findings of my studies and take a more holistic approach. Thus, I will also incorporate further literature sources as well as insights that I gained during my working experience at the Center for Disability and Integration. To structure and integrate the practical implications, I subsume them under a framework that differentiates between three fields of managerial activities: strategy, leadership structures, and culture (Bruch & Vogel, 2011).

The implications provided for the action fields of strategy processes and culture are derived from further literature sources. The recommendations for leadership structures directly result from the findings of Study 1, Study 2, and Study 3. In Study 1, I center on the importance of a HFL style as a mechanism for promoting employees’ health. Study 2 provides evidence for the importance of organizational flexibility, more specifically low centralization, for job satisfaction of all employees, but especially for those with disabilities. Study 3 focuses on the important role of interpersonal and intrapersonal resources for the job performance of employees with disabilities. These findings underline the positive performance implications of supportive working environments, in which instrumental help is provided when necessary and self-efficacy is fostered. Hereby, the leader takes on a critical role. Finally, putting it altogether, I will become even more specific by breaking down the different fields of managerial action into concrete practical recommendations for three different organizational groups: top management, line management, and HR management.

5.2.1 Strategy Processes: Aligning the Creation of a Healthy and Disability-Friendly Workplace with Corporate Strategy

Strategy is defined in various ways. Mintzberg (1987) presented five definitions of strategy: strategy as plan, ploy, pattern, position, and perspective. Many scholars have
emphasized the importance of top management vision and corporate values in the strategy process (Hart, 1992). Although strategy making is also viewed “as an organizationwide phenomenon” (Hart, 1992: 347), expanding the influence of the top management team to all organizational members, the particular role of the top management team is unquestioned (Thomas & McDaniel, 1990). Its power is crucial to strategic decision making (Finkelstein, 1992).

Bruch and Vogel (2011) suggested that companies should involve employees in identifying need for change. Further, the strategy needs to be shared in the entire organization and internalized by everyone. Thus, the engagement in health promoting and disability including activities should be made a shared strategic objective within the organization.

In the following, I will address four important issues related to strategy in more detail: Understanding and designing a business case for health and disability management, conducting a needs assessment, the importance of the top management team in these processes, and the imperative to align diversity with organizational objectives.

### 5.2.1.1 Understanding the Business Case of Health- and Disability Management

As outlined in Chapter 1.1, the results of numerous studies demonstrate the relationship between poor health and negative organizational consequences, such as high absenteeism and low productivity (Goetzel et al., 2001; Goetzel et al., 2004; Koopman et al., 2002). At the same time, they speak for the business rationale for implementing high-quality health-promotion programs (Goetzel & Ozminkowski, 2008). This moral and business obligation needs to be translated into an organization’s strategy of a comprehensive occupational health management, unifying disease prevention and disease management (Sparling, 2010). This is in line with studies providing evidence that an integrated program of health promotion and disease prevention is associated with clinical effectiveness and cost-effectiveness (Pelletier, 2001). Hereby, the integration of specific components into a coherent, ongoing program that is consistent with corporate objectives is important.

Moreover, disability management is related to health management and should be incorporated in a comprehensive program. Studies investigating outcomes of disability management programs provide evidence for their potential to reduce sick days as well
as costs and to accelerate rehabilitation (Arnetz, Sjögren, Rydéhn, & Meisel, 2003). However, many organizations are still not prepared well for this challenge. The “2010 Survey of Employment of Americans with Disabilities” conducted by the Kessler Foundation and the National Organization on Disability reveals the relative unpreparedness of employers to deal with employees living with disabilities (National Organization on Disability, 2011). Results of this survey indicate that despite the fact that 70 percent of the surveyed organizations report to have diversity policies or programs in place, only two-thirds of the programs include disability.

5.2.1.2 Determining the Status Quo, Target State, and Concrete Actions

Assessing the various factors associated with health risks, is a necessary first step for further activities (Goetzel & Ozminkowski, 2008). On the one hand, absenteeism rates should be measured and monitored. On the other hand, regular surveys are helpful for a more in-depth understanding of current health-related developments and the emergence of disabilities. Surveys should assess indicators such as subjective health perception, available resources, burnout levels, and the acceleration trap (Bruch & Menges, 2010).

Based on the determined status quo, the target state needs to be determined. Then, specific goals are to be defined and translated into concrete steps of actions that are cascaded down the organization, to each and every leader and employee.

Moreover, regular evaluations ensure that health- and disability-related developments are monitored since this is the Achilles’ heel of many programs (Sparling, 2010; Williams & Westmorland, 2002).

5.2.1.3 Top Management Support as Key Success Factor for Health Management and the Inclusion of People with Disabilities

The support of the top management and its involvement in improvement processes is considered critical for the success of occupational health programs (Chu et al., 2000; Della, DeJoy, Goetzel, Ozminkowski, & Wilson, 2008). O’Donnell (2001) emphasizes the importance to align a health program with an organization’s goals and making top management aware of how the program helps to attain these goals.
Similarly, there is ample evidence for the relationship between top management commitment and the effectiveness of diversity management (Konrad & Linnehan, 1995). Cox and Blake (1991: 52) emphasize that commitment needs to go beyond “sloganism”; for instance, appropriate resources need to be provided, such as human, financial, and technical ones. A survey study of Rynes and Rosen (1995) which was administered to almost eight hundred human resource professionals identified a strong association between top management support and adoption of diversity training as well as its success. Furthermore, the adoption of training was related to positive diversity beliefs of the top management team and to high strategic priority. Thus, the literature clearly indicates that top managers play a key role in pushing diversity and making it a business imperative (Morrison & Herlihy, 1992).

According to Bell (2007), a company should appoint a key leader at the executive level, who is responsible for defining, implementing, and monitoring diversity-related objectives. In addition, top managers have to cascade the top-level diversity decisions down the organization to each level of management, making sure that diversity efforts attain each and every employee. For specific topics, task forces involving key players, such as management, HR, and employees, have proven to be successful to develop and establish certain policies and practices (Cox & Blake, 1991; Heller, 1997). Task forces bring together people from different departments to brainstorm about ways to open opportunities to minorities (Dobbin et al., 2011).

### 5.2.1.4 Aligning Team Diversity with Organizational Objectives

As outlined in Chapter 1.3.2, diversity as well as disability diversity is not per se something positive or negative, but rather dependent on the context. In fact, diversity brings about opportunities and risks at the same time. Thus, diversity should be purposefully aligned with strategic objectives in the organization; otherwise, it is unlikely that it creates a benefit. For example, when an organization aims at gaining new customers, for instance customers with disabilities, making use of disability diversity and the broader pool of ideas, experiences, and complementary knowledge of this group of people can create a competitive advantage. Since diversity manifests at the team level, it is advisable to purposefully compose teams with a clear goal definition (Bruch et al., 2010). This applies not only for teams of employees, but also for the board room.
In this regard, Hilb and Jent (2007) developed a diversity disk (i.e., “Diversity Optima”) that helps creating “targeted board diversity” based on different criteria. The main objective is providing support on the appointment of complementary board members that can fill a role which is not covered by the existing board members (Hilb, 2012: 75). The disk contains three sub-disks. With the help of the outer disk, the needed know-how areas, such as industry know-how, auditing, or entrepreneurship, can be determined as a first step. Then, the middle disk, containing different board member roles (e.g., developer, controller, promoter), is adjusted in terms of the most characteristic team role of an existing board member. When applying the middle disk to all board members, missing roles can be identified. Finally, the inner disk represents the most designative demographic characteristic or “comparative competency” of the person (e.g., person with disability, junior, foreigner). As a result of the combination of these three sub-disks, the persons responsible for appointing a new board member get an idea of the complementary person that would add value to the team. However, the diversity of a team should never be more complex than the reality in which it is operating (Hilb, 2012). In order to apply “Diversity Optima” successfully, it is important that each board member knows his/her strengths and weaknesses.

5.2.2 Leadership Structures: The Core Role of Leaders in the Effective Management of Health and Disability

There is agreement concerning the important role of a supervisor for the health of employees and their work ability (INQA/Initiative Neue Qualität der Arbeit, 2012). Trust, individual consideration, respect, and appreciation are the foundation for an employee-oriented leadership style. These key cornerstones are also covered by the leader-member exchange construct (Graen & Uhl-Bien, 1995). Study 1 supports existing evidence for the positive implications of a good relationship quality between supervisor and employee in terms of several outcomes, such as better work ability, the reduction of emotional exhaustion, decreased turnover intention, higher supervisor satisfaction, and increased commitment. However, this “good basis” of leadership needs to be complemented by a domain-specific leadership style to realize health promotion in daily activities, namely HFL. The corresponding practical recommendations will be provided in the following paragraph. In the second paragraph, I will focus on recommendations resulting from Study 2. I will elaborate on the advantages of low centrali-
zation, especially for employees with disabilities. Finally, I will draw from findings of Study 3 and focus on the decisive role of a leader in providing interpersonal resources and developing intrapersonal ones.

5.2.2.1 Development and Demonstration of Health-Focused Leadership (Study 1)

As findings of Study 1 indicate, health-specific leadership behaviors seem to be a very promising avenue for employees’ health promotion. The leader is in a central position for strengthening resources and reducing demands. In the third part of Study 1, I demonstrated the usefulness of HFL behaviors in decreasing emotional exhaustion and increasing work ability. These mediating variables, in turn, are associated with job performance as well as turnover intentions. Both are critical organizational variables because they are directly related to organizational effectiveness. Our overall model of occupational health not only demonstrates how HFL is associated with health-related well-being but also - mediated by well-being – with performance indicators. Therefore, investing in employees’ health is not only for the employees’, but also for the organization’s benefit.

Derived from various literature streams, I developed a HFL construct, which consists of two dimensions: prevention and intervention. By demonstrating that prevention and intervention relate differently to different organizational outcomes, I provide first evidence for the usefulness of this distinction. When leaders aim at preserving work ability, for instance, they need to demonstrate prevention-related behaviors, but also intervention-related ones. For emotional exhaustion, leaders’ preventive behaviors are the strongest predictor for decreased exhaustion levels. Depending on the status quo of an individual or team, leaders should adjust their health-focused behaviors accordingly. They should make sure that health problems do not occur, but, when they do, be sensitive to early warning signs and initiate adequate countermeasures. Several studies in the area of disability management and rehabilitation support the effectiveness of early intervention (e.g., Hoefsmit et al., 2012; Yassi et al., 1995). Hence, in order to equip leaders with the needed awareness and skills to embody a HFL style, organizations need to adjust their current leadership development programs such as to incorporate sessions on HFL.
The overall aim of an organization should be to develop overall healthy leadership structures; more specifically, the emergence of a leadership climate that is characterized by a common health focus. Organizational climate is defined as shared perceptions of a phenomenon (Joyce & Slocum Jr, 1984). In organizations that incorporate health in their strategy and realize a comprehensive health management program, leaders should be more likely to collectively direct HFL behaviors towards their followers.

5.2.2.2 Establishing Flexibility by Creating a Decentralized Organizational Environment (Study 2)

Study 2 shows that high centralization is negatively related to job satisfaction among all employees, and especially among those with disabilities. Job satisfaction is a critical variable in motivating (e.g., Locke & Latham, 1990; Pool, 1997) and maintaining people in the workforce (e.g., Tett & Meyer, 1993). Thus, creating a more decentralized organizational environment seems to be beneficial for the entire workforce. This supports previous studies, revealing a positive relationship of flexible HR practices, such as schedule flexibility, and job satisfaction (e.g., Carlson, Grzywacz, & Kacmar, 2010). To maintain satisfied employees, it is important for HR to install processes which allow for the incorporation of specific individual needs. Decentralization may be one starting point. Delegating decision-making power to lower levels allows for more leeway to perform daily work. This may improve responsiveness to the needs of all employees and especially to those of certain groups of employees, such as older workers, employees with young children, and, particularly, employees with disabilities.

5.2.2.3 Creating a Supportive Environment that Fosters the Development of Interpersonal and Intrapersonal Resources (Study 3)

Study 3 provides evidence for the interplay of interpersonal (i.e., instrumental social support) and intrapersonal (i.e., occupational self-efficacy) resources when it comes to job performance. In line with the extended support buffer hypothesis, the job performance of low self-efficacious employees increases with increasing levels of social support. Given their influential role within organizations, supervisors take on a prominent role in fostering both types of resources. Therefore, supervisors should be responsive to individual differences in terms of self-efficacy. Meeting personal needs of peo-
people with disabilities can help to unleash their full working potential, making them well-performing members of the workforce. This means that supervisors should pay attention to whom they offer support in the first place. When an employee with a disability has high self-efficacy beliefs, help seems less indicated compared to an employee who does not have enough confidence in his or her skills. Depending on personal characteristics, interventions from supervisors should individually differ, which makes a one-size-fits-all approach rather inadvisable. In order to provide an appropriate amount of support, supervisors should try to collect information about the level of self-efficacy of their employees with disabilities. Therefore, they should assess, observe, and monitor the level of self-efficacy of their employees with disabilities. Job interviews, regular interactions, as well as annual talks might provide opportunities to get a better feeling for the self-efficacy level of a particular individual, and might consequently determine the right level of support which should be provided towards this person.

However, social support might come not only from supervisors but also from coworkers. In this regard, Colella (1994) underlines the necessity of providing education concerning the treatment of people with disabilities not only for higher level management or HR department employees but especially for the direct colleagues working with a person with a disability. Hereby, again, supervisors play an important role in educating their followers and fostering interaction between individuals with and without disabilities. It is coworkers who share most of the working time with their colleagues with disabilities; consequently, the potential for providing social support to them is ample. However, just as supervisors, coworkers should bear our finding in mind that social support is not equally beneficial for all employees with disabilities. Instead of excessively supporting everybody with a disability, they should concentrate on those individuals with low levels of self-efficacy. Therefore, it might be important to listen closely to colleagues’ comments, questions, and requests, as these might be good indicators of their self-efficacy levels and their related need of support.

Concerning intrapersonal resources, supervisors should aim at fostering the self-efficacy of their employees. An increase of positive self-beliefs is associated with a reduced need for social support. Gist and Mitchell (1992) distinguish two general scenarios. The first scenario is that the experienced level of self-efficacy is an inaccurate perception of one’s own ability; the second is that it reflects an accurate perception. Depending on the type of scenario, the authors suggest two different approaches to
increase self-efficacy. First, when employees misperceive their level of capability (i.e., scenario one), supervisors should try to correct these misperceptions. For instance, they can counteract by providing positive feedback on the performance level. Second, when low self-efficacy is a consequence of low capability (i.e., scenario two), a supervisor can try to change task-related and personal factors. Examples are trainings to increase skills or helping the employee to deal with distractions. In both cases, supervisors should emphasize the positive consequences of effort and concentration on job outcomes (Gist & Mitchell, 1992).

Finally, equally relevant for coworkers, supervisors, and whole organizations seems the question of how effective support looks like. Colella (1994) suggests that stakeholders should be made aware of the fact that (most) people with disabilities do not ask for being patronized. Consequently, it seems decisive to not only provide support to the right people (i.e., the ones low in self-efficacy) but also to provide the right type of support (i.e., an instrumental, solution-oriented support instead of a patronizing, belittling support).

In sum, supervisors and organizations should try to motivate all employees to pay attention to the need of social support for people with disabilities and thereby, create a supportive environment. Ways to do so could make use of role modeling (Bandura & Walters, 1963; Weiss, 1977), or include social aspects in performance appraisals for all employees. When companies, supervisors, and coworkers pay attention to the needs of people with disabilities, they can help them to perform to their full potential.

5.2.3 Creating a Healthy and Disability-Inclusive Culture

Culture plays a powerful role in “shaping organizational life” (Saffold III, 1988: 546). Schein (1985: 9) describes organizational culture as “the pattern of basic assumptions that a given group has invented, discovered, or developed […]” Thus, culture refers to shared perceptions of organizational members in terms of values and norms. This is what Trice and Beyer (1984: 654) refer to as the first basic component of culture, i.e., “its substance.” The second basic component is defined as the forms or the practices whereby these shared perceptions are expressed (i.e., visible behavioral patterns; compare Kottler & Heskett, 1992).
First, the development of a healthy organizational culture is of utmost importance for the prevention of long-term health problems and their intervention. Thus, health needs to be a value lived up to and apparent in organizational norms and practices. Occupational health management should rather be an integral part of organizational culture than ad-hoc solutions for certain individuals. Consequently, decision makers should strive for creating a global health system instead of improving individual health for a sick system.

In addition, policies, HR, and reward systems need to be aligned accordingly (Sparling, 2010). They should reinforce healthy behaviors (Goetzel & Ozminkowski, 2008). For instance, HR systems should provide enough flexibility to allow flexible working schedules (e.g., Hilb, 2009) and not reward working long hours, or not taking vacation days.

Second, a disability-friendly organizational culture is crucial to make sure that diverse groups can effectively work together. Studies confirm that full acceptance and incorporation of individuals with disabilities can only be achieved by a cultural change (Schur, Kruse, & Blanck, 2005). However, in many companies, “corporate culture creates or reinforces obstacles for employees with disabilities” instead of removing them (p. 18). A recent study of Dobbin and colleagues (2011) provides evidence that corporate culture is a strong predictor of diversity program adoption. They conclude that “firms with a history of making formal commitments to new social norms are significantly more likely to join the diversity management bandwagon.” (p. 404).

A diversity-friendly organizational culture should be based on learning and sharing ideas (Ely & Thomas, 2001). In many cases, people are just not aware of the exclusion of people with illnesses or disabilities (Bell, 2007). Thus, there is a need for diversity education with a long-term focus. Bell considers diversity education together with valuing diversity as promising for behavioral and cultural change. This is in line with Sessa (1992: 64), who stated that “the organization must be changed or transformed to manage and optimize [that] diversity and make it an integral part of the organization.”

Hence, organizations need to create an inclusive environment, which has been defined by various diversity scholars as diversity climate (Gonzalez & DeNisi, 2009; McKay, Avery, & Morris, 2008) or, more recently, as climate for inclusion (Nishii, in press). There are different conceptualizations present in the literature. However, “the common
thread among these definitions is that individuals perceive that a culturally and demo-
graphically diverse set of organizational members is included, equally empowered, 
treated fairly, and enjoys positive working relationships with each other” (Konrad, 
Cannings, & Goldberg, 2010: 1662). Climate for inclusion, similar to other diversity 
climate constructs, comprises the dimensions fairness of employment practices, inte-
gration of differences, and inclusion in decision-making (Nishii, in press). For people 
with disabilities, this would also mean creating an environment in which they are com-
fortable to ask for accommodations.

Moreover, a lot of practices aiming at supporting employees with disabilities are in 
fact beneficial for all employees and even help to prevent the onset of new disabilities 
(Schur et al., 2005). For instance, organizations that are flexible and sensitive to indi-
vidual needs are not only beneficial for people with disabilities but also for pregnant 
women, parents, or older workers.

Further, top management has a role model function for the organization – in a positive 
as well as in a negative sense (Shamir, House, & Arthur, 1993). A recent study of 
Kunze, Böhm, and Bruch (2013), for instance, provided evidence for the positive im-
plications of low negative top manager stereotypes on the diversity-performance link. 
In addition, recent research indicates spill-over effects of top management team behav-
iors on employee outcomes (Raes, Bruch, & De Jong, 2013). This is in line with the 
findings provided by Goetzel and Ozminkowski (2008), demonstrating that top man-
agement support for and participation in health-promotion programs is essential for 
their success.

As outlined above, culture is reflected in various organizational practices. In the fol-
lowing, I will select those, which are specifically relevant for the inclusion of people 
with work-related health problems or disabilities: (1) Developing disability-conscious 
HRM structures and embedding responsibility structures, (2) transforming disability 
into a talent whenever possible, (3) fostering networking activities among people with 
disabilities, and (4) avoiding black-and-white thinking in terms of working ability.
5.2.3.1 Implementation of Disability-Conscious HRM Structures and Responsibility Structures

Because diversity is a “people-related business issue” (Jackson, 1992: 4), HR departments play a critical role in translating antidiscrimination legislation into organizational rules and practices. In Study 2, I outline the positive effects of structural organizational flexibility for employees with disabilities. In line with this argumentation, I postulate the hypothesis that low organizational formalization as one facet of organizational flexibility has a positive influence on the relationship between having a disability and job satisfaction. However, contrary to this hypothesis, the results of Study 2 indicate that this is not the case since no moderation effect for formalization was found – neither a positive nor a negative one. I already provided possible explanations why positive consequences of formalization may have neutralized its effects in terms of flexibility (see Chapter 3.6.1). According to Konrad and Linnehan (1995), this positive side of formalization is beneficial for minority-friendly HR structures. They provided evidence for the idea that formalized HRM structures especially designed to support employees of minority groups, which they call “identity-conscious HRM structures,” are positively related to indicators of the employment status of protected groups, i.e., women and people of color. Formalized HRM structures are considered to be important because they help marginalized groups to demand their rights. These rules can help to legitimate claims. As a result, decision makers cannot justify their actions when they do not comply with formalized rules describing how certain issues have to be dealt with. Moreover, formalized HRM structures have the potential to change power relations.

For people with disabilities, disability-conscious HRM rules help to enforce their needs, for example their needs for accommodations. When disability-friendly policies exist, there is less scope for interpretation or excuses because decision makers are obliged to realize specific disability-related claims, providing a better negotiation position for employees with disabilities. Thus, changes towards disability-friendly practices should be implemented in all areas of HRM.

One of the first steps is creating the operative requirements for accommodating people with disabilities. Accommodations include architectural changes, providing special aids, or allowing more flexible working hours (Stone & Colella, 1996). However, providing these operative requirements already seems to represent an obstacle for
many companies. Employers still have many concerns, such as the perception that accommodations produce high costs, are burdensome, or difficult to implement (Hendricks, Batiste, Hirsh, Schartz, & Blanck, 2005). Studies provide evidence that in the majority of cases, these concerns are misperceptions (Hendricks et al., 2005). Schartz and colleagues (2006), for instance, surveyed 890 employers. They found that out of the 259 investigated accommodation solutions, approximately half (49.4 percent) had no direct costs at all. 131 (50.6 percent) had direct costs that were in the majority of cases (74.1 percent) $500 or less in the first year. The median of all costs was $600, the median of all accommodations, including those that did not cost anything, was only $25. Comparing the relatively low costs of accommodations to their potential benefit on productivity, social ramifications seem to carry more weight than financial ones.

A further issue of diversity is that “diversity efforts are everyone’s responsibility but no one’s primary responsibility” (Kalev, Kelly, & Dobbin, 2006: 592). Therefore, it seems important to assign clear areas of responsibility. Kalev, Kelly, and Dobbin (2006: 611) conclude that “structures that embed accountability, authority, and expertise (affirmative action plans, diversity committees and task forces, diversity managers and departments)” are the most effective intervention of increasing proportions of minority groups in management positions of large private companies. Furthermore, the authors provide evidence that diversity trainings, networking, and mentoring programs are more effective in organizations with responsibility structures.

5.2.3.2 Creating a Win-Win Situation by Transforming a “Disability” into a Unique Talent

In general, an organization’s disability philosophy should focus on abilities rather than on disabilities (Lengnick-Hall, 2007). As introduced in a recent model of Shore and colleagues (2011) and outlined in Chapter 1.3.2, simultaneously valuing uniqueness and encouraging belongingness contributes to successful inclusion processes. This is in line with Ely and Thomas’ (2001) integration-and-learning perspective, which views cultural diversity as a resource for learning and adaptability, e.g., to different customer needs. This perspective is applicable to people with disabilities as well: If they are given the opportunity, they can add value to a company or a team by bringing in different sets of experiences, perspectives, and skills. Ely and Thomas (2001) pro-
vide the example of a law firm, which employed only white females, but aimed at attracting women of color. To be able to do so, the decision makers had to hire lawyers of color, which led to a complete transformation of the company and of the working processes. As a result, existing staff members saw their new colleagues “not only as a resource through which they could gain entree into previously inaccessible niche markets but, more importantly, as a resource from which they could learn new ways of reconceiving and reconfiguring their work as well” (Ely & Thomas, 2001: 241/242). The same positive process is imaginable for people with disabilities, who, for instance, are hired to push product innovations for customers with disabilities.

This is in line with Jent’s (2002) terminology of “comparative competencies,” or Hilb and Jent’s (2007) “Diversity Optima,” referring to the idea that every individual has a characteristic strength that is unique. The best situations are those, in which “disability” is transformed into ability or even into a unique capability because this creates a win-win situation for both sides. For instance, many blind people hear far better than non-blind people do (Röder, Rösler, & Neville, 1999). A different example is that some blind people have a better tactile sense than other people. One project that uses exactly this core competency approach is “discovering hands.” This project trains blind and visually impaired women in the prevention and early detection of breast cancer⁶. On the one hand, the project creates important jobs for blind and visually impaired women; on the other hand, patients benefit from high precision concerning the recognition of breast modifications.

If companies succeed in using the unique skills of people with disabilities, they can create a competitive advantage. A further example comes from a current book project, introducing successful inclusion concepts of different organizations (Böhm, Baumgärtner, & Dwertmann, in press). A software company developed the software solution PS@Work with and for one of their employees, who is blind (Chávez Lambers, in press). The aim of designing PS@Work was to support the respective employee in working more autonomously and efficiently. PS@Work enables the employee to better organize his or her workplace. The user can, for example, paste bar codes on folders or drawers. By using specifically developed cell phone software, he or she can insert the corresponding information in the cell phone. After scanning the code with a wireless hand scanner, the cell phone reads out loud the beforehand saved information.

⁶ http://www.discovering-hands.de/
Documents like letters or indexes of content of certain office folders automatically get a barcode with the most important information when they are printed. Because of the transferability to different workplaces of blind and visually impaired people, a new product was created, which decisively contributed to the company’s success.

5.2.3.3 *Fostering the Development of Networks among People with Disabilities through Affinity Groups and Mentoring Programs*

Dominant group members usually have better social networks, which provide them with more career-relevant information (Bell, 2007). Hence, one way for companies to create better career conditions for minority groups is to foster networking activities of such groups, either informally through affinity groups or formally through mentoring programs. By sponsoring affinity groups, such as groups for gays and lesbian or people with disabilities, organizations encourage networking activities between minority group members and visibly demonstrate support for diversity. By providing formal mentoring programs, where a protégée is paired with a mentor who supports her/him advancing the career, companies can ameliorate the success of minority groups (Bell, 2007). Hilb (2010: 94) demonstrates the important role of mentoring via diverse case scenarios. He emphasizes the “on-the-job-development” as crucial for learning and progressing.

Studies concerning diversity management practices have demonstrated the usefulness of networking activities for positive career outcomes of minority groups (Yang & Konrad, 2011). For instance, results of a study of Friedman and colleagues (Friedman, Kane, & Cornfield, 1998) indicate that network groups have a positive overall effect on career optimism of black managers. This occurs mainly via increased mentoring. In a more recent study, Friedman and Holtom (2002) compared the turnover intentions of minority employees who had joined a network group with those who had not joined one. The study provides evidence that employee network groups have the potential to help organizations to retain managerial-level minority employees.

One best practice example is the “Disability Employee Network”7 of Dow (Carton & Lee, in press). This network helps employees with disabilities to network, find mentors, interact with the top management team, and share their experiences to make Dow more accessible. Dow offers multiple disability-related programs and workshops

7 http://www.dow.com/careers/diversity/environment/disability.htm
Overall Discussion and Conclusion

around the globe to raise awareness for people with disabilities in the workplace and promote acceptance as well as appreciation of their talents within and outside the company (for more details or further practice examples, see our edited book on the inclusion of people with disabilities in the workplace: “Berufliche Inklusion von Menschen mit Behinderung. Best Practices aus dem ersten Arbeitsmarkt;” Böhm et al., in press).

5.2.3.4 Using Partial Work Capacity: From “all or nothing” to “partial is better than nothing”

A further cultural issue is the need to shift the perspective of working ability from “all or nothing” to “partial is better than nothing.” When a person with disability cannot work full-time, employers often think that he or she is unable to work. This reflects a rather black-and-white thinking in terms of two categories: being “able” to work versus being “unable” to work. However, even though some people with disabilities cannot work as much or as fast as those without disabilities, they have important working potential to offer. This potential should be used and developed. Along these lines, a main recommendation of the OECD “Sickness, Disability, and Work” report (2009: 7) is “focusing on what persons with partial work capacity can do and seeing them as having a meaningful labour market contribution to make.” This means that the frame of reference in many cases is not the comparison between “abled” and “disabled”, but between an individual with disability staying at home and an employee with disability using his or her working potential. The idea is to shift from “nothing” to (partial) labor force participation of people with disabilities. This is especially important within the return to work process (Shaw, Hong, Pransky, & Loisel, 2008).

5.2.4 Specific Practical Implications for Different Organizational Groups

As depicted in Table 5.1, I become even more specific and present separate practical implications for three organizational groups: top management, line management, and HR management. Again, these concrete recommendations are structured according to the fields of managerial action (Chapters 5.2.1 to 5.2.3). All components, which are strategy processes, leadership structures, and culture, as well as the respective activities of the different groups should be aligned (Bruch & Vogel, 2011) to achieve a maximum positive result in terms of employee health and effective disability management.
Table 5.1 Summary of Practical Implications, Divided by Target Group and Field of Managerial Action

<table>
<thead>
<tr>
<th>Top Management</th>
<th>Line Management</th>
<th>HR Management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy Processes</strong></td>
<td><strong>Strategy Processes</strong></td>
<td><strong>Strategy Processes</strong></td>
</tr>
<tr>
<td>Be aware of the business case of occupational health/disability management and its implications</td>
<td>Understand and implement an organization’s overall health-related strategy</td>
<td>Map HR systems and processes to the overall health-related strategy</td>
</tr>
<tr>
<td>Put health and disability management on the strategic agenda</td>
<td>Be aware of your important role in health and disability management</td>
<td>Design a disability management process</td>
</tr>
<tr>
<td>Include disability in your diversity program</td>
<td>Compose teams purposefully</td>
<td>Assess and monitor the status quo and health-related developments</td>
</tr>
<tr>
<td>Conduct a needs assessment and regular measurements of the status quo to monitor and evaluate health- and disability-related developments</td>
<td>Try to take advantage of the unique skills/talents of people with disabilities</td>
<td>Monitor sick leaves and conduct health surveys for an in-depth understanding of critical health-related variables</td>
</tr>
<tr>
<td><strong>Leadership Structures</strong></td>
<td><strong>Leadership Structures</strong></td>
<td><strong>Leadership Structures</strong></td>
</tr>
<tr>
<td>Demonstrate good overall leadership skills as a basis for a healthy leadership style</td>
<td></td>
<td>Integrate health promotion and disability management in leadership development programs</td>
</tr>
<tr>
<td>Build a good relationship with your employees</td>
<td></td>
<td>Translate antidiscrimination legislation into organizational rules and practices</td>
</tr>
<tr>
<td>Show HFL behaviors in terms of prevention:</td>
<td></td>
<td>Design formalized “disability-conscious” HRM structures and practices</td>
</tr>
<tr>
<td>• Don’t demand too much of your employees</td>
<td></td>
<td>Install processes that allow for the incorporation of individual needs, such as the realization of accommodations</td>
</tr>
<tr>
<td>• Make sure that the workload is appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Make sure that there are possibilities for regeneration following phases of high workload and focus on the most important tasks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Keep away factors that may negatively impact the health of your employees (prevention of work overload, stress, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ensure that the regular working hours are usually met (through avoiding overtime, taking leave, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be responsive to early signs of exhaustion or sickness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show HFL behaviors in terms of intervention:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Do not interpret sick leave as a sign of lacking resilience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Show understanding when someone is sick</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td><strong>Culture</strong></td>
<td><strong>Culture</strong></td>
</tr>
<tr>
<td>Make health a corporate value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make health and disability management an integral part of your company’s culture (no</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


5.3 Overall Limitations and Directions for Future Research

McGrath (1981: 179) suggested to view the research process as “a set of dilemmas to be ‘lived with’” rather than “a set of problems to be ‘solved’.” Thus, all research approaches have certain methodological limitations. Besides the specific disadvantages that I discussed within the individual study chapters, there are some rather general dilemmas that apply to all of my three studies. These will be addressed in the first part of

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer health-promoting trainings and workshops</td>
</tr>
<tr>
<td>Make sure that employment practices are fair and disability-friendly</td>
</tr>
<tr>
<td>Provide diversity education with a special emphasis on disability-related diversity</td>
</tr>
<tr>
<td>Enable partial labor force participation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage an appreciative and supportive working climate</td>
</tr>
<tr>
<td>Create a team culture, in which team members with health conditions dare to disclose and in which they feel comfortable to ask for accommodations</td>
</tr>
<tr>
<td>Value uniqueness and encourage belongingness</td>
</tr>
<tr>
<td>Underline the different set of experiences, perspectives, and skills that people with disabilities can add</td>
</tr>
<tr>
<td>Support networking activities of your diverse employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Align HR and reward systems with your health- and disability-related strategy</td>
</tr>
<tr>
<td>Foster a climate for inclusion by ensuring fairness of employment practices, integration of differences, and inclusion in decision-making</td>
</tr>
<tr>
<td>Be a role model of a health-promoting culture and of health-focused leadership</td>
</tr>
<tr>
<td>Be aware that boardroom behaviors are likely to have spill-over effects on employees – in good and in bad ways</td>
</tr>
<tr>
<td>Implement formalized “disability-conscious” HRM structures to help people with disabilities to enforce their needs, e.g., individual accommodations</td>
</tr>
<tr>
<td>Deploy responsibility structures/Assign clear responsibilities for (disability) diversity efforts, such as diversity managers/departments, diversity committees, and task forces</td>
</tr>
<tr>
<td>Communicate the value of the unique perspectives and talents of minority groups (such as those of people with disabilities)</td>
</tr>
<tr>
<td>Sponsor affinity groups and mentoring programs for people with health problems/disabilities</td>
</tr>
<tr>
<td>Respond appropriately when someone is sick</td>
</tr>
<tr>
<td>Try to find a joint solution when someone is sick for a longer period of time</td>
</tr>
<tr>
<td>When an employee is sick, clearly communicate that “health comes first” and that he/she should fully recover from the illness before coming back to work</td>
</tr>
<tr>
<td>Delegate responsibility</td>
</tr>
<tr>
<td>Provide interpersonal resources for people with disabilities, especially for those with low levels of self-efficacy</td>
</tr>
<tr>
<td>Encourage constructive helping behaviors within your team, such as instrumental social support</td>
</tr>
<tr>
<td>Develop the intrapersonal resources of your followers, such as occupational self-efficacy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer health-promoting trainings and workshops</td>
</tr>
<tr>
<td>Make sure that employment practices are fair and disability-friendly</td>
</tr>
<tr>
<td>Provide diversity education with a special emphasis on disability-related diversity</td>
</tr>
<tr>
<td>Enable partial labor force participation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage an appreciative and supportive working climate</td>
</tr>
<tr>
<td>Create a team culture, in which team members with health conditions dare to disclose and in which they feel comfortable to ask for accommodations</td>
</tr>
<tr>
<td>Value uniqueness and encourage belongingness</td>
</tr>
<tr>
<td>Underline the different set of experiences, perspectives, and skills that people with disabilities can add</td>
</tr>
<tr>
<td>Support networking activities of your diverse employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Align HR and reward systems with your health- and disability-related strategy</td>
</tr>
<tr>
<td>Foster a climate for inclusion by ensuring fairness of employment practices, integration of differences, and inclusion in decision-making</td>
</tr>
<tr>
<td>Be a role model of a health-promoting culture and of health-focused leadership</td>
</tr>
<tr>
<td>Be aware that boardroom behaviors are likely to have spill-over effects on employees – in good and in bad ways</td>
</tr>
<tr>
<td>Implement formalized “disability-conscious” HRM structures to help people with disabilities to enforce their needs, e.g., individual accommodations</td>
</tr>
<tr>
<td>Deploy responsibility structures/Assign clear responsibilities for (disability) diversity efforts, such as diversity managers/departments, diversity committees, and task forces</td>
</tr>
<tr>
<td>Communicate the value of the unique perspectives and talents of minority groups (such as those of people with disabilities)</td>
</tr>
<tr>
<td>Sponsor affinity groups and mentoring programs for people with health problems/disabilities</td>
</tr>
<tr>
<td>Respond appropriately when someone is sick</td>
</tr>
<tr>
<td>Try to find a joint solution when someone is sick for a longer period of time</td>
</tr>
<tr>
<td>When an employee is sick, clearly communicate that “health comes first” and that he/she should fully recover from the illness before coming back to work</td>
</tr>
<tr>
<td>Delegate responsibility</td>
</tr>
<tr>
<td>Provide interpersonal resources for people with disabilities, especially for those with low levels of self-efficacy</td>
</tr>
<tr>
<td>Encourage constructive helping behaviors within your team, such as instrumental social support</td>
</tr>
<tr>
<td>Develop the intrapersonal resources of your followers, such as occupational self-efficacy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer health-promoting trainings and workshops</td>
</tr>
<tr>
<td>Make sure that employment practices are fair and disability-friendly</td>
</tr>
<tr>
<td>Provide diversity education with a special emphasis on disability-related diversity</td>
</tr>
<tr>
<td>Enable partial labor force participation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage an appreciative and supportive working climate</td>
</tr>
<tr>
<td>Create a team culture, in which team members with health conditions dare to disclose and in which they feel comfortable to ask for accommodations</td>
</tr>
<tr>
<td>Value uniqueness and encourage belongingness</td>
</tr>
<tr>
<td>Underline the different set of experiences, perspectives, and skills that people with disabilities can add</td>
</tr>
<tr>
<td>Support networking activities of your diverse employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Align HR and reward systems with your health- and disability-related strategy</td>
</tr>
<tr>
<td>Foster a climate for inclusion by ensuring fairness of employment practices, integration of differences, and inclusion in decision-making</td>
</tr>
<tr>
<td>Be a role model of a health-promoting culture and of health-focused leadership</td>
</tr>
<tr>
<td>Be aware that boardroom behaviors are likely to have spill-over effects on employees – in good and in bad ways</td>
</tr>
<tr>
<td>Implement formalized “disability-conscious” HRM structures to help people with disabilities to enforce their needs, e.g., individual accommodations</td>
</tr>
<tr>
<td>Deploy responsibility structures/Assign clear responsibilities for (disability) diversity efforts, such as diversity managers/departments, diversity committees, and task forces</td>
</tr>
<tr>
<td>Communicate the value of the unique perspectives and talents of minority groups (such as those of people with disabilities)</td>
</tr>
<tr>
<td>Sponsor affinity groups and mentoring programs for people with health problems/disabilities</td>
</tr>
<tr>
<td>Respond appropriately when someone is sick</td>
</tr>
<tr>
<td>Try to find a joint solution when someone is sick for a longer period of time</td>
</tr>
<tr>
<td>When an employee is sick, clearly communicate that “health comes first” and that he/she should fully recover from the illness before coming back to work</td>
</tr>
<tr>
<td>Delegate responsibility</td>
</tr>
<tr>
<td>Provide interpersonal resources for people with disabilities, especially for those with low levels of self-efficacy</td>
</tr>
<tr>
<td>Encourage constructive helping behaviors within your team, such as instrumental social support</td>
</tr>
<tr>
<td>Develop the intrapersonal resources of your followers, such as occupational self-efficacy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer health-promoting trainings and workshops</td>
</tr>
<tr>
<td>Make sure that employment practices are fair and disability-friendly</td>
</tr>
<tr>
<td>Provide diversity education with a special emphasis on disability-related diversity</td>
</tr>
<tr>
<td>Enable partial labor force participation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage an appreciative and supportive working climate</td>
</tr>
<tr>
<td>Create a team culture, in which team members with health conditions dare to disclose and in which they feel comfortable to ask for accommodations</td>
</tr>
<tr>
<td>Value uniqueness and encourage belongingness</td>
</tr>
<tr>
<td>Underline the different set of experiences, perspectives, and skills that people with disabilities can add</td>
</tr>
<tr>
<td>Support networking activities of your diverse employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Align HR and reward systems with your health- and disability-related strategy</td>
</tr>
<tr>
<td>Foster a climate for inclusion by ensuring fairness of employment practices, integration of differences, and inclusion in decision-making</td>
</tr>
<tr>
<td>Be a role model of a health-promoting culture and of health-focused leadership</td>
</tr>
<tr>
<td>Be aware that boardroom behaviors are likely to have spill-over effects on employees – in good and in bad ways</td>
</tr>
<tr>
<td>Implement formalized “disability-conscious” HRM structures to help people with disabilities to enforce their needs, e.g., individual accommodations</td>
</tr>
<tr>
<td>Deploy responsibility structures/Assign clear responsibilities for (disability) diversity efforts, such as diversity managers/departments, diversity committees, and task forces</td>
</tr>
<tr>
<td>Communicate the value of the unique perspectives and talents of minority groups (such as those of people with disabilities)</td>
</tr>
<tr>
<td>Sponsor affinity groups and mentoring programs for people with health problems/disabilities</td>
</tr>
<tr>
<td>Respond appropriately when someone is sick</td>
</tr>
<tr>
<td>Try to find a joint solution when someone is sick for a longer period of time</td>
</tr>
<tr>
<td>When an employee is sick, clearly communicate that “health comes first” and that he/she should fully recover from the illness before coming back to work</td>
</tr>
<tr>
<td>Delegate responsibility</td>
</tr>
<tr>
<td>Provide interpersonal resources for people with disabilities, especially for those with low levels of self-efficacy</td>
</tr>
<tr>
<td>Encourage constructive helping behaviors within your team, such as instrumental social support</td>
</tr>
<tr>
<td>Develop the intrapersonal resources of your followers, such as occupational self-efficacy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer health-promoting trainings and workshops</td>
</tr>
<tr>
<td>Make sure that employment practices are fair and disability-friendly</td>
</tr>
<tr>
<td>Provide diversity education with a special emphasis on disability-related diversity</td>
</tr>
<tr>
<td>Enable partial labor force participation</td>
</tr>
</tbody>
</table>
Overall Discussion and Conclusion

I will also elaborate on possible solutions. In the second part of the chapter, I will focus on general ideas for future research from a content perspective.

**Figure 5.1 Research Strategies and Related Limitation (McGrath, 1981)**

![Figure 5.1](image)

5.3.1 Methodological Limitations and Possible Solutions

In all of the three studies of this dissertation, I applied a field study approach. McGrath (1981) distinguished eight methodological strategies, which are illustrated in Figure 5.1. The letters A (actors), B (behavior), and C (context) represent the maximum points of three mutually conflicting aims. A indicates the maximum of generalizability, B the precision in control and measurement of variables of behavior the researcher
Overall Discussion and Conclusion

is interested in, and C the realism of context. The main dilemma is that by maximizing one/two of the desiderata, the other two/one will decrease/minimize. As can be seen from Figure 5.1, a field study maximizes C, while decreasing A and B. Thus, in all three studies, a high realism of context is accompanied with a lack of precision in measurement and low generalizability to different contexts, such as different companies, different cultures, etc.

Concerning generalizability (A), two of my Studies (Study 1 and 2) were conducted in Germany and one (Study 3) in Israel. The specific German as well as Israeli culture may have systematically influenced my findings. Moreover, the type of organizations I investigated poses certain restrictions to generalizability as well. In Study 1, for instance, I used a data set from a German public service organization; in Study 2, a sample from small and medium sized companies and in Study 3, from an Israeli call center specifically prepared to employ people with disabilities. All of these different companies are associated with certain cultural and firm-specific characteristics that might have limited the generalizability of the findings. Therefore, although my dissertation draws on a variety of data sets, the replication of the results with different samples or with cross-cultural data across different types of contexts might be helpful to further test the robustness of the findings and increase their generalizability.

The second drawback of a high realism of context is a lack of precision in control and measurement of variables (B). As can be seen from Figure 5.1, laboratory experiments maximize B. An experiment is characterized by a deliberately contrived setting, in which certain behavior processes can be observed under controlled conditions. Future research may make use of this opportunity when the research goal focuses on identifying and understanding certain health- or disability-related processes.

In addition, collecting all study data with the same methodology, namely a questionnaire, brings forth the risk of common methods variance (Podsakoff et al., 2003). Common methods variance “can result when two or more constructs are measured by a single rater or source” (Avolio, Yammarino, & Bass, 1991: 571). I tried to avoid a potential bias through different procedures. I collected data from several sources. In Study 2, for instance, the respondents were asked if they possessed a disability identity card, which is issued after a thorough declaratory procedure, in which the degree of a disability is assessed based on detailed diagnostic and medical reports. Thus, the measurement of disability is rather objective (Dwertmann et al., 2011). Moreover, a
demographic characteristic, such as having a disability, and an attitudinal variable, such as job satisfaction, are unlikely to share the same sources of bias. In Study 3, data were collected from three different sources, namely the employees themselves, the HR responsible, and the supervisors. Furthermore, several statistical analyses were conducted to demonstrate the independence of our variables. In Study 1, I tested the factorial structure of the investigated constructs and its discriminant validity by conducting various factor analyses. In Study 2, an exploratory factor analysis with all items of our focal variables was conducted and resulted in the appropriate number of constructs. Moreover, moderation analyses (Studies 2 and 3) are rather unlikely to be affected by a monomethod bias (Evans, 1985).

Even though survey designs have certain limitations, I tried to minimize the related risks. Nevertheless, future research should replicate my dissertation’s findings by using different designs or by incorporating different data sources, such as assessing objective health data.

Furthermore, all of my hypotheses infer causal relationships between the independent and dependent variables. The reasoning for this is based on a theoretical point of view. From an empirical perspective, three conditions must be fulfilled to demonstrate that a variable X may be a cause of a variable Y (Bollen, 1989; Cohen et al., 2003). (1) X must be correlated with Y; (2) X must precede Y in time; and (3) the X-Y relationship stays robust even when the effect has been isolated, which means that possible influences of other variables are eliminated (i.e., nonspuriousness). All the studies of this dissertation fulfill condition one. The second condition demanding the temporal precedence of the independent variable(s) only holds in one of the studies. In Study 3, job performance was measured with a four week time lag from the independent variables. Condition three, namely the exclusion of all possible other influences, is not completely ensured in any of the three studies since I did not choose an experimental design. However, since I controlled for relevant other factors in all of my studies, spuriousness is rather unlikely. To establish temporal precedence, future studies should use longitudinal study designs (Cohen et al., 2003). They realize multiple advantages over cross-sectional designs. They allow using time as an independent variable, estimating stability of research variables and how they develop over time, (additionally) investigating within person variance, and shedding light on complex relationships, and on intervention effects over time (Avey, Luthans, & Mhatre, 2008). However, as outlined by
McGrath (1981), there is no “right” strategy and researchers should therefore combine various strategies across multiple studies to compensate for different methodological flaws and gain insights into the research problems from different angles.

### 5.3.2 General Future Research Directions

Within the scope of my dissertation, I had to focus on a limited number of research questions. My studies addressed theoretically and practically relevant aspects, which inspired me to think about further interesting and necessary research projects. These ideas will be outlined in the following.

First, there is a general lack of studies examining organizational processes that lead to inclusion (Shore et al., 2011), especially in the field of disability. Moreover, current studies mainly focus on the negative outcomes of disabilities rather than on facilitating mechanisms or positive variables (Shore et al., 2009). Study 2 and Study 3 of this dissertation take a first step in this direction by investigating enabling organizational conditions (i.e., perceived structural flexibility and instrumental social support), but more studies need to follow. Future disability research should investigate the impact of further organizational factors. One way to do so is to examine the creation of work environments where diversity is appreciated, diverse individuals are included (Nishii, in press), and persons with disabilities feel comfortable asking for accommodations. These types of organizational environments are especially important for people with health problems or disabilities, because having a disability is generally viewed as being something negative (Shore et al., 2009). Thus, these employees have “fewer opportunities to belong to valued groups” (Shore et al., 2011: 1264) (compare Chapter 1.3.2).

Second, beyond investigating positive organizational boundary and facilitating conditions for people with disabilities, future studies should combine this line of research with theories explaining the underlying psychological processes. A promising avenue for research on these disability-related psychological processes and the reduction of discrimination may be incorporating the social identity perspective within disability research. Within the last years, social identity theory has been extended (see the Special Issue of the Academy of Management Review, 2000). One common theme of more recent identity studies is the conceptualization of organizational identity as a
more modifiable and situational construct (Hogg & Terry, 2000). Self-categorizations are thought to be activated by the context. One interesting approach in this regard may be the combination of Brickson’s (2000) model of identity orientation processes in demographically diverse organizations with the belongingness-uniqueness framework of Shore and colleagues (2011) mentioned in Chapter 1.3.2. Brickson assumes that organizational characteristics represent the contextual frame for self-categorization processes, more specifically (1) organizational structure, (2) task structure, and (3) reward structure. The properties of these structures influence the identification processes that take place, which result from the assumed identity orientation of the majority group (i.e., a personal, relational, or collective identity orientation). The relational identity orientation is assumed to have the most beneficial effects on the reduction of stereotypes and discrimination. When an organizational context promotes direct cooperation with a minority group member due to the fact that working tasks are allocated to dyads, a relational identity orientation is likely to emerge. This type of identity orientation will lead to a deeper cognitive understanding of a person of a minority group (Brickson, 2000), such as a person with disability, making positive effects of disability diversity more likely. This framework seems promising in explaining processes leading to the experience of belongingness and appreciation of uniqueness of employees with disabilities.

Third, as illustrated in Study 3, constructive helping behavior can have positive effects on people with disabilities. However, not only the amount but also the type of social support is decisive for its effect. There are also helping behaviors, which reflect subtle forms of discrimination. Whereas constructive support is targeted at practically assisting with a problem, over-support is viewed as rather counterproductive. There are studies that find social support to be related to negative outcomes when it is perceived as an intervention that restricts a person’s freedom (e.g., Brehm & Cole, 1966), or as providing unsolicited social support which is interpreted as implied incompetence by the receiver (Smith & Goodnow, 1999). One example, which has recently gained attention, is paternalism, a hidden form of discrimination (Colella, Garcia, Reidel, & Triana, 2005). Future studies should therefore focus on different types of social support and their outcomes. Moreover, it would be interesting to investigate a sample of people with disabilities that just entered the workforce after having been unemployed before. In line with studies investigating people that are unemployed (Creed, Bloxsome, & Johnston, 2001; Schindler, Vogel, & Schneider, 2011), I assume that
people with disabilities would demonstrate lower levels of self-efficacy and thus, would need more constructive social support in the beginning. It would be interesting to see if the need for helping behavior would (1) depend on characteristics other than self-efficacy and (2) if the amount of social support needed would decrease over time.

Fourth, in all of my studies, I looked at “people with disabilities” as a rather homogenous group. It would be interesting to investigate how disability status and other diversity dimensions simultaneously influence organizational outcomes. In a recent study, for instance, Baldridge and Swift (2013) show that disability status (more specifically, disability severity) interacts with age and gender in predicting accommodation requests. The theoretical rationale behind their empirical findings is that demographic characteristics other than disability are involved in shaping social identities and thus, affect certain behavior-related decisions, such as requesting an accommodation. This is likely to apply to outcomes such as job satisfaction and job performance as well.

Fifth, in all of my studies, I took on a managerial perspective on the phenomenon of health and disability. Therefore, I focused on the benefits an organization can realize when adequately promoting their employees’ health and dealing with people with disabilities. Hereby, I followed the call of Colella and Bruyère (2011) to move away from the rehabilitation or supply side perspective on people with disabilities by merely focusing on their personal perspective. However, I did not explicitly address the demand side perspective, which is still understudied. Questions related to incentives for organizations to promote their employees’ health, to deal with, and hire people with disabilities need to be addressed to identify levers that may help to ameliorate the conditions for successful workplace inclusion. Herby, economic research looking at employment policies can further inform our understanding of employment barriers. To capture the demand side more exhaustively, the intersection of age and disability is a further promising area of future research. As mentioned above, disability and age are correlated (WHO, 2011) and companies face an aging workforce. However, both fields of research have developed rather in isolation. The combination of age-related research, for instance findings of age diversity studies, and disability research seems to be promising. Moreover, as the workforce ages, the topic of accommodations is likely to get even more important (Colella & Bruyère, 2011).

Finally, future research on health-related as well as disability-related questions should aim for multilevel research designs. These could examine how individual factors inter-
Overall Discussion and Conclusion

act with group-level and organizational-level factors. Lower/individual-level phenomena are usually embedded in the contextual frame of higher/organizational determinants. For instance, overall organizational norms may have an impact on work unit climates and these, in turn, on individual experiences. Concerning HFL, future studies should also investigate the role of organizational conditions, such as work and family climates (Kossek, Colquitt, & Noe, 2001). In addition, when leaders themselves are put under enormous pressure to attain certain goals fast, they are likely to pass it on to their followers, at least to a certain extent. Thus, it might be less likely that they demonstrate HFL behaviors. In sum, multilevel research can help to disentangle the complexities of the health- and disability-related issues mentioned above.

5.4 Conclusion

With this dissertation I contribute to the research fields of leadership, HRM, and organizational behavior with a focus on health promotion and people with disabilities. I focused on identifying organizational factors and conditions that are beneficial to approach relevant aspects of the negative public health trend, namely the increase of work-related health problems and disabilities. This trend challenges organizations in many ways, which converge at a central goal: keeping valuable human resources in the organization and dealing with employees who have developed a disability. From a managerial as well as an economic perspective, there is no way around including people with health issues/disabilities into the workforce. The results of my studies reveal many promising avenues to address these health-related challenges. First, domain-specific leadership that promotes employees’ health has been identified as one lever to counteract the negative public health trend. HFL has demonstrated to be an effective approach to promote well-being and address the “biggest, new challenge,” namely mental disabilities (OECD, 2009: 15). Second, I contribute to research on people with disabilities that are part of the workforce. A common thread appears to be that meeting their individual needs is important to make them valuable members of the organization. One enabling condition for their job satisfaction is structural flexibility. Depending on their level of intrapersonal resources, instrumental social support may also be an effective contextual factor to spur their on-the-job success.

Overall, the creation of supportive workplace conditions has the potential to prevent work-related disabilities (e.g., by health-focused leaders) and to more fully include
people with disabilities into the organization (i.e., by providing organizational decentralization and instrumental social support). Aligning the needs of people with disabilities with organizational benefits creates a win-win situation for both parties and, moreover, by reducing the burden on social security systems, a benefit for society as a whole.
## 6 Appendix

### 6.1 Survey Items for Study 1

Table 6.1 Survey Items Study 1: Leader-Member Exchange

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I usually know where I stand with my direct supervisor.</td>
<td>Normalerweise weiss ich, woran ich bei meiner direkten Führungskraft bin.</td>
</tr>
<tr>
<td>2.</td>
<td>I usually know how satisfied my direct supervisor is with me.</td>
<td>Normalerweise weiss ich, wie zufrieden meine direkte Führungskraft mit mir ist.</td>
</tr>
<tr>
<td>5.</td>
<td>My direct supervisor has enough confidence in me that he/she would defend and justify my decisions if I were not present to do so.</td>
<td>Meine direkte Führungskraft hat genug Vertrauen in mich, um meine Entscheidungen zu vertreten, falls ich nicht anwesend sein sollte.</td>
</tr>
<tr>
<td>6.</td>
<td>Regardless of how much power he/she has built into his/her position, my direct supervisor would be personally inclined to use his/her power to help me solve problems in my work.</td>
<td>Meine direkte Führungskraft wäre persönlich bereit, ihren Einfluss einzusetzen, um mir zu helfen, Probleme am Arbeitsplatz zu lösen.</td>
</tr>
<tr>
<td>7.</td>
<td>I can count on my direct supervisor to “bail me out,” even at his or her own expense, when I really need it.</td>
<td>Ich kann mich darauf verlassen, dass meine direkte Führungskraft mir „aus der Klemme hilft” wenn ich es wirklich brauche, selbst wenn es auf ihre eigenen Kosten geht.</td>
</tr>
<tr>
<td>8.</td>
<td>I characterize my working relationship with my direct supervisor as extremely effective.</td>
<td>Ich sehe meine Arbeitsbeziehung mit meiner direkten Führungskraft als sehr effektiv an.</td>
</tr>
</tbody>
</table>

Introduction: The following items refer to your direct supervisor and his/her treatment of you and your colleagues. Please indicate how much you agree/disagree.
Table 6.2 Survey Items Study 1: Health-Focused Leadership

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Prevention</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>My direct supervisor regularly demands too much of his/her employees (reverse coded).</td>
<td>Meine Führungskraft überfordert ihre Mitarbeiter regelmässig (reverse coded).</td>
</tr>
<tr>
<td>2.</td>
<td>My direct supervisor makes sure that the workload of his/her employees is appropriate.</td>
<td>Meine Führungskraft achtet darauf, dass das Arbeitspensum ihrer Mitarbeiter angemessen ist.</td>
</tr>
<tr>
<td>3.</td>
<td>My direct supervisor makes sure that there are possibilities for regeneration following phases of high workload.</td>
<td>Meine Führungskraft achtet bei ihren Mitarbeitern darauf, dass nach arbeitsintensiven Phasen Möglichkeiten zur Regeneration bestehen.</td>
</tr>
<tr>
<td>4.</td>
<td>My direct supervisor tries to keep away factors that may negatively impact the health of his/her employees (prevention of work overload, stress, etc.)</td>
<td>Meine Führungskraft versucht, schädliche gesundheitliche Einflüsse von ihren Mitarbeitern fernzuhalten (Vermeidung von Überlastung, Stress etc.)</td>
</tr>
<tr>
<td>5.</td>
<td>My direct supervisor ensures that the regular working hours are usually met (through avoiding overtime, taking leave, etc.)</td>
<td>Meine Führungskraft sorgt dafür, dass die geplanten Arbeitszeiten in der Regel eingehalten werden (durch Vermeidung von Überstunden, Nehmen von Urlaubstagen etc.)</td>
</tr>
<tr>
<td></td>
<td><strong>Intervention</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>When an employee is absent due to illness, my direct supervisor interprets it as a sign of lacking resilience (reverse coded).</td>
<td>Wenn ein Mitarbeiter krankheitsbedingt fehlt, wertet meine Führungskraft das als Zeichen mangelnder Belastbarkeit (reverse coded).</td>
</tr>
<tr>
<td>2.</td>
<td>When an employee is in poor health, my direct supervisor shows understanding for his/her situation.</td>
<td>Wenn es einem Mitarbeiter gesundheitlich schlecht geht, zeigt meine Führungskraft Verständnis für seine Situation.</td>
</tr>
</tbody>
</table>
3. When an employee has health problems, my direct supervisor responds appropriately.

Wenn ein Mitarbeiter gesundheitliche Probleme hat, reagiert meine Führungskraft angemessen.

4. When an employee is in poor health, my direct supervisor tries to work together with him/her to find a joint solution.

Wenn es einem Mitarbeiter gesundheitlich schlecht geht, versucht meine Führungskraft mit ihm gemeinsam eine Lösung zu finden.

5. When an employee is sick, my direct supervisor clearly communicates that “health comes first” and that he/she should fully recover from the illness before coming back to work.

Wenn ein Mitarbeiter krank ist, kommuniziert ihm meine Führungskraft deutlich, dass „Gesundheit zuerst kommt” und er sich auskurieren soll.

### Table 6.3 Survey Item Study 1: Work Ability

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>When you rate your lifetime best health status with 10 points: How many point would you give for your current health status? Please indicate the corresponding number (0 means that you are currently totally incapable of work).</td>
<td>Wenn Sie Ihren besten, je erreichten Gesundheitszustand mit 10 Punkten bewerten: Wie viele Punkte würden Sie dann für Ihren jetzigen Gesundheitszustand geben? Bitte kreuzen Sie die entsprechende Zahl an (0 bedeutet, dass Sie zur Zeit völlig arbeitsunfähig sind).</td>
</tr>
</tbody>
</table>

*Introduction: The next item refers to your health status. How do you estimate your current health status compared with that of your lifetime best?*
### Table 6.4 Survey Items Study 1: Emotional Exhaustion

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>There are days that I feel already tired before I go to work.</td>
<td>Es gibt Tage, an denen ich mich schon vor der Arbeit müde fühle.</td>
</tr>
<tr>
<td>2.</td>
<td>After my work, I now need more time to relax than in the past to become fit again.</td>
<td>Nach der Arbeit brauche ich jetzt oft längere Erholungszeiten als früher, um wieder fit zu werden.</td>
</tr>
<tr>
<td>3.</td>
<td>During my work, I often feel emotionally drained.</td>
<td>Ich habe bei der Arbeit immer häufiger das Gefühl, emotional ausgelaugt zu sein.</td>
</tr>
<tr>
<td>4.</td>
<td>After my work, I usually feel worn out and weary.</td>
<td>Nach der Arbeit fühle ich mich in der Regel schlapp und abgespannt.</td>
</tr>
<tr>
<td>5.</td>
<td>I can stand the pressure of my work very well (reverse coded).</td>
<td>Die Belastung durch meine Arbeit ist gut zu ertragen (reverse coded).</td>
</tr>
<tr>
<td>7.</td>
<td>Normally, I can manage the amount of work well (reverse coded).</td>
<td>In der Regel kann ich meine Arbeitsmenge gut schaffen (reverse coded).</td>
</tr>
<tr>
<td>8.</td>
<td>When I work, I usually feel vital (reverse coded).</td>
<td>Während meiner Arbeit fühle ich mich normalerweise voller Energie (reverse coded).</td>
</tr>
</tbody>
</table>

### Table 6.5 Survey Item Study 1: Satisfaction with Direct Supervisor

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How satisfied are you overall with your supervisor?</td>
<td>Wie zufrieden sind Sie insgesamt mit Ihrem Vorgesetzten?</td>
</tr>
</tbody>
</table>
### Table 6.6 Survey Items Study 1: Organizational Commitment

**Organizational Commitment**  
(Mowday, Steers, & Porter, 1979)

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.</td>
<td>Ich bin sehr froh, dass ich mich entschlossen habe, für diese Organisation und nicht für eine andere zu arbeiten.</td>
</tr>
<tr>
<td>2.</td>
<td>I am proud to tell others I am part of this organization.</td>
<td>Ich bin stolz darauf, anderen erzählen zu können, dass ich ein Teil dieser Organisation bin.</td>
</tr>
<tr>
<td>3.</td>
<td>I talk up this organization to my friends as a great organization to work for.</td>
<td>Ich lobe diese Organisation gegenüber meinen Freunden als einen tollen Arbeitgeber.</td>
</tr>
<tr>
<td>4.</td>
<td>I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.</td>
<td>Ich bin bereit, mich für den Erfolg dieser Organisation mehr anzustrengen als normalerweise erwartet wird.</td>
</tr>
</tbody>
</table>

### Table 6.7 Survey Items Study 1: Turnover Intention and Job Performance

**Turnover Intention**  
(based on Spector, Dwyer, & Jex, 1988)

*Introduction:* The following item refers to your intent to quit the organization.

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How often did you seriously consider quitting your job within the last six months?</td>
<td>Wie oft haben Sie in den letzten sechs Monaten ernsthaft darüber nachgedacht, Ihre Stelle zu kündigen?</td>
</tr>
</tbody>
</table>

**Job Performance**  

*Introduction:* The following item refers to the result of your performance and development dialogue (LEDI). The answer is of course voluntary and highly confidential.

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Please check the overall performance appraisal that you got in your last LEDI (performance and development dialogue).</td>
<td>Bitte kreuzen Sie an, welches Gesamturteil Sie im Rahmen Ihres letzten LEDI erhalten haben.</td>
</tr>
</tbody>
</table>
### 6.2 Survey Items for Study 2

Table 6.8 Survey Item Study 2: Disability Status

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Do you have a disability (according to the definition of the SGB III/IX)? Yes, with a percentage of ___ percent/No</td>
<td>Haben Sie eine Behinderung (nach der Definition des SGB III/IX)? Ja, mit ___%/Nein</td>
</tr>
</tbody>
</table>

Introduction: The following questions will be used for research purposes only. We would be very grateful if you also answer to these questions. We guarantee that your anonymity will be strongly protected.

Table 6.9 Survey Items Study 2: Perceived Flexibility

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Whatever situation arises, written procedures are available for dealing with it.</td>
<td>Für jede denkbare Situation gibt es eine schriftliche Anleitung.</td>
</tr>
<tr>
<td>2.</td>
<td>Rules and procedures occupy a central place in the organization.</td>
<td>Regeln und Verfahren spielen in unserem Unternehmen eine zentrale Rolle.</td>
</tr>
<tr>
<td>3.</td>
<td>Written records are kept of everyone’s performance.</td>
<td>Die Leistungen aller Mitarbeiter werden schriftlich erfasst (z.B. durch Fehlerquoten, Verkaufsquoten, Zielerreichungsgrade).</td>
</tr>
<tr>
<td>4.</td>
<td>Employees in our organization are hardly checked for rule violations (reverse coded).</td>
<td>Regelverletzungen durch Mitarbeiter in unserem Unternehmen werden kaum geprüft (reverse coded).</td>
</tr>
<tr>
<td>5.</td>
<td>Written job descriptions are formulated for positions at all levels</td>
<td>Für die Positionen auf allen Ebenen in unserem Unternehmen gibt es schriftliche Stellenbe-</td>
</tr>
</tbody>
</table>

Perceived Flexibility

(based on Desphandé & Zaltman, 1982/Jansen, Van Den Bosch, & Volberda, 2006; Hage & Aiken, 1967;)

Introduction: The following statements refer to the structures and processes of your company. Do you agree with the statements?
in the organization.

<table>
<thead>
<tr>
<th>Centralization – Hierarchy of Authority Hage &amp; Aiken, 1967</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There can be little action taken here until a supervisor approves a decision.</td>
</tr>
<tr>
<td>2. Even small matters have to be referred to someone higher up for a final answer.</td>
</tr>
<tr>
<td>3. Employees have to ask their boss before they do almost anything.</td>
</tr>
<tr>
<td>4. A person who wants to make his/her own decisions would be quickly discouraged here (reverse coded).</td>
</tr>
<tr>
<td>5. Any decision employees make has to have their boss’s approval.</td>
</tr>
</tbody>
</table>

Table 6.10 Survey Items Study 2: Job Satisfaction

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How satisfied are you overall with your working tasks?</td>
<td>Wie zufrieden sind Sie insgesamt mit Ihrer Tätigkeit?</td>
</tr>
<tr>
<td>2.</td>
<td>How satisfied are you overall with your coworkers?</td>
<td>Wie zufrieden sind Sie insgesamt mit Ihren Kollegen?</td>
</tr>
<tr>
<td>3.</td>
<td>How satisfied are you overall with your supervisor?</td>
<td>Wie zufrieden sind Sie insgesamt mit Ihrem Vorgesetzten?</td>
</tr>
<tr>
<td>4.</td>
<td>How satisfied are you overall with your promotion opportunities?</td>
<td>Wie zufrieden sind Sie insgesamt mit Ihren Entwicklungschancen?</td>
</tr>
<tr>
<td>5.</td>
<td>How satisfied are you overall with your pay?</td>
<td>Wie zufrieden sind Sie insgesamt mit Ihrem Gehalt?</td>
</tr>
</tbody>
</table>
## 6.3 Survey Items for Study 3

### Table 6.11 Survey Items Study 3: Instrumental Social Support

**Instrumental Social Support – Source: Employees**  
(Berlin Social Support Scales; BSSS; Schwarzer & Schulz, 2000)

*Introduction: Below are different statements with which you may agree or disagree. Using the 1-5 scale below, indicate your agreement with each item by ticking the appropriate check box. The higher your level of agreement the higher the number of your answering category. Please be open and honest in your responding.*

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I know some people upon whom I can always rely.</td>
<td>Ich habe Menschen, auf die ich mich immer verlassen kann.</td>
</tr>
<tr>
<td>2.</td>
<td>When I am worried, there is someone who helps me.</td>
<td>Wenn ich Sorgen habe, gibt es jemanden, der mir hilft.</td>
</tr>
<tr>
<td>3.</td>
<td>There are people who offer me help when I need it.</td>
<td>Es gibt Menschen, die mir ihre Hilfe anbieten, wenn ich sie brauche.</td>
</tr>
<tr>
<td>4.</td>
<td>When everything becomes too much for me to handle, others are there to help me.</td>
<td>Wenn mir alles zu viel wird, helfen mir andere.</td>
</tr>
</tbody>
</table>
Table 6.12 Survey Items Study 3: Occupational Self-Efficacy

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thanks to my resourcefulness, I know how to handle unforeseen situations in my job.</td>
<td>Wenn im Beruf unerwartete Situationen auftauchen, weiss ich immer, wie ich mich verhalten soll.</td>
</tr>
<tr>
<td>2.</td>
<td>If I am in trouble at my work, I can usually think of something to do.</td>
<td>Für jedes Problem bei meiner Arbeit habe ich eine Lösung.</td>
</tr>
<tr>
<td>3.</td>
<td>I can remain calm when facing difficulties in my job because I can rely on my abilities.</td>
<td>Beruflichen Schwierigkeiten sehe ich gelassen entgegen, weil ich mich immer auf meine Fähigkeiten verlassen kann.</td>
</tr>
<tr>
<td>5.</td>
<td>No matter what comes my way in my job, I’m usually able to handle it.</td>
<td>Was auch immer in meinem Berufsleben passiert, ich werde schon klarkommen.</td>
</tr>
<tr>
<td>6.</td>
<td>My past experiences in my job have prepared me well for my occupational future.</td>
<td>Durch meine vergangenen beruflichen Erfahrungen bin ich gut auf meine berufliche Zukunft vorbereitet.</td>
</tr>
<tr>
<td>7.</td>
<td>I meet the goals that I set for myself in my job.</td>
<td>Ich erreiche die beruflichen Ziele, die ich mir setze.</td>
</tr>
<tr>
<td>8.</td>
<td>I feel prepared to meet most of the demands in my job.</td>
<td>Ich fühle mich den meisten beruflichen Anforderungen gewachsen.</td>
</tr>
</tbody>
</table>
Table 6.13 Survey Items Study 3: Job Performance/In-Role Behavior

<table>
<thead>
<tr>
<th>Item</th>
<th>English</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>This employee adequately completes assigned duties.</td>
<td>Diese/r Mitarbeiter/in erfüllt die ihm/ihr übertragenen Aufgaben auf angemessene Weise.</td>
</tr>
<tr>
<td>2.</td>
<td>This employee fulfills responsibilities specified in the job description.</td>
<td>Diese/r Mitarbeiter/in erfüllt die in der Stellenbeschreibung festgelegten Verantwortlichkeiten.</td>
</tr>
<tr>
<td>3.</td>
<td>This employee performs tasks that are expected of him/her.</td>
<td>Diese/r Mitarbeiter/in erledigt die von ihm/ihr erwarteten Aufgaben.</td>
</tr>
<tr>
<td>4.</td>
<td>This employee meets formal performance requirements of the job.</td>
<td>Diese/r Mitarbeiter/in erfüllt formale Leistungsanforderungen der Stelle.</td>
</tr>
<tr>
<td>5.</td>
<td>This employee engages in activities that will directly affect his/her performance evaluation.</td>
<td>Diese/r Mitarbeiter/in beschäftigt sich mit Aktivitäten, die sich direkt auf seine/ihr Leistungsbeurteilung auswirken werden.</td>
</tr>
<tr>
<td>6.</td>
<td>This employee neglects aspects of the job he/she is obligated to perform (reverse coded).</td>
<td>Diese/r Mitarbeiter/in vernachlässigt Aspekte seiner Arbeit, die er/sie ausführen müsste (reverse coded).</td>
</tr>
<tr>
<td>7.</td>
<td>This employee fails to perform essential duties (reverse coded).</td>
<td>Diese/r Mitarbeiter/in kommt wesentlichen Verpflichtungen nicht nach (reverse coded).</td>
</tr>
</tbody>
</table>
References


References


coworker support as predictors of individual strain and job performance. 


Wiesbaden, Germany: Universum Verlag GmbH.

Bjelland, M. J., Bruyère, S. M., von Schrader, S., Houtenville, A. J., Ruiz-Quintanilla, 
A., & Webber, D. A. 2010. Age and disability employment discrimination: 


Shake-It-Up: Using health promotion, capacity building and a disability studies 

Facts, challenges and responses [PGDA Working Paper 71]. Cambridge, MA: 
Program on the Global Demography of Aging.

disability-related diversity: Opportunities and pitfalls. In T. Geisen & H. G. 
Harder (Eds.), *Disability management and workplace integration: 
International research findings*: 85-98. Farnham, UK: Gower.

Inklusion von Menschen mit Behinderung. Best Practices aus dem ersten 

Wiley.


References


References


References


Curriculum Vitae

Miriam Karin Baumgärtner, born in Tübingen, Germany

EDUCATION

2009-2013  University of St. Gallen, Switzerland
Doctoral studies in Strategy & Management (Dr. oec. HSG)

2010  University of Michigan, Ann Arbor, USA
ICPSR Summer School in Quantitative Methods of Social Research

2004-2008  University of Mannheim, Germany
M.Sc. in Psychology (Dipl.-Psych.)

2003-2004  University of North Carolina (UNCG), Greensboro, and Western Carolina University (WCU), Cullowhee, North Carolina, USA
Scholarship as visiting student at the Psychology Department

2001-2003  University of Constance, Germany
B.A. in Psychology (Vordiplom)

WORK EXPERIENCE

Since 2009  University of St. Gallen, Switzerland
Research associate and project leader, Center for Disability and Integration (CDI-HSG)

2008-2009  Kenexa GmbH, München, Germany
Consultant for employee surveys and HR management solutions

2004-2008  gesis, Leibniz Institute for the Social Sciences, Mannheim, Germany
Research assistant (Prof. Dr. Ingwer Borg, Prof. Dr. Beatrice Rammstedt, Prof. Dr. Michael Braun)