DEVELOPMENT AND EXPLORATION OF PERSON-DYNAMIC-FIT

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DEDICATION

This doctoral dissertation is lovingly dedicated to

my parents, Hildegard and Rudolf Quinkert.

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This research project has been undertaken as part of a research cooperation between Edinburgh Napier University Business School (Scotland) and the Business School of the University of Applied Sciences THM (Technische Hochschule Mittelhessen, Gießen, Germany). This thesis has thus been supervised by experts from both universities.

During the course of the conceptual and empirical work the author worked as a scientific assistant for the THM University and has also taken part in several consultancy projects which have enlarged her practical understanding of strategy, change and the organisational context. The phase of analysis and writing up has been interrupted and accompanied by two maternity phases. Due to these supervisory specifications as well as personal circumstances the list of institutions and people to whom I owe my gratitude is, of necessity, fairly long.

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Abstract

The aim of this research is to develop and explore a Person-Dynamic-Fit (PD-Fit) concept. This concept is measured by means of a fit between the dynamic preference of individuals and the level of dynamic in their specific work environments. This fit is reviewed for its relation to acknowledged Work Outcomes. An intensive literature review is conducted in the relevant research fields to identify the key factors and items for the study. Based on this the author develops relevant measurement tools for Individual Dynamic Preference (IDP), Work Environment Dynamic (WED) and Work Outcomes (WOC). For the IDP assessment recognized measurement tools for individual change readiness and resistance are adopted and the individuals' experience with change is considered as well. For the WED assessment an established dynamic assessment instrument is used and for the WOC evaluation the study includes acknowledged factors such as job satisfaction, organisational commitment and turnover intention as well as a self-developed factor referred to as exploited potential. As other potential influencing factors, general Person-Environment-Fits (PE-Fits) as well as demographic data and work conditions are included in the study as well. To analyse and explore the proposed Person-Dynamic-Fit (PD-Fit) concept the author collects data through 25 semi-structured interviews with white collar employees of German organisations.

The underlying philosophical stance is that of a critical realist and for the analysis a mixed method approach is chosen. The collection of qualitative and quantitative data at the same time led to deeper insights into the newly proposed concept of Person-Dynamic-Fit (PD-Fit) and allowed for derivations for future research.

A new construct of PD-Fit has been developed conceptually and new insights in the assessment of dynamic preferences of individuals as well as in the assessment of environmental dynamic have been generated. The proposed PD-Fit could not be directly related to the defined Work Outcomes within this study but supportive indications for the new constructs have been identified. The findings do add substantial depth and breadth especially in the area of assessment knowledge. The mixed method approach

revealed critical issues in the area of self-assessed data in the area of change and regarding generalized approaches. These topics require further research.

Potential reasons for the results as well as limitations of the study are discussed as well. This work concludes with the connection of the findings to theory and practice and with potential fields for further or deeper research.

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List of Abbreviations

abs	absolute (value)	
Ch.	chapter	
CR	cognitive rigidity	
E / Env	Environment	
e.g.	exempli gratia (for example)	
EP	exploited potential	
ER	emotional reaction	
et al.	et alii (and others)	
GOE	group, organisation, external environment	
IDP	Individual Dynamic Preference	
JC	job change	
JS	job satisfaction	
KSA	knowledge, skills and abilities	
LOC	locus of control	
MV	missing value	
n.a.	not available	
OC	organisational commitment	
OD	Organisational Development	
org	organisation	

Р	person	
PD-Fit	Person-Dynamic-Fit	
PE-Fit	Person-Environment-Fit	
PG-Fit	person-group-fit	
PJ-Fit	person-job-fit	
PO-Fit	person-organisation-fit	
PS-Fit	person-supervisor-fit	
Qual. / qual.	qualitative	
Quant. / quant.	quantitative	
RA	risk aversion	
Red	reduced (factors or items)	
RS	routine seeking	
RQ	research question	
SC	supervisor change	
SEC	self-efficacy for change	
STF	short-term focus	
TI	turnover intention	
WED	Work Environment Dynamic	
WOC	Work Outcomes	

Chapter 1 Introduction

The importance of the topic of the present study is rooted in an increased level of environmental dynamics and the need of organisations as well as individual employees to deal with the accompanying changes. The underlying research idea of a fit of individuals into their specific work environments in terms of their dispositional change attitude could increase the individuals' as well as organisations' change competence given that a lack of adaptability to change has been identified as a crucial reason for ineffective change initiatives of organisations (Soumyaja, Kamalanabhan and Bhattacharyya 2011). This research idea, its derivation and especially the importance of the focus on the level of individual recipients is clarified and justified in more detail in the next sections and will be exhaustively explained further in the literature review in *Chapter 2*.

Many leading researchers and practitioners declare that unprecedented dynamics in the internal and external environment of organisations have continuously increased over recent decades (e.g. Kotter 1996; Kanter, Kao and Wiersema 1997; Muthusamy, Wheeler and Simmons 2005; De Meuse, Marks and Dai 2010; Soumyaja et al. 2011). Organisational life has become more and more complex: changing technologies, market conditions, workforce compositions and customer needs have amplified the challenges for today's managers. Management is required to consider both the technical as well as the human side of change to lead organisations successfully in times of change(Soumyaja et al. 2011). Organisations are under pressure to conduct changes in their strategies, structures, processes and their culture in order to survive in this increasingly turbulent business environment. Changes have thus become unavoidable for companies, no matter whether they are ready for them or not (Weber and Weber 2001; By 2007; Burnes 2009) and at the same time they have become more severe and potentially more disruptive to the organisations' employees (Mossholder, Settoon, Armenakis and Harris 2000; Kiefer 2005). In order to manage these multiple and ongoing changes successfully, the creation of change readiness on organisational level and especially on individual employee level has thus become imperative and vital for organisational success (Armenakis, Stanley and Mossholder 1993; Rowden 2001; Morgan and Zeffane 2003).

The present study on Person-Dynamic-Fit (PD-Fit) takes these requirements into consideration. The readiness level of individual employees is respected within the defined construct of Individual Dynamic Preference (IDP), which will be explained in more detail in the next chapter.

Preparing the organisation for environmental turbulence is also in line with strategic fit literature. The strategic fit concept has been set up by strategy experts (Chandler 1962; Mintzberg 1978; Ansoff and McDonnell 1990) who call for the alignment of the internal (strategy, structure, technology, culture, capabilities, etc.) to the external environmental conditions. A constant analysis of the organisational environment shall guide the organisation to choose the right strategic response to external developments. The alignment between the environment and the internal organisational conditions often requires the implementation of necessary changes within the organisation. The more changes an organisation is facing in its environment the more internal changes might be necessary in response. However, if the organisation is already well aligned to its environment these changes can happen rather successively and less disruptive, because the organisation is then ready for the current level of turbulence rather than prepared for each specific change.

Those companies which can meet the challenges best can keep and enhance their competitive advantage in the market. Research, however, reveals that still most of the organisational change processes fail – according to several researcher (Porras and Robertson 1992) (Beer and Nohria 2000) as well as consultancy firms (Meaney and Pung 2008) 60 to 70 % of all change initiatives are not successful. Although literature provides a great amount of substantial change management theory as well as recommendations and suggestions on how to best implement changes and on how to support change implementation with adequate communication programs, training tools and management strategies, the reality displays that although change is often initiated, the implementation and institutionalisation of these changes are still highly demanding (Herold, Fedor and Caldwell 2007). As a result, the competence to lead and manage organisational change has become a highly required asset and a crucial management skill (Coetsee 1999; By 2005).

By (2007) differentiates between two options to deal with organisational change: the conscious versus the unconscious change management approach, where the recommended conscious approach requires to "*build and support an organisational*

culture and structure that facilitates continuous management of change" (By 2007, p. 7). The probability of successful implementations is said to be higher if the organisation focuses on continuous change readiness.

Rowden (2001) came to a similar conclusion, defining constant readiness as follows:

"Rather than building readiness for a predetermined change, the organisation exists in a constant state of readiness, preparing itself not for any specific change, but for change in general, attuned to its environment and willing to question its fundamental ways of doing business" (Rowden 2001, p. 15).

He further highlights that this readiness was not only required within the organisation as a whole but also on an individual employee level.

Any kind of large-scale change in organisations can only occur through individual changes. Employees need to adjust their work routines and processes or change their values, opinions and attitudes in order to work in correspondence with the organisational changes (Whelan-Berry and Gordon 2000). While the majority of change researchers have focussed on the organisation or the workgroup as a whole (Lewin 1947; Kotter 1996), a growing part of the literature has lately (last two decades) taken a more micro-focussed perspective, focussing on the individuals involved in the change process (Armenakis et al. 1993; Judge, Thorensen, Pucik and Welbourne 1999; Wanberg and Banas 2000; Oreg 2003; Caldwell, Herold and Fedor 2004; Oreg 2006; Rafferty and Simons 2006; Holt, Armenakis, Feild and Harris 2007a; Fugate, Kinicki and Prussia 2008; Soumyaja et al. 2011; Rafferty, Jimmieson and Armenakis 2013). According to these researchers it is assumed that people will embrace heterogeneous attitudes towards change, based on their individual attributes. Of course employee responses to change such as resistance to or support for a change depend on several variables, but there is strong evidence that it also depends on the individual's perception of the situation and on his or her own personality. While some employees may hardly be bothered by organisational change at all, others feel anxious about even the smallest work adjustments and react negatively to these (Wanberg and Banas 2000). Employees try to make sense of their environments and of the occurring changes and they try to anticipate the outcomes for them personally (Eby, Adams, Russell and Gaby 2000).

As Soumyaja et al. (2011) indicate: "members of an organisation must be the key source of energy for organisational change processes, and for this reason, their *commitment and involvement are crucial factors for successful organisational change*". Human Resources are frequently considered to be the most valuable asset of organisations today and the competitive advantage of an organisation is highly influenced by the individual skills and abilities of its workforce (Jones 2009). People make up the organisation and are responsible for carrying out the changes. It is thus dependent upon the peoples' *"standpoint, skills, motivation and initial knowledge"* how well change can be implemented (Omazic, Vlahov and Basic 2011, p. 157).

This individual disposition toward changes highly influences their personal level of readiness and their behaviour towards change. It is therefore vital to consider individual differences in this context.

Especially in the field of change readiness and resistance, it is important to take the individual differences among the employees into consideration. The present study proposes the construct of dispositional Individual Dynamic Preference (IDP). This is closely linked to the conceptual idea of (dispositional) readiness and resistance to change.

Literature research in the field of change management shows that most of the research focuses on a single change event or conducts research within a specific change setting. Although this approach frequently generates recognizable results, the focus on a specific change event also limits the generalisation of the results for other situations or change events. There is however also a growing part of the literature that focuses on general attitudes to change. For the present research the decision was made not to relate the study to any specific change event, regardless of the awareness that the impact of the change event itself can be dominant in terms of its influence on change reactions. The basis for this decision is that in times of high environmental dynamic with on-going and multiple changes it is important to determine a dispositional attitude towards change in general within the existing organisational environment and not towards any specific event, even if this disposition might in the end only account for part of the change behaviour of the employees. The study thus aims to assess general experience with small and larger change and their impact on the proposed dispositional IDP construct and other evaluated factors. In order to recognize such situational and change specific aspects as well, the respondents are also asked for their personal experiences with change in the past. It should be emphasized that although the concept of change is the key driver for this research, the issue of change itself will thus not be the focus of this

study. Change is to be seen as a context variable of the environment in which the study is taking place rather than being the central part of this research. It is not the aim of this study to look at specific changes in the business world but rather to determine their general relevance for individual work environments and their influence on the perceptions and attitudes of individual employees. Potential limitations that this choice might entail are discussed in *section 6.4 Limitations*.

The proposed concept of Individual Dynamic Preference (IDP) shall therefore display the individual's dispositional attitude towards change in general. As such it needs to be differentiated from concepts of attitudinal change readiness or resistance towards a specific change. This construct is not new to research as it is closely linked to the concepts of change readiness (Armenakis and Bedeian 1999; Armenakis and Harris 2001; Holt et al. 2007a; Weiner, Amick and Lee 2008) and resistance to change (Oreg 2003). However, the choice of the specific items and factors was done with reference to the proposed Person-Dynamic-Fit rather than being rooted fully in a single existing concept. The author decided to introduce the new term of Individual Dynamic Preference (IDP) for this present study in order to describe a more neutral attitude of individuals towards change and environmental dynamic. In the present literature there is a tendency to view change readiness and resistance in positive or negative terms rather than as a neutral disposition. As part of the developed concept of Person-Dynamic-Fit the author wants to emphasise that a fit into a specific environment would be more desirable (or positive) than high dispositional change readiness or low dispositional change resistance. A low IDP disposition could thus still be better within a certain work setting than a high IDP disposition. It will be the aim of this research to find support for this proposed relationship to work outcomes.

It can be argued that IDP is no true new concept, as it is rooted in well knows concepts and the author agrees to this for a large part. It should therefore be emphasized that it is not the intention of this study to invent a new term in order to add to scientific confusion. It was mainly for the use within this specific study and the emphasis of a "neutral" scale and due to the fact that sub items were drawn from different acknowledged concepts (and not a single one).

Even though the term "preference" might indicate a "choice" of the individuals it should be emphasized that the construct is still dispositionally based. As such it is not really upon the respondents' actual "choice" rather rooted in their personality but also experience and context. As such, and also in line with the philosophical stance of the researcher, the IDP of an individual is a rather stable state, but some attitudinal factors and context variables could lead to a change in IDP over time.

The expected use of the new construct is that the participants of the study as well as researchers look at the dispositional factor in this study in more neutral terms. The new construct is thus rather a purpose for this specific study and shall contribute to research only collaterally as part of the proposed Person-Dynamic-Fit. Further reasoning for the new term and its conceptualisation are given in detail in *section* 2.2.

Measuring dispositional Dynamic Preference at an Individual employee level (IDP) displays the differences among individuals and could enable managers to take measures which consider these distinct characteristics. Individual change readiness as one of the key underlying constructs has been the focus of several research papers and examinations and is becoming an important aspect for practitioners. Individual readiness to change is related with the individual state of readiness towards a change while readiness to change reflects organisational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organisation's capacity to successfully make these changes (Armenakis et al. 1993). Several researchers developed scales and defined factors to determine and measure this construct of individual change readiness (e.g. Wanberg and Banas 2000; Holt et al. 2007a). A review by Holt et al. (2007b) outlined that individual change readiness is influenced predominantly by factors of the change content, context, process and by individual attributes. These and other areas will be investigated in detail within the literature review. Change resistance constructs are also included in the analysis, as long as the concept definition could be related to the proposed IDP construct.

While strategic fit researchers have called for an alignment (or fit) between the organisation's internal settings such as strategy and structure and the organisation's environment to increase organisational performance (Ansoff and McDonnell 1990), human resources research is calling for a fit between the organisation's employees with their environment. This latter fit – often referred to as Person-Environment-Fit – has been strongly related to individual employees' work outcomes, such as job satisfaction, organisational commitment and turnover intentions (Cable and Judge 1996; Saks and Ashforth 1997; Lauver and Kristof-Brown 2001). Environment in this employee-focussed concept is defined by areas such as the specific job situation of the employee,

the workgroup, the supervisor and/or the organisation as a whole (Kristof 1996; Kristof-Brown, Zimmermann and Johnson 2005; Jansen and Kristof-Brown 2006). Researchers have emphasized the relevance of the Person-Environment-Fit (PE-Fit) concept and its sub-concepts for personnel selection and placement decisions and practitioners have strived for a fit, particularly in the area of person-job and person-organisation-fit for many years in order to improve work outcomes. The proposed concept of PD-Fit could as well be interpreted as a potential sub-fit of Person-Environment-Fit (PE-Fit). Therefore its distinction from the already existing concepts as well as potential relations to these will be of high importance for this study. The overall research idea of a fit between an Individuals' Dynamic Preference (IDP) and the Dynamic of his or her Work Environment (WED) thus derived from knowledge about these existing fit concepts and the strategic fit. The alignment between internal and external characteristics has been shown to be of relevance for entire organisations on a macro level (strategic fit concept) as well as for rather micro levels such as peoples' fit into their jobs, organisations or else.

As a result, the following four concepts are of primary interest for this research, of which the first two are directly required to determine the proposed Person-Dynamic-Fit (PD-Fit):

- Individual Dynamic Preference (IDP) (based on change readiness and resistance constructs)
- Work Environment Dynamic (WED)
- general Person-Environment-Fit (PE-Fit) and
- their impact on Work Outcomes (WOC)

Due to the fact that an appropriate development and exploration of the proposed concept of Person-Dynamic-Fit (PD-Fit) will rest fully on the ability to assess all four of the relevant concepts, an intensive literature review (*Chapter 2*) of the distinct areas serves as the basis for the concept development.

1.1 Research Aim

It is the aim of this study to develop a Person-Dynamic-Fit (PD-Fit) concept and to analyse and explore its relevance for key Work Outcomes (WOC). The concept will be based on knowledge about Person-Environment-Fit (PE-Fit) and related work outcomes but will focus on the fit between the dynamic of an individual's work environment (WED) and the Individual Dynamic Preference (IDP) based on the individual's attributes and differences in dealing with environmental change.

Taking a critical perspective towards the PE-Fit concepts the author wants to emphasize that little attention has been paid to the overall dynamic in the environment and its effect on the fit perception of employees. If the overall dynamic in the external environment is rising and responding internal adjustments lead to an increase of internal changes, a current PE-Fit might be constantly threatened. In order to consider this environmental dynamic the study introduces an additional fit concept which shall determine the fit of the individual to the dynamic level of its environment. This fit will be referred to as Person-Dynamic-Fit (PD-Fit) in the present study. In order to find support for this concept, the relation between the new concept and acknowledged Work Outcomes (WOC) shall be assessed. The dynamic fit shall determine the fit of the employee's Dynamic Preference (IDP) and the Dynamic of the specific Work Environment of the employee (WED). The IDP concept will be developed based on acknowledged concepts of individual change readiness and resistance. These usually indicate the proposition of an individual to support or resist specific changes in the organisation. For this study, however, it is important not to determine the employee's readiness for a specific change event but rather his or her readiness to accept a certain amount or intensity of change in his or her work environment in general. For the WED assessment it will therefore also be necessary to determine the dynamic of the employee's environment in general terms rather than change specific descriptions. For these reasons a literature review of change typologies and turbulence scales shall guide the development of objective dynamic assessments as well as the evaluation of change experiences.

1.2 Research Objectives

In a first step the development of the relevant factors and items to determine the four different concepts is of primary importance (IDP; WED; WOC; PE-Fit). In order to do so the existing literature in the fields is thoroughly analysed.

• For the development of a tool to measure Individual Dynamic Preference (IDP) the review focuses on recent meta-analyses in the field of individual change readiness. In addition, the study compared these results with other existing individual change readiness or resistance tools, which were not included in these

meta-analyses but appeared relevant for the proposed research. Publications on change resistance are only included in the analysis when the concept definitions can be related to the proposed IDP construct. Unlike most existing tools, the tobe-developed tool for this study is supposed to measure change readiness without relation to any specific change event in order to indicate general dynamic preference. Current measurement tools are thus analysed for relevant variables for change-unspecific readiness and resistance. Until now, few tools have such a general approach. The results will then display the individual attitude towards change in general and therewith the Individuals' Dynamic Preference (IDP). Other concepts such as change commitment or openness to change have also been analysed for their relevance for the determination of PD-Fit if they were defined in related terms.

- The second core field of this study deals with the measurement of the individual's Work Environment (WED). Based on Ansoff and McDonnell's (1990) argument that the dynamic level of certain strategic business units (SBUs) within an organisation can differ from one to another, this study assumes that the dynamic level will also vary among the different jobs and individual work environments within an organisation. The differences are assumed to be dependent on the specific tasks, responsibilities and leadership requirements of the job incumbent as well as the specific job, the workgroup and the overall organisational environment. Other influential factors on job environments, such as cultural differences between different organisational parts as described by Werbel and DeMarie (2001), might also need to be considered. This corresponds to the Individual Perspective School of Change (please refer to Table 2-1 for further details).
- The third field of interest for this study is the Person-Environment-Fit (PE-Fit) construct. Research in this field is growing and several tools to determine PE-Fit have been developed. For this study several relevant variables and measures are selected. Although the PE-Fit is not relevant for the dynamic fit assessment in the first place, it is very important to consider the general PE-Fit results as control variables for the study. PE-Fit has been defined as a multidimensional construct which has displayed high relevance for individual work outcomes (Law, Wong and Mobley 1998). Based on this, the study uses general PE-Fit and its sub-constructs of person-organisation-fit (PO-Fit), person-job-fit (PJ-Fit),

person-group-fit (PG-Fit) and person-supervisor-fit (PS-Fit) as control variables to analyse Person-Dynamic-Fit (PD-Fit) as a new and distinct fit concept.

In order to demonstrate the relevance of PD-Fit for personnel decisions it is the aim of this research to analyse the relation between the new Person-Dynamic-Fit (PD-Fit) concept and relevant work outcomes. In the area of Work Outcomes (WOC) the study will rely on acknowledged variables which have been used in PE-Fit research as well as in change response research. By doing so, further interdependencies between the distinct concepts can be reviewed.

Measures for all these concepts are included in the study in order to get results in all four relevant fields. The results of IDP and WED can then be used to determine the proposed PD-Fit. The study assumes that employees who are working in an environment with a dynamic level which matches their dynamic preference (IDP) will display better work outcomes than those with lower fits. In order to be able to do the assessment this way, the scale to measure WED and the scale for IDP assessment need to be aligned for the fit calculation.

- A further objective of this research is to identify potential influencing factors on the above defined factors
- The use of a distinct mixed method approach for the data collection and analysis is the final objective of this research and done in order to add breadth and depth to the study and to the theory in the research field in general and with specific reference to methods used in this context.

1.3 Research Questions

Deduced from the research aim and objectives of this study a "key research question" has been developed and formulated as follows.

Can Person-Dynamic-Fit (PD-Fit), defined as the fit between Individual Dynamic Preference (IDP) and Work Environment Dynamic (WED), be introduced as a distinct sub concept of Person-Environment-Fit (PE-Fit) with influence on Work Outcomes (WOC)?

TABLE 1-1: KEY RESEARCH QUESTION

Relevant sub-questions to be answered in the course of the study were further deduced from this key research question, covering all relevant fields of the study as visualized in the following figure.

TABLE 1-2: OVERVIEW OVER RESEARCH AIM, RESEARCH OBJECTIVES ANDRESEARCH QUESTIONS

RESEARCH AIM	RESEARCH OBJECTIVES	RESEARCH QUESTIONS		
	Identify or develop the relevant factors and items to determine the four different concepts of:			
It is the aim of this study to develop a Person- Dynamic-Fit (PD-Fit) concept and to analyse its relevance for Work Outcomes (WOC). The concept will be based on knowledge about Person- Environment- Fit (PE-Fit) and related 	1. Individual Dynamic Preference	RQ 1	How can Individual Dynamic Preference (IDP) be determined?	
	(IDP)	RQ	What characteristics influence IDP?	
		RQ 3	Is a generalized self-assessment of Individual Dynamic Preference (IDP) appropriate?	
		RQ 4	Is the assessment of IDP with a general change	
		RQ 5	How do change experiences differ between respondents who are low, medium or high in their Dynamic Preference (IDP)?	
	2. Work Environment	RQ 6	What factors best indicate the dynamic level of the work environment that an individual is placed in?	
	Dynamic (WED)	RQ 7	Is a self-assessment of Work Environment Dynamic (WED) appropriate?	
	3. Person- Environment-Fit (PE-Fit)	RQ 8	What Person-Environment sub-concepts are relevant for this research?	
	、 <i>´</i>	RQ 9	What Person-Environment-Fit is most important to the respondents?	
	4. Work Outcomes (WOC)	RQ 10	What Work Outcomes (WOC) are relevant in the context of this research?	
	Determine a fit between factor 1 (IDP) and factor	RQ 11	How can Person-Dynamic-Fit (PD-Fit) be determined?	
	2 (WED) and relate this Person-Dynamic-Fit (PD-Fit) to relevant Work Outcomes	RQ 12	Can Person-Dynamic-Fit (PD-Fit) be related to Work Outcomes (WOC)?	
		RQ 13	Can Person-Dynamic-Fit be directly related to other sub concepts of Person-Environment-Fit (PE-Fit)?	
	(WOC).	RQ 14	Is Person-Dynamic-Fit (PD-Fit) distinctly different from other PE-Fit constructs?	
	RQ 15	What are potential influencing factors on IDP, WED and PD-Fit?		
	Use a distinct mixed method approach for the data collection and analysis in order to add breadth and depth to the study and to the theory in the research field in general.	RQ 16	Does the mixed method approach suit this research well? Is the qualitative or the quantitative approach of IDP and WED assessment more appropriate for future research?	

1.4 Research Process

The following figure visualises the underlying research process of this study. The first two boxes have been described in the former section (*Section* 1.3) and the other fields will be covered in detail throughout the thesis.



FIGURE 1-1: UNDERLYING RESEARCH PROCESS OF PRESENT STUDY

1.5 Thesis Overview

Chapter 1 starts with an introduction into the topic, including the research aim, research objectives and research questions. It further visualizes and describes the underlying research process and the expected outcomes and benefits of the study.

Chapter 2 covers the review of the relevant literature in the four fields defined as relevant for the proposed research. These are:

- employee response to change
- work environment dynamic
- person-environment-fit concepts and
- work outcomes

The chapter covers all of the important related concepts and identifies those topics applicable to the proposed study.

Chapter 3 deals with the topics of research philosophy, methodology and the underlying process factors. In this chapter the author emphasizes her epistemological position as a critical realist and constructs her approach and methodology from this world view. Different potential methodological approaches are discussed and pondered and the decision for a mixed method approach is exhaustively explained. The chapter further covers technical details and procedures regarding the study execution as well as ethical issues of undertaking research in general.

Chapter 4 is split into several main parts, starting off with the descriptive analysis, followed by two main sections covering the analysis of the quantitative and the qualitative data collected in the research process. Each of the latter two is split into several steps in order to determine the relevant factors required for the calculation and analysis of the proposed Person-Dynamic-Fit (PD-Fit), namely Individual Dynamic Preference (IDP), Work Environment Dynamic (WED), Work Outcomes (WOC) and Person-Environment-Fit (PE-Fit). The chapter concludes with a comparative analysis of the generated results of the quantitative and the qualitative data.

Chapter 5 covers the interpretation of the results and discusses the findings and their implications. This is done in line with the previously defined research objectives and questions and corresponds with the four relevant research areas of IDP, WED, WOC and PE-Fit.

Chapter 6 concludes this thesis with a focus on the achievements of the research aim, the contribution of the findings for theory and practice and their implications for further research. Typical for the work of a critical realist researcher a section on reflexivity in which the significance of the individual role of the researcher is covered also included in this section. The chapter closes with a consideration of the potential limitations of the research approach and findings.

An exhaustive appendix is attached to this thesis, allowing the reader to get further and more detailed information on different topics and results throughout the course of the thesis.

1.6 Chapter Summary

The chapter introduces the reader into the topic in general and presents the general research idea. The research aim to "develop a Person-Dynamic-Fit (PD-Fit) concept and to analyse its relevance for key Work Outcomes (WOC)" is exhaustively described and the consequential research questions are presented in *Table 1-2: Overview over research aim, research objectives and research questions*.

In a time of rising dynamic with less time for adequate reactions to changes, ex ante measures become increasingly important. Matching employees to their work environment in terms of dynamic could improve the overall ability of organisations to change and enhance the success potential of change implementation. Awareness of the dynamic preference of each employee could also enable managers to apply necessary measures responding to the specific changes taking place and knowledge about upcoming changes in the external environment of the organisation could then be analysed for their relevance for specific jobs. This would allow for timely responses and preparing as well as intervening measures.

The next chapter is an introduction into the state of the research and literature and the proposed field of study. Importantly it provides a context to the four central themes which were identified as critical for the proposed concept of Person-Dynamic-Fit in Chapter 1, namely Individual Dynamic Preference (IDP), Work Environment Dynamic (WED), Work Outcomes (WOC) and Person-Environment-Fit (PE-Fit).
Chapter 2 Literature Review

2.1 Introduction to Literature Review

As stated earlier, four constructs are of relevance for the development and evaluation of the Person-Dynamic-Fit (PD-Fit) concept. These are:

- Individual Dynamic Preference (IDP) (proposed concept which can be related to employee resistance and readiness to change)
- Work Environment Dynamic (WED)
- Person-Environment-Fit (PE-Fit) and
- Work Outcomes (WOC).

For each of the four constructs a literature review is conducted to determine the relevant theories in the applicable fields and to analyse what specific factors and constructs need to be



FIGURE 2-1: RESEARCH PROCESS - STEP 3

considered for this research study. In addition an introduction into more general fields of research touched by this study is provided, such as general knowledge of change management history and development, different change classifications and the strategic fit concept.

The concepts of individual change readiness and resistance will be discussed in detail, due to their significance for responses to change and its specific relevance for the proposed concept of Individual Dynamic Preference (IDP). An analysis of existing measurement tools for readiness and related constructs such as resistance is conducted in order to identify the key factors for the examination of IDP. Due to the fact that the concept itself is new and research in the related fields still limited – and also in many ways contradictory and inconsistent – the main focus of the literature review is on the findings of two recent review in this field (Holt et al. 2007a; Weiner et al. 2008) as well as on a publication of Oreg (2003). The latter is one of the first to attempt to measure a dispositional response towards change (in his case, resistance). The according *Section* 2.2 of the literature review thus refers to change response of individuals towards change in general before looking on the two related concepts of readiness and resistance in more detail.

The second important construct is the Dynamic of the specific Work Environment (WED) of an individual. In this part the review is based on literature from the field of environmental analyses and strategic management. Several researchers have defined dynamic and turbulence of the overall organisational environment and have introduced relevant factors which determine these aspects of the environment. For the proposed study these findings are broken down to a more employee specific environmental level. In addition, research on change typologies and categories is analysed for potential insights on dynamic characteristics.

As a third relevant concept the literature review focuses on the Person-Environment-Fit (PE-Fit) concept and its sub-concepts. Due to the fact that the proposed PD-Fit shall determine a fit between individuals and their environments it is necessary to take existing and relevant fit concepts in this area into consideration for this study.

In the last part of the literature review distinct Work Outcomes (WOC) are described and discussed for their relevance for this study. This review focuses on those outcomes which have displayed relevance in the above mentioned research fields of change response and environmental fits.

To complete the literature review the relevant findings are summarized and the factors which will be utilized in the proposed study are introduced. This includes

- the selection of the relevant influence factors for the assessment of Individual Dynamic Preference (IDP)
- the key variables to determine the dynamic of the individual Work Environment (WED)
- the choice of the relevant Work Outcomes (WOC) and
- the introduction of relevant influencing factors to be included in the study.

The proposed research field is summarized visually in a research framework which includes all relevant concepts and factors (*Figure 2-2: Research Framework*).



FIGURE 2-2: RESEARCH FRAMEWORK

2.2 Employee Response to Change

2.2.1 Introduction

Change management in general has been a field of research for several decades and has been defined as "the process of continually renewing an organisation's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers" (Moran and Brightman 2001, p. 111). As such, change management is however not a distinct discipline with clearly defined boundaries, but rather an interdisciplinary field where theory and practice are drawn from distinct fields of social sciences (Burnes 2004). In order to give an introduction into the research field without going too deeply into the related disciplines such as organisational psychology, strategic management or human resources management, the author will give a brief overview into the three schools of thought which underlie the theory of change management and which are relevant for the modern definitions of it. The three schools also offer distinct descriptions of the role of individuals in the process of change.

Schools of Thought	Perspective on Change Management
Individual	This school views organisational behaviour as the result of an individual's
Down ontine Caboal	interaction with its environment (and reason). In order to change human
Perspective School	behaviour it would be necessary to modify the external stimuli on the one
	hand but predominantly to change the individual's understanding of their
	environment and themselves in the situation (Smith, Beck, Cooper, Cox,
	Ottaway and Talbot 1982).
Group Dynamic	This school emphasizes the role of teams and work groups for
	behavioural change (Bernstein 1968). As such, Lewin (1947) emphasizes
School	that in order to change human behaviour it is necessary to focus on the
	group level by changing norms, roles and values within that group (Smith
	et al. 1982; French and Bell 1984; Cummings and Huse 1989).
Open System	This school emphasizes the importance of seeing the organisation as an
	entity, composed of interconnected sub-systems (Burnes 2004). Change
School	in one part of the system, or within one sub-system, will have influence
	and impact on other parts of the organisational system (Scott 1987) and
	organisations also interact with external systems and can, vice versa, also
	influence this external environment (Buckley 1968).

TABLE 2-1: THREE SCHOOLS OF THOUGHT UNDERLYING CHANGE MANAGEMENT

Changes can thus occur on different levels of the organisation – individual, group or system-wide (Burnes 2004, 2009). Independent of this focus it is necessary to determine, whether the workforce is considered as a homogeneous group with joint

interests and goals or whether there are differences in their motives. The planned approach to change considers the workforce as a group of rational individuals but the emergent school has considered that decision making and human behaviour in organisations is to a large extend subject to organisational politics and power.

Concepts on individual level change behaviour – such as change resistance and readiness – have also been discussed in change management research for several years. In this area it frequently becomes apparent that some employees react differently towards changes compared to others and that they show differences in receptiveness to distinct changes (Iverson 1996). A growing literature has begun to look at the aspects of managing change not only from a system-wide perspective with homogeneous behaviours (macro-view), but also by taking into consideration that differences among individuals are rather common (micro-view). This micro-view perspective on responses to change has become increasingly important, particularly in the field of resistance and readiness research (Armenakis et al. 1993; Wanberg and Banas 2000; Herscovitch and Meyer 2002; Oreg 2003; Holt et al. 2007a; Soumyaja et al. 2011). Much of this research has focused on the origins of resistance to and readiness for change. Research differentiates between factors which are influenced by the organisational environment and the specific change and factors which arise from the individual's own disposition.

Individual reactions towards change differ strongly ranging from feeling stress to showing anger but also to seeing change as an opportunity or challenge. This is due to the uniqueness of individuals (Tiong 2005).

With reference to Torrington, Hall and Taylor (2008), Omazic et al. (2011) emphasize that to implement changes successfully it is no longer sufficient to make them work in line with the business strategy...

"but to think of a systematic process for their managing, aligning with the wishes and needs of the employees to avoid resistance" (Omazic et al. 2011, p. 51).

2.2.2 The Concept of Resistance

As stated earlier, an emerging body of literature is evolving in the field of individual change management. Knowledge about individual response to change is vital for the right change management measures. Generally it must be distinguished between attitudinal and dispositional attitudes towards change. Literature further differentiates between individual resistance to a change or individual readiness for a change. The concept of resistance has a much longer history and has been the key focus of change management measures for decades. Coch and French JR (1948) first analysed the different kinds of employee resistance to change and how they could be overcome by management. When employees experience change they frequently feel uncertainty and fear of failure, but while some employees are afraid of only the slightest changes, others are not bothered by any type of change at all (Wanberg and Banas 2000). Resistance as a characteristic fear of uncertainty is a natural response but must be overcome for successful change implementation (Eby et al. 2000). The terms readiness and resistance have long been used in simultaneous contexts. Lately, however, several researchers have called for a distinct readiness concept (Armenakis et al. 1993; Holt et al. 2007a), because avoiding resistance although considered a pre-condition for successful change implementation, does not necessary go along with actual change readiness.

Machiavelli has once put it in his famous quote, emphasizing this special aspect about support for change:

"And it ought to be remembered that there is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things. Because the innovator has for enemies all those who have done well under the old conditions, and lukewarm defenders in those who may do well under the new. "(Machiavelli 1532, p. 24)

The change readiness construct, as a form of welcoming a change and not just not resisting it, has evolved in the research literature of the last two decades. The concept of readiness is explained in more detail in *Section* 2.2.3, as it is one of the core underlying constructs of this study. In order to understand its distinction from the concept of resistance, this construct is further explained in the next paragraph.

Resistance is defined as "a multifaceted phenomenon, which introduces unanticipated delays, costs, and instabilities into the process of strategic change" (Ansoff and McDonnell 1990, p. 405). Resistance can sabotage all attempts and intentions in an organisation. This negative disposition frequently leads managers to use power against these employees. This use of power and authority might frequently work, but the long-term consequences of this approach are often highly negative. The use of power in times

of change and uncertainty can lead to distrust and resentment among the employees and often causes stronger resistance in future change initiatives (Goldstein 1988).

Ansoff and McDonnell (1990) further differentiate between individual and group resistance. Individual resistance is strongly influenced by the specific personality of the individual, while group resistance on the other hand, although it has its roots in individual resistance, is a collective resistance of a group of people, as individuals with the same values and behaviour patterns frequently react in the same way. Group resistance is much more stable and more difficult to decrease.

Typical symptoms of resistance are rejection, procrastination, indecision, lack of implementation follow-up, strategic ineffectiveness, sabotage or regression (Ansoff and McDonnell 1990). Resistance can be displayed verbally or nonverbally and actively or passively.

It is further important to differentiate between attitudinal resistance that describes negative behaviours towards a specific change and what is often referred to as dispositional resistance conceptualised as a multidimensional disposition comprised of behavioural, cognitive as well as affective components (Piderit 2000; Oreg 2003). The latter is defined as being a trait that will show peoples' general tendency to support a change event or to rather resist it.

An additional differentiation can be made between behavioural and systemic resistance as defined by Ansoff and McDonnell (1990). Behavioural resistance depends on the level of political or cultural threat to an individual or group. Systemic resistance, on the other hand, originates either in a lack of necessary capacities or a lack of required competences.

Schiemann (1995) in Neiva, Ros and Torres da Paz (2005, p. 82) divided resistance into six more specific sub-categories:

- "sensation of loss of control with respect to familiar, and probably comfortable, patterns of work
- fear of "difference" with respect to the present routine
- uncertainty about new processes and expected results arising from the change
- perceived and real loss of power brought about by the demands of change

- increase in the demands of work generated by the change
- misunderstandings and unclear demands in the change process"

Most of the concepts and measurement tools which aim to determine resistance focus on specific change events. An exception is the concept of Oreg (2003), who developed a Resistance to Change Scale (RTC-Scale) in order to measure "an individual's tendency to resist or avoid making changes" (p. 680) on a general dispositional level and thus not focused on any situational antecedent. The result of seven studies among students and university staff members indicate a four-facet structure to this disposition which is made up of the following factors: (a) routine seeking, (b) emotional reaction, (c) short-term focus and (d) cognitive rigidity. The proposed Resistance to Change Scale achieved satisfactory reliabilities in all seven studies. In terms of predictability of reactions to a specific change, however, the RTC scores showed no differences. But the distinct subgroups showed differences in their evaluation of the conducted change (study tested reactions and evaluations of university staff confronted with an office move).

It should be stated, however, that the four factors explained only just over 57 % of the variance, but they all loaded significantly on the first factor and it can thus be assumed that they are all dimensions of the same trait (Oreg 2003).

Oreg (2003) purposely left out other factors proposed by researchers in the field (e.g. Judge et al. 1999) such as risk aversion or self-esteem, arguing that these would "*tap into different aspects of resistance to change*" (p. 691) and would make the measurement less economical and too broad.

Due to the high popularity of these and some other factors in the respective research field, they were however included into the proposed study anyhow.

But the four Oreg factors were reduced from 18 items to only 16 (in total, including three additional factors) in order to keep the complexity of the proposed study low. 2-4 items were collected for each of the four factors. Similar to Oreg (2003), Wanberg and Banas (2000) and Judge et al. (1999) also supported the influence of personality differences on resistance, which is also emphasized by Erwin and Garman's (2009) meta-analysis as a key finding.

Erwin and Garman (2009) conducted a meta-analysis among 18 research articles on the topic of resistance to change and summarized the influence of personality differences on resistance as displayed in the following table:

TABLE 2-2: PERSONALITY DIFFERENCES REGARDING RESISTANC	E
according to Erwin and Garman (2009, p. 51)	

Predisposition to resist	Openness to change
Individuals are inclined toward negative	Individuals are more open to change
reaction to change, and tend to be short-	with greater self-esteem, optimism,
sighted, rigid and dogmatic.	more confidence in their abilities to
Those who resist change often deny,	control outcomes of change, and a
dissociate, use projection, act out, blame	greater willingness to take risks
others, avoid difficulties, and have	
irrational thoughts about the change.	

As another result of this recent meta-analysis Erwin and Garman (2009) emphasize that a purely dichotomous view on resistance is probably too narrow, leaving out the positive effects which resistance can have on refining strategies and implementation plans.

2.2.3 The Concept of Individual Change Readiness

A lot of research has focused on resistance to change within organisations and on its causes. An emerging literature, however, has now taken "readiness for organisational change" into the focus of investigation. A review of this field of literature by By (2007) revealed that research in this field is still limited. Armenakis et al. (1993) define "readiness" as a concept similar to Lewin's (1951) change concept of unfreezing.

It needs to be emphasized at this stage that Lewin's phase of "unfreezing" refers to a state of the entire organisation or a group of people and not to a state of an individual. Armenakis definition of change readiness describes the same organisational readiness level. This interpretation needs to be differentiated from more individual level readiness constructs as offered in the latter part of this section.

The unfreezing stage is part of Lewin's three-step model of change management which contributes to the idea that group members need a process to direct them through the change implementation process. His main reason for the development of this model derived from his practical experience that many changes which strived for a higher performance were successfully implemented but could not be institutionalized. With the three step model Lewin intended to include the objective of permanency into the process (Lewin 1947). This model is often referred to as Lewin's key contribution to

change management research among many others (Burnes 2004, 2009). Kurt Lewin (1947) defined the process of change implementation as a three stage model, consisting of the phases of unfreezing, moving and refreezing. The unfreezing stage is the phase of destabilising the status quo and the old behaviours in order to successfully adopt new behaviours. In the moving phase Lewin then emphasises the need to take all existing and necessary forces into account and identify the potential options of change. In this phase new behaviours are implemented. In the final step – the refreezing phase – the group needs to be stabilized in a new status quo in order to institutionalize the changes. The latter often requires changes in organisational culture, norms, policies and practices (Cummings and Huse 1989). Unlike Lewin's intention, the three-step model is often treated as an independent construct. As such, it was developed further by OD-developers and other researchers (Lippitt, Watson and Westley 1958; Bullock and Batten 1985; Cummings and Huse 1989) into a variety of models for planned change.

Another recent meta-analysis of 106 peer-reviewed articles in the area of change readiness which has analysed the conceptualisation as well as measurement of the readiness concept is by Weiner et al. (2008), defining further the key differentiations between the published definitions and construct characteristics.

A first result of their analysis reveals that researchers have not all used the term 'change readiness' but other terms such as commitment to change, willingness to change, acceptance towards change, and so on. The definition of the terms, however shows that they are referring to a similar or comparable construct. Weiner et al. (2008) analysed the different concepts systematically and arrived at the following findings:

- The conceptualisation of change readiness has been described in literature in two distinct approaches: on the one hand several authors define readiness in psychological terms, focusing on employees' attitudes, beliefs and intentions, or in structural terms focusing on capabilities and resources for change. On the other hand there is substantial literature where authors equate readiness with the preparation phase of behavioural change. As such the latter definition is much narrower with a rather short-term perspective. In the majority of the included articles authors defined readiness in psychological terms.
- Another differentiation in the conceptualisation of change readiness was detected by Weiner et al. (2008) in the level of target. Some studies focus on

the entire organisation, some on groups within the organisation and others have an individual employee focus. As stated earlier, this differentiation is also referred to as macro or micro view research in the field of change readiness. While macro view researchers focus on the organisation as a whole, micro view research calls for a bigger consideration of individual differences. The macro-view has been largely dominant, but a rising number of researchers have lately focussed on the micro perspective as well (Armenakis et al. 1993; Judge et al. 1999; Wanberg and Banas 2000; Oreg 2003; Martin, Jones and Callan 2005). Though their concepts are divergent, they all identify the individual set of determinants as a major factor responsible for reaction towards changes. Most micro-researchers still see the predominant macro-approach as appropriate, but they emphasize the importance of adding the individual-focus, as it is an important additional source for change-reaction. Although Lewin's theory of unfreezing – moving - refreezing can also be interpreted as a representative process for change on an individual level, most work about individual change can be found in the psychology literature. In this area many researchers have also tried to understand the individual change process outside the business setting, particularly in fields such as addiction, weight loss or other behavioural changes (e.g. Prochaska and DiClemente 1983 in Weiner et al. 2008). This is one of the reasons why the issue of managing organisational change is approached in such diverse fields such as management, psychology, sociology or other. In Weiner et al.'s (2008) meta-analysis 46 % of the readiness articles took a micro view perspective.

• An additional construct difference was detected by Weiner et al. (2008) in the change focus. While some authors described readiness as a general state existing in an organisation, other authors described readiness as the *"preparedness for a specific change or type of change"*. This is one of the major distinctions between the different concepts because change specific readiness measures are frequently only applicable to the specific change tested and their results have little relevance for other change projects. The more general tools aim to find a more comprehensive approach but frequently lack in consideration of situational characteristics. For the study to be undertaken the aim is to take a general approach to change because the proposed Person-Dynamic-Fit (PD-Fit) is supposed to be applicable to the person within the specific job environment but at the same time independent of specific change context factors.

The following definitions are thus excerpts of the variety of different conceptualisations and definitions.

The concept of readiness for change is related to the stage of unfreezing as described earlier because in this phase people break up old habits and open up for new ideas and ways of doing things. It further reflects "organisational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organisation's capacity to successfully make those changes" (Armenakis et al. 1993, p. 681). Readiness is further defined as the cognitive precursor to the behaviours of either resistance to, or support for, a change effort. This in turn means that readiness can decrease the probability for resistance and increase the success potential of change implementation (Armenakis et al. 1993). The creation of readiness among the workforce is thus necessary for successful change implementation (Miller, Wilson and Hickson 2004).

Miller, Johnson and Grau (1994) have defined openness to change – a similar construct as readiness – as a combination of willingness to support the change and a positive view about the anticipated consequences of the change. This is similar to the view of Jones et al. (2005) who state that the degree of change readiness of an individual is determined by the extent to which individuals hold positive views about the need for the change and the implications for one self and the wider organisation. According to Eby et al. (2000, p. 422) *"Readiness for organisational change reflects an individual's unique interpretive reality of the organisation"* and even within the same organisational context, this interpretation differs among individuals based on their individual experience and history within the company (Eby et al. 2000). Their individual change readiness is said to be determined by their individual perception of the reality rather than by the actual objective reality (Spreitzer 1996). A review by Holt et al. (2007a) comes to the conclusion that individual change readiness is determined by four key factors:

- the change content
- the change process within the organisation
- then context / surrounding
- and the individual attributes of the employee



FIGURE 2-3: THE RELATIONSHIP BETWEEN CONTENT, PROCESS, CONTEXT AND INDIVIDUAL ATTRIBUTES ON READINESS (Holt et al. (2007a, p. 235))

Holt et al. (2007a) state that

"Readiness for change is a comprehensive attitude that is influenced simultaneously by the content (i.e. what is being changed), the process (i.e. how the change is being implemented), the context (i.e. circumstances under which the change is occurring), and the individuals (i.e. characteristics of those being asked to change) involved that collectively reflect the extent to which an individual or a collection of individuals is cognitively and emotionally inclined to accept, embrace, and adopt, a particular plan to purposefully alter the status quo." (p. 235)

This view is also supported by Terry and Callan (1997) who linked the level of individual adjustment to changes to the event characteristics, the situational appraisal, to coping strategies and to personal resources and by Rafferty and Simons (2006) who identified individual characteristics, work group characteristics, and organisational factors as contributors to change readiness.

This is further supported by a recent 60-year review by Oreg, Vakola and Armenakis (2011) who identified five primary antecedent categories: (a) change recipients characteristics, (b) internal context, (c) change process, (d) perceived benefit / harm and (e) the change content.

As Cunningham (2006) summarizes, researchers also focus on "coping behaviours" defined as "conscious psychological and physical efforts to improve one's resourcefulness in dealing with stressful events" (Anshel, Kim, Kim, Chang and Hom 2001, p. 45). Organisations thus need to be able to cope with change and Cunningham (2006) suggests that people with good coping abilities are more likely to contribute to changes than others. This idea of coping competence has been positively related to readiness.

The importance of readiness for change implementation has been stressed and research in the field is further evolving (Armenakis et al. 1993; Holt 2002). Numerous definitions of the readiness construct have been proposed, as the above stated excerpts indicate. Until today, however, no single one has been accepted as a standard so far. The distinct approaches make it difficult for researchers as well as practitioners to identify the core factors which influence the construct and the different impacts of the factors are also still debatable. However, there are several similarities and congruencies that can be detected in the diverse approaches.

The definition by Armenakis et al. (1993, p. 681) has been used by many researchers in previous years:

"Readiness, which is similar to Lewin's (1951) concept of unfreezing, is reflected in organisational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organisation's capacity to successfully make those changes. Readiness is the cognitive precursor to the behaviours of either resistance to, or support for a change effort." (Armenakis et al. 1993)

It has been defined based on a meta-analysis in the field. According to the authors, all decisions about change programs should depend on two considerations: the extent of readiness among the workforce and the urgency of the change. Appropriate measures to increase readiness were defined as persuasive communication and active participation.

This definition has, however, a rather broad view on readiness with a focus on the organisation as a whole rather than each individual employee.

Regarding the affective elements of change readiness there is further a call for a stronger focus on these components by a very recent review by Rafferty, Jimmieson and Armenakis (Rafferty et al. 2013) who emphasized that the incorporation of affective elements is still limited. They further seek to adopt a multi-level approach to the change readiness construct with more consideration of all three levels (individual, work-group and organisation) as important influencing factors. A similar call for a multilevel concept of readiness for planning and implementing organisational change comes from Vakola (2013).

Bouckenooghe (2010) undertook a conceptual review on several change attitudes and calls for a more complete typology of attitudes towards change. He aims to draw the different concepts of readiness, resistance, openness etc. back to their roots of "attitudes to change" to decrease the confusion in the field.

The variety of conceptualisations and definitions shows the heterogeneity of research in the field and the different foci. Distinct views at the overall construct do also lead to more limitations regarding the present research, as not all construct designs can be considered or are compatible. The present research focuses on the dispositional and individual level elements of change readiness. The choice of items and factors described in the following section is done by actually turning to the existing items and scales used for the determination of these variables and by checking their applicability.

2.2.4 Measuring Individual Response to Change

Ever since the concept of individual change readiness has been first introduced in literature by Armenakis et al. (1993) a variety of measurement tools to determine the readiness stage of individuals has been developed. The review by Holt et al. (2007b) analysed and compared 32 quantitative measurement tools. They conclude that there is *"considerable room for improvements"*, based on the lack of the tools' evidence of validity and reliability. The meta-analysis by Weiner et al. (2008) conclude with a similar result, indicating that there is still not one measurement tool which can meet reliability and validity goals. All existing tools are limited to either situational factors or methodological factors. It is thus the aim of this study to review recent tools and to identify those factors which appear most relevant for the Individual Dynamic Preference

(IDP) construct. Measures for individual change readiness as well as from the field of individual change resistance, change openness or change commitment, were included in the comparison as long as their definitions showed that they were measuring a comparable construct.

Existing concepts for measurement tools have been developed in a variety of scientific fields, such as human resource management, strategic management, change management, psychology and even medicine. As diverse as these scientific origins are, so are the approaches of these tools. It will be the first step of this comparison to conduct an analysis among a selection of the tools in order to identify factors (direct and indirect variables) relevant for IDP.

Table 6-3: Publications on Change Response Measurement Approaches in *Appendix B* shows the overview and comparison of sources which were included in the comparative analysis of measurement tools and approaches. Due to their different origins and foci not all supply information in all fields of the analysis. The following areas were included in the investigation:

- author & year of publication
- article type
- construct name and conceptual definition
- construct level
- individual factors
- context factors

The aim of this comparative analysis is to get a broad overview over existing approaches to investigating and measuring individual responses to change. There are thirty nine research articles and publications included in the study. They stem from various fields of research disciplines, such as business, public sector, education or health.

Although the overall aim of this investigation is to determine those factors for the present research which are most relevant and which have also been tested empirically, several conceptual papers were also included, due to their support for one or the other factor.

For the proposed study it is required to identify those factors which are on the one hand relevant for dispositional concept Individual Dynamic Preference (IDP) and which can on the other hand be determined without a specific change occasion. The latter is very important, because the dynamic fit concept intends to be applicable for different organisational and environmental settings. For the choice of factors this means that the author will chose only those factors, which can be measured without a specific change relation.

The context factors (column 7) are not directly integrated into the construct on IDP but they can be informative for potential influences on this construct.

As a result of this analysis it is evident, that the approaches to the investigation of change response and specifically change readiness or resistance are manifold. It further needs to be differentiated, whether the methods aim to determine readiness of individuals themselves or the individual's perception of the organisational readiness for change. In both cases the researchers would take into consideration individual differences, but the object of the assessment is entirely a different one.

It was thus rational to concentrate on those factors, which focus on the construct of individual dispositional readiness as well as a measurement on an individual level. The author further checked particularly those publications which offered empirical results about the proposed factors.

As a result the following individual factors were chosen to be integrated in the study as the basis for the determination of Individual Dynamic Preference (IDP):

- self-efficacy for change (SEC)
- cognitive rigidity (CR)
- locus of control (LOC)
- routine seeking (RS)
- emotional reaction (ER)
- short-term focus (STF)
- risk aversion (RA)

These specific factors were chosen as they are already acknowledged in the field of research and have been used in a veriety of different research projects in the field. They further meet the requirements of the specific study area of Person-Dynamic-Fit which

can be summarized as generalizability, dispositional an the individual level of the determined readiness.

The following section provides explanatory information about the proposed factors and offers cross references to the according publications.

Self-efficacy for change: self-efficacy for change or sometimes referred to as change efficacy is defined as peoples' beliefs about their own competences to deal with changes and master such situations (Herold et al. 2007). The factor reflects the extent to which organisational members feel confident that they can perform well in changing situations and could perform the required behaviours successfully. It is thus a factor focusing on the perceived abilities of the individuals to handle change (Terry and Callan 1997; Wanberg and Banas 2000; Martin et al. 2005; Holt et al. 2007a). Rafferty and Simons (2006) found support of this factor for the implementation of fine-tuning as well as corporate transformational changes. They used the 4-item scale by Schwoerer and Rosen (1992) as did Eby et al. (2000). Cunningham, Woodward, Shannon, MacIntosh, Lendrum, Rosenbloom and Brown (2002) also found support for the impact of self-efficacy on readiness for change.

Cognitive rigidity: This factor addresses the ease and frequency with which an individual changes their mind and is willing to adapt to a new situation (Oreg 2003). Several researchers in the field on cognitive processes have proposed this factor (sometimes referred to as dogmatism) as being relevant for a person's response to organisational change (Bartunek, Lacey and Wood 1992; Lau and Woodman 1995). According to the theory, individuals with high cognitive rigidity would be less willing and capable to adjust to changing circumstances (Oreg 2003). While the study by Lau and Woodman (1995) did not find supportive evidence for this theory, Oreg (2003) found significant support for this factor and its relevance for change response.

Locus of control: represents a personal control factor, reflecting the "*source of control over events affecting them*" (Rotter 1966; Lau and Woodman 1995, p. 539). It thus further shows the degree to which people believe that they have control over their own lives. People with high locus of control believe that they can achieve goals mainly through their own effort rather than being primarily determined by outside forces, such as luck, fate, other people or certain circumstances (Gurin, Gurin and Morrison 1978; Levenson 1981; Terry and Callan 1997; Judge et al. 1999; Paglis and Green 2002). Holt et al. (2007a) further relate locus of control to readiness factors and a comprehensive

study of literature by Judge et al. (1999) also came to the conclusion that locus of control was a relevant factor relating to a dispositional variable of coping with change.

Routine seeking: "*reflects the extent to which people feel comfortable with, and enjoy, having routines in their lives*" (Oreg 2003, p.681-682). According to Oreg people who seek routines prefer low levels of novelty and are reluctant to give up old habits. People who score high on this factor would thus be more likely to resist changes, which are frequently associated with novelty and new procedures and processes (Oreg 2003).

Emotional reaction: this factor covers people's feelings and emotions in the context of imposed change (Oreg 2003). It covers issues such as fear of loss of control as well as the level of resilience of the individual. It is expected that people who fear a loss of power and who have low resilience are more likely to resist changes. The factor of emotional reaction is not very popular, but was developed by Oreg (2003) and showed good results in predicting a general response to changes in several studies. It was further subject to a cross-cultural study among 17 nations and more than 4000 participants which further supported the factor.

Short-term focus: people with a short-term focus tend to concentrate primarily on the potential and immediate inconveniences caused by the change. The factor thus takes in the irrational component when people resist change even though they are aware of the long-term benefits of the proposed change. Since most changes entail such a phase of adjustments in the early stage, people who perceive these as inconvenient "hassles" are well likely to have a general tendency to resist change (Oreg 2003).

Risk aversion: This factor is defined by Judge et al. (1999) as the "propensity of individuals to seek out or avoid risky scenarios" (based on Cable and Judge (1994)), Slovic (1972) and Gomez-Mejia and Balkin (1989)).

This selection includes all four of Oreg's factors, because his construct definition as a *"disposition response construct"* is strongly related to the proposed idea of Individual Dynamic Preference (IDP). It further includes factors which find support in many other publications. Three further factors were added to the original Oreg factors due to their acknowledgment in recent publications and their strong relation to the IDP construct. Due to the high complexity of some of the chosen factors (in many cases one factor is tested with a 10-20 item scale each), the items were reduced to a minimum in order to integrate all seven factors into the study design.

2.3 Work Environment Dynamic (WED)

2.3.1 Term Definition and Origin of Change Management

Change management has its origin to a large extend in the research field of strategic management, because only when strategies are implemented they actually "come to life" and this usually requires organisational changes. A closer look at the dynamic of organisations' environments is also strongly linked to these scientific fields. Based on this, it appears reasonable to take a closer look at the concept of strategic fit as thisconcept has largely informed the author's thinking about this proposed study. Since a new concept of fit between organisational elements (in this case individuals) and their environments in this case in terms of "dynamic" is being introduced in this study.

Johnson, Johnson and Scholes (1993) have described strategy by a set of characteristics which would be supported by most strategic management writers. They describe strategy as:

- "concerning the full scope of an organisation's activities
- the process of matching the organisation's activities to its environment
- the process of matching its activities to its resource capability
- having major resource implications
- affecting operational decisions
- being affected by the values and beliefs of those who have power in an organisation
- affecting the long-term direction of an organisation" (Burnes 2004, p. 214)

This depiction shows that organisations' strategies are influenced by external factors as well as internal factors and that a fit between the different elements of the two should be strived for.

This resulted in the development of the strategic fit concept. This term was first introduced by Chandler (1962) as a fit between an organisational strategy and its structure (internal focus). Later this view was extended by the external factor of the organisational environment, especially by a fit between an organisation's products and the market (external focus) (Ansoff 1965). Later on, Andrews (1980) proposed a fit between internal capabilities and external possibilities and Ansoff and McDonnell (1990) enlarged his fit concept, including an internal fit component (capabilities). All

these alignments are referred to as the strategic fit. In subsequent research other scientists further extended this fit model with additional or alternative influential factors such as technology or organisational culture (Bea and Haas 2005).

Ansoff and McDonnell's (1990) enlargement of the strategic fit concept emphasized in their success hypothesis "*that organisations need to align not only their strategic behaviour but also their organisational capabilities to the turbulence of the environment*", thus the aggressiveness and responsiveness of the firm. This is also supported by Teece, Pisano and Shuen's (1997) dynamic capability approach, who define dynamic capabilities in accordance to Leonard-Barton (1992):

"...as the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Dynamic capabilities thus reflect an organisation's ability to achieve new and innovative forms of competitive advantage give path dependencies and market positions." (Teece et al. 1997, p. 517)

According to the dynamic capability approach those companies which can respond to external changes rapidly and flexible, and which can apply competences accordingly, will have a competitive advantage in the market.

For change implementation these approaches mean that organisational success depends on the alignment of organisational capabilities, organisational strategy and the environmental dynamic level. Next to structural issues or system support, capabilities depend to a large extend on the employees of an organisation, because their skills, abilities, attitudes and personal capacity add up to the overall capabilities within the organisation. This supports the view that a micro view perspective on change issues is promising and of high relevance to understand the status of the internal capabilities and the options for environmental alignment on an individual level.

Turbulence in the environment is defined as the "changeability in an environment characterized by the degree of novelty of challenges and the speed with which they develop" (Ansoff and McDonnell 1990, p. 491). It is also influenced by the environmental dynamic and the level of uncertainty. The term "dynamic" has a Greek origin meaning "force"; and "uncertainty", as another component contributing to the environmental turbulence can be defined as the "degree of doubt, unpredictability and ambiguity that exists in any situation" (Burnes 2004).

Several marketing researchers have also analysed environmental turbulence and its characteristics in recent years. According to Chonko, Jones, Roberts and Dubinsky (2002) these characteristics include market turbulence, technological turbulence and competitive intensity. Researchers further stress that managers need to adjust their strategies and planning to the level of environmental turbulence. What may work well in stable environments may be obstacles in unstable situations (D'Aveni 1994). According to Moussetis (2011, p. 107) Ansoff defines environmental turbulence "*as a combined measure of changeability and predictability of the organisations' environment (complexity, novelty, rapidity of change and visibility)*".

Knowledge about the turbulence level can thus improve the organisations' ability to respond through strategic decisions and capability measures. Preparing the workforce for an anticipated turbulence level and making them "ready" for it is therefore essential for business success and performance. Therefore the idea of the strategic fit concept is likely to be of high relevance for the determination of the Person-Dynamic-Fit (PD-Fit).

As stated above, the turbulence level in the business environment has increased intensely in recent years. One tool to actually measure the environmental turbulence as well as to determine the strategic fit or miss-fit has been developed by Ansoff and McDonnell (1990): the environmental turbulence scale. According to their strategic fit concept a company's performance is optimized when it aligns its business strategy and its company's capabilities to the turbulence level of the organisation's environment (Ansoff, Sullivan, Antoniou, Chabane, Djohar, Jaja, Lewis, Mitiku, Salameh and Wang 1993; Pelham 1999). Ansoff and McDonnells' 5-point-turbulence scale differentiates five different stages of environmental dynamic:

 TABLE 2-3: FIVE LEVELS OF ENVIRONMENTAL DYNAMIC

 according to Ansoff and McDonnell (1990)

LEVEL	ENVIRONMENTAL DYNAMIC
Laval 1	predictable and repetitive environment characterized by stability and
Level I	perseverance
Level 2	expanding environment, forecastable by extrapolation
Level 3	changing environment, threats and opportunities are still predictable
Level 4	discontinuous environment, partially predictable
Level 5	discontinuous environment, unpredictable and surprising

Different change types and distinct strengths of forces for change can be related to different turbulence levels and thus distinct success behaviours are required accordingly. The stronger the forces for change become and the higher the dynamic and the turbulence in the organisations' environments become, the more difficult it is for organisations to respond to the changes. According to each turbulence level it is then possible to determine the characteristics of the corresponding strategy and internal capabilities. This idea is referred to as the strategic success hypothesis and summarized in the following two figures:

TABLE 2-4: STRATEGIC SUCCESS HYPOTHESISaccording to Ansoff et al. (1993) in (Moussetis (2011), p. 109)

The "strategic success hypothesis states that an organisation's performance potential is optimum when the following three conditions are met:

- aggressiveness of the organisation's strategic behaviour matches the turbulence of its environment;
- (2) responsiveness of the organisation's capability matches the aggressiveness of its strategy; and
- (3) the components of the organisation's capability must be supportive of each other."

TABLE 2-5: STRATEGIC FIT CONCEPTaccording to Ansoff et al. (1993) in Moussetis (2011), p. 105)

		Production	Marketing	Entrepreneurship	Creativity
Turbulence scale	1	2	3	4	5
environmental turbulence	repetitive	expanding / slow incremental	changing fast incremental	discontinuous predictable	surprising unpredictable
strategic aggressiveness	stable	reactive	anticipatory	entrepreneurial	creative
	based on previous cases	incremental based on experience	incremental based on extrapolation	discontinuous based on expected futures	discontinuous based on creativity
responsiveness of capability	custodial	production	marketing	strategic	flexible
	suppresses change	Adapts to change	Pursues familiar change	Seeks new change	Seeks novel change

Other researchers have come to similar typologies mainly describing distinct environments as stable, uncertain, complex, static, dynamic, discontinuous and turbulent (Emery and Trist 1965; Lawrence and Lorsch 1967a, 1967b; Duncan 1972; Post 1978) and the variability is referred to as environmental turbulence (Moussetis 2011, p. 107).

Ansoff and McDonnells' (1990) diagnosis tool allows organisations to detect future market opportunities and threats, and internal strengths and weaknesses and to identify the gaps between these external and internal positions. Organisations must then find ways to respond to environmental changes.

They further emphasize that the environmental turbulence varies between organisations on the one hand but also between strategic business units (SBUs) within the organisations, depending on the specific market or industry focus of the SBUs.

According to Moussetis (2011, p. 106) "this is the historical moment where Ansoff expands his thinking beyond the formal planning to include a wider set of contingencies". He thus acknowledges that change management is subject to environmental variability, strategic behaviour, managerial capability and behavioural characteristics such as resistance to change. Moussetis (2011) revision of Ansoff's work linked it to other schools of thought in strategic management and thus shows its high relevance to these concepts and its actuality for businesses today. This is also stressed by Martinet's (2010) latest publication which highlights particularly his contribution to the topic of "strategic foresight".

2.3.2 Determination of the Work Environment Dynamic Level (WED)

Dynamic level determination has so far only been used in the field of strategic management. In these cases environmental analysis of an organisation or subparts of an organisation is conducted and the different environmental factors are analysed for their dynamic level. As stated above, Igor Ansoff (1990) has been a strong supporter of environmental analysis emphasizing its importance for subsequent strategy implementation.

For the determination of the dynamic level of the specific work environment of an individual the author breaks down existing environmental analyses tools to specific work environment issues. Factors of the environment need to be checked for their relevance for the specific work environment of the individual. For this study overall

Work Environment Dynamic (WED) level is determined based on the dynamic of the following two sub sectors:

- dynamic of the organisation and its internal capabilities in general
- and the dynamic of the specific job environment (particularly in terms of job requirements, tasks and routines).

In the qualitative analysis "experience with change" in every-day situations as well as with large scale changes in the respondents' past are further sources for the WED assessment.

Even though the used term of Work Environment Dynamic (WED) might be new to the literature, the underlying construct is far from new. As with the area of IDP above the created term is only used for study specific reasons in order to group several items and factors under one umbrella which were drawn from several acknowledged approaches. Since the largest part of the WED factors of this study is drawn from Ansoff and McDonnell (1990) it could have also been referred to as environmental turbulence. The author did however intentionally use a different term as Ansoff and McDonnell looked at the environment from an organisational perspective rather than the view of an individual employee. Several more job specific items and factors were added to this existing concept.

So far the role of the larger environmental context of the organisation has not been subject of much research in the field of individual change readiness and individual change response. An exception is the study of Herold, Fedor and Caldwell (2007) which calls for a stronger focus on the context in which changes occur. They show that the level of readiness for a change (referred to as change commitment in their publication) is influenced by the turbulence of the surrounding environment. They state that the context is relevant for readiness, because a specific change is often put up in a setting of multiple on-going changes and distractions which also influence the attitude of employees. Secondly every change places demands on the individual and each individual only has restricted resources to meet these demands. A consideration of the work environment is therefore essential to understand the readiness level of each individual (Herold et al. 2007). The idea of a setting of on-going changes corresponds to Kotter's (1996) understanding of change in today's organisations.

In the field of change readiness literature it is particularly Holt et al. (2007a) who emphasize the role of environmental context for the overall ability to deal with changes.

As stated earlier, he defines context as one of four key influencing factors and thus includes issues such as company culture and capabilities for change in his analysis. He further emphasized the area of process focusing on change competence of the organisation. These latter elements are also covered by the environmental analysis in the proposed study. The environmental analysis is thus based on Ansoff's turbulence scale but focuses on only those factors relevant for the specific work environment of the individual such as internal organisational characteristics (structure, communication, planning horizon, etc.) and job-specific conditions (tasks, processes, flexibility, etc.).

For the assessment of WED this study draws on factors and items used by Ansoff et al. (Ansoff and McDonnell 1990; Ansoff et al. 1993) as well as self-developed items of a similar kind covering the more job specific topics. The chosen items are described in *Section 3.4.3.2*. General external factors are not included in the study due to the assumption, that the dynamic of the organisation will cover those factors which have an effect on the individual work environment.

2.3.3 Change Classification

There are three distinct perspectives towards changes which are generally distinguished by change management researchers (Burnes 2004):

- The incremental model of change
- The punctuated equilibrium model of organisational transformation
- The continuous transformation model of change

Supporters of the first view (incremental model of change) see change as something that individual parts of an organisation have to deal with one by one. As such changes arise incrementally and separately and are dealt with in a continuous approach by the members of the organisation. "*The received wisdom therefore is that change will take place through successive, limited and negotiated shifts*" (Pettigrew, Ferlie and McKee 1992, p. 14). As such it is a perspective that has particularly been adopted by Planned Change advocates. A transformational change would thus be achieved by numerous incremental changes and shifts within the organisation (Burnes 2004). Critics of this perspective argue that although organisations might go through such periods of continuous incremental change, especially in the last two decades these periods of stability were often dispersed by revolutionary change periods (Mintzberg 1978; Handy 1989).

This leads to the second perspective towards organisational change: the punctuated equilibrium model, which became known in the 1980s by researchers such as Miller and Friesen (1984), Tushman and Romanelli (1985) and Gersick (1991). They describe the organisational environment as evolving through long periods of stability which are then punctuated and disrupted by phases of rapid and fundamental changes (Gersick 1991).

Although many observations have supported these former two perspectives, little empirical data can be found to support them (Burnes 2004). This leads to an increased interest in the third perspective towards organisational change: the continuous transformation model of change. Advocates of this model, such as Brown and Eisenhardt (1997), Peters (1997) or Kanter et al. (1997) believe that the organisational environment is changing rapidly, radically and surprisingly and will continue to do so. If organisations want to sustain competitive in this kind of markets they need to engage in continuous change striving for an alignment to their environments. In order to do so, many writers have even argued that this requires organisations to respond continuously and as such might have to work spontaneously and at "the edge of chaos" (Lewis 1994; Stickland 1998; Hayles 2000; Stacey 2003). This latter complexity view, however, also finds only limited empirical evidence (Burnes 2004).

If change classification was that easy it would be conceivable to classify all changes as part of continuous transformation only because the other two theories appear outdated. Other researchers, however, have focused on the lower level characteristics of change allowing for more informative typologies.

Changes can be differentiated regarding their intensity and frequency as well as according to their organisational level (individual, group or system-wide), as explained in the last chapter. Bringing these factors together in a change matrix, this leads to the coverage of most change situations within organisations. The matrix shows potential examples for the distinct change modes.

	Incremental	Punctuated	Continuous
Individuals	Learning	Promotion	Career Development
Groups	Kaizen	Team Building	Changes in composition and tasks
System	Fine-tuning	Business Process Reengineering	Culture

TABLE 2-6: EXAMPLES FOR VARIETIES OF CHANGE(Burnes 2004, p. 321)

Other writers have introduced other factors and models in differentiating and describing the range of changes occurring in organisations and their environments. The most important concepts of differentiating the varieties of change are summarized briefly in the following paragraphs ranging from rather simple typologies with narrow foci to more complex concepts of change types. This introduction into change classification theory is necessary because this study requires a good understanding of change types in order to undertake the classification of changes reported in the area of "experience with change" which is covered in the qualitative part of this research.

Grundy (1993), for example, differentiates between three change types: smooth incremental change, bumpy incremental change and discontinuous change. The three forms are visualised in the following figure.



FIGURE 2-4: THREE CHANGE TYPES according to Grundy (1993, p. 25)

Smooth incremental changes evolve slowly in a systematic and evolutionary mode with change at a constant rate. Bumpy incremental change has periods of relatively tranquillity punctuated by acceleration in the pace of change. These changes can evolve

from the environments as well as internally. Discontinuous change – as the third defined form of change, is characterized by rapid shifts in strategy, structure or culture and can be linked to higher levels of environmental turbulence (Grundy 1993).

Dunphy and Stace (1993) define a "scale of change" differentiating four distinct change types based on a continuum:

- Type 1: Fine tuning: An on-going process characterized by fine-tuning of the fit between the organisation's strategy, structure, people and processes
- Type 2: Incremental adjustment: incremental adjustments to the changing environment, which involves distinct modifications to strategy, structures and processes.
- Type 3: Modular transformation: major realignment of department(s) and radical change focused on subparts of an organisation.
- Type 4: Corporate transformation: Corporation wide change characterized by radical shifts in strategy and revolutionary changes throughout the whole organisation.

Another differentiation is made by Stacey (1996), who defines the distinct change classifications according to the extent to which they are predictable. He differentiates between closed change, contained change and open-ended change. Closed changes are well explainable. It is obvious what happened, why it happened, and what the consequences are and it is possible to explain the consequences for the future. Contained changes are less explainable. It is possible to say what probably happened, why it probably happened and what the consequences will probably be. Open-ended changes in contradiction cannot be explained by the people involved and the impacts for the future are uncertain.

Other typologies were developed by Nadler and Tushman (1989) who defined four change types as tuning, adaption, reorientation and re-creation, focusing mainly on the origin of the trigger for the change and by Porras and Robertson (1992) who differ between developmental change, transformational change, evolutionary change and revolutionary change based on the planning involved and on the degree of change. Cummings and Worley (2001, p. 30) have identified a "continuum ranging from incremental change that involves fine-tuning the organisation to quantum changes that

entail fundamentally altering how it operates." Other writers have supported only one extreme of the scale, such as Peters (1989) who stresses the importance of disruptive and continuous change as being the only appropriate way to conduct changes. The defined scale from Pettigrew et al. (1992) differentiates between operational scale change (small, rather unimportant) to strategic change (major change, important, structural) while Kotter (1996) fully neglects the existence of a continuum viewing change as something that organisations need to be continuously doing with several small or large changes occurring simultaneously.

The distinct concepts described above are very diverse but reveal one factor which most of them have in common: the description of change along a continuum from incremental small-scale changes to transformational, large-scale changes. Although the different advocates stress distinct aspects of these change types. As such, incremental change is seen as focussing mainly on changing activities, behaviours or attitudes while transformational change is rather strategic with changes towards an organisation's structures or culture. From these differentiations arise the question on how to best manage the distinct change types. Many writers have questioned the applicability of just the planned approach to change or just the emergent approach to change and called for a larger variety of approaches with respect to the large variety of change types. However, there is much agreement about the fact that the planned approach to change is more suitable for incremental change types. Thus it is the environment which determines the applicability of the management approach, rather than relying on only one approach for all occurring changes (Burnes 2004).

	Small Scale	2	Large Scale	
Change Continuum	Incrementa	l Transformational		
Ammaaahaa ta Changa	Stable	ENVIRONMENT	Turbulent	
Approaches to Change	Planned		Emergent	

FIGURE 2-5: CHANGE CONTINUUM & APPROACHES (Burnes 2004, p. 323)

For many change types the implications for the individual employees vary. Thus the extent of the influence of the change on an individual's work environment needs to be taken into consideration (Terry and Callan 1997).

The distinct typologies are explained in detail in this literature review because a choice of types will be used in order to classify individual experiences as reported by the respondents in the interviews. This will help to determine the level of turbulence of the individual work environment (WED) in the qualitative analysis. In the current study the focus is put on the Dunphy and Stace (1993) typology because this model uses more than one or two dimensions for change classification and can therefore be used best to distinguish between the reported changes.

The distinct typologies by Dunphy and Stace (1993) have the following different dimension in common:

- "the scale of change
- the content of change
- whether the change is a response to internal or external factors
- the organisational level
- the impact of the change"

(Rafferty and Simons 2006, p. 329)

2.4 Person-Environment-Fit (PE-Fit) Concept

2.4.1 Introduction to Person-Environment-Fit (PE-Fit)

As stated in the introduction to this literature review human resources research is calling for a fit between employees and their environment (Edwards, Caplan and Harrison 1998; Carless 2005; Kristof-Brown et al. 2005; Jansen and Kristof-Brown 2006). The proposed concept of Person-Dynamic-Fit (PD-Fit) would correspond to this idea and thus needs to be explored for its relation to already existing and acknowledged concepts in order to analyse if there is a distinct relevance for Work Outcomes (WOC).

The person-environment interaction theory has its early roots in 1935, when Kurt Lewin determined organisational outcomes as a function of the interaction between individual employees and their environments. A good fit of the individuals with their specific organisational environments has been related to positive outcomes for the individual as

well as for the organisation. Person-Environment-Fit (PE-Fit) has been positively related to Work Outcomes (WOC) such as job satisfaction (JS) and organisational commitment (OC) and negatively associated with employee turnover intentions (TI) (Hollenbeck 1989; Chatman 1991; Bretz and Judge 1994; Harris and Mossholder 1996; Kristof 1996). PE-Fit has therefore been in the focus of research conceptually as well as empirically for several decades and the interest in the field is growing. But the findings are fragmented and not all consistent. The author will therefore describe the distinct sub concepts of PE-Fit separately, because they have been developed apart from each other. However, emphasis is placed on the fact, that the distinct sub-concepts should always be viewed simultaneously.

A study by Caldwell, Herold and Fedor (2004) also related the topic of PE-Fit to environmental change. The study showed that environmental changes could be related to shifts in the PE-Fit perception of individuals. Since PE-Fit is defined as the congruence between an individual and its work environment, changes in the work environments can cause shifts in PE-Fit as well. With this relationship environmental change can have negative effects on Work Outcomes (WOC), because poor PE-Fit can lead to undesirable outcomes such as reduced organisational commitment or increased turnover intention (O'Reilly and Chatman 1986; Vandenberghe 1999). Caldwell et al. (2004) call for a stronger focus of future research on the effects of organisational change on PE-Fit.

Broadly, PE-Fit can be defined "*as the compatibility between an individual and a work environment that occurs when their characteristics are well matched*" (Kristof-Brown et al. 2005). As such it is a multidimensional and overarching concept under which several – more specific – fit concepts are gathered (Law et al. 1998). Numerous sub-concepts have been conceptualized, such as person-vocation fit, person-organisation-fit, person-job-fit, person-group-fit, person-person-fit or person-supervisor-fit (Kristof 1996; Edwards et al. 1998; Kristof-Brown et al. 2005; Jansen and Kristof-Brown 2006; Morley 2007; Tak 2010).

A meta-analysis by Kristof-Brown et al. (2005) summarized the existing literature and investigated the relationship between four distinct fit dimensions, which they determined as being critical for fit assessment. These dimensions were: person-organisation-fit, person-job-fit, person-group-fit, and person-supervisor-fit. How well a person fits into its work environment is therefore dependent on these distinct aspects.

Many studies focus on only one isolated fit concept. Especially in the fields of personnel recruitment and selection, researchers have focused on PO-Fit, as the match between the individual and organisational attributes such as values or goals, and personjob-fit (PJ-Fit), as the fit between individual attributes and specific job requirements (Carless 2005). Less attention has been paid to the concepts of person-group (PG-Fit) and person-supervisor-fit (Kristof-Brown et al. 2005). The results of the study display only a weak relationship between the distinct concepts when tested regarding their relationship to work outcomes. This supports the uniqueness of each of the different sub concepts as a separate determinant for fit assessment and the general definition of PE-Fit as a multidimensional concept (Kristof-Brown et al. 2005). This multidimensionality is widely accepted in research and many scientists have emphasized the danger of isolating the fit-components and looking at them individually. Only the assessment of several dimensions at the same time will give a realistic view of the overall PE-Fit (Carless 2005; Kristof-Brown et al. 2005; Jansen and Kristof-Brown 2006). Assessing them simultaneously provides a more realistic insight into their influence (Carless 2005). But the concepts still have their unique influence on work outcomes and therefore a separate reflection of each distinct sub-concept of PE-Fit is suggestive (Timmor and Zif 2010).

Due to the limited research in the field of PS-Fit it was first decided to include only PO, PJ and PG-Fit in the present study. This was in line with other research in the area such as Werbel and Gilliland (1999). However, the results of the pre study phase revealed that the influence of PS-Fit should not be underestimated and the author thus decided to add the factor to the questionnaire for the main study. This decision finds support in a more recent study by Tak (2010) which was not published at the time when the present study was developed and executed. The concept of PS-Fit will thus also be summarized in the next part of the chapter as well as the other three PE-sub-fits.

2.4.2 Person-Organisation-Fit (PO-Fit)

The roots of person-organisation-fit (PO-Fit) go back to Tom's (1971) suggestion that individuals will perform better in organisations which match their personality than in those which don't match. Schneider (1987) further emphasizes that individuals will place themselves in organisations which meet their characteristics and will leave those which don't (Valentine, Godkin and Lucero 2002).

PO-Fit is defined as the match between individual and organisational values and attributes (Chatman 1991; O'Reilly, Chatman and Caldwell 1991). Value-congruence has become *widely accepted for operationalising PO-Fit* (Verquer, Beehr and Wagner 2002; Kristof-Brown et al. 2005; Morley 2007; Ambrose, Arnaud and Schminke 2008). However, other attributes, such as goals or beliefs, have also been defined as determinants of PO-Fit (Kristof 1996).

Piasentin and Chapman (2006) conducted a critical examination of PO-Fit literature by reviewing 46 publications. They identified four distinct fit-components of PO-Fit. Although this distinction was only identified upon a literature review and has never been tested empirically, it gives valuable insight into the PO-Fit construct. The four components of PO-Fit are:

need-supplies fit:	needs of the individual can be met by the organisation		
demand-ability fit:	individual's ability fit to organisational demands		
supplementary fit:	fit of characteristics of individual and organisation		
	complementary fit:	individual is able to provide something, that	
	is missing in the orga	nnisation	

As with the concept of PJ-Fit, there is also an ability-demand and a needs-supply side to this fit concept, depending on the viewpoint of either the employee or the employer. These issues are again influenced by the characteristics of the two entities (person and organisation). The needs-supply fit occurs when an organisation can satisfy the needs and preferences of the individual, or in other words, when the employee is satisfied in the work environment. The ability-demand fit, on the other hand, is high, when an organisation is happy with the employee, because he/she meets the organisational requirements (Autry and Daugherty 2003).

Kristof (1996) has provided some specific examples for these demands and supplies:

"More specifically, organisations supply financial, physical and psychological resources, as well as the task-related interpersonal, and growth opportunities that are demanded by employees. (...) Similarly, organisations demand contributions from their employees in terms of time, effort, commitment, knowledge, skills, and abilities (...") (Kristof 1996, p. 4).

An additional distinction in the PO-Fit concept can be made between supplementary fit and complementary fit. Supplementary fit in PO-Fit exists when the characteristics of the individual are similar to those of other individuals in the organisation. Complementary fit, on the other hand occurs when an individual fits in well, because it has characteristics or abilities which are missing within the organisation. Therewith complementary fit is achieved by "filling in the whole" or "add what is missing" (Muchinsky and Monahan 1987) and supplementary fit is achieved by being similar. The majority of studies has focused on the supplementary perspective of fit, where fit is determined by the congruence between an individual and organisational characteristics, but complementary fit has been identified as being relevant for PO-Fit as well (Piasentin and Chapman 2006). In their meta-analytic review Piasentin and Chapman (2006) called for further research to determine why some individuals consider supplementary aspects determinant of PO-Fit while others experience a high PO-Fit based on as complementary issues. They propose that certain individual characteristics might influence the PO-Fit perspectives of employees. In addition they called for a critical observation of the dominance of supplementary fit assessment. Their review revealed that several researchers have argued that a strong focus on supplementary fit in recruiting and personnel decision might lead to a homogeneous workforce which might be lacking the ability to adapt to environmental changes (Schneider 1987; Walsh 1987). This aspect might call for higher employee diversity rather than homogeneity.

With reference to the distinct perspective of PO-Fit it has been proposed that the focus on a certain perspective is individually different. This difference is important for PO-Fit assessment, because it will be important to know for relating PO-Fit to job outcomes (Piasentin and Chapman 2006).

Based on these distinct dimensions of PO-Fit, the construct has been defined as *"the compatibility between people and organisations that occurs when*

- at least one entity provide what the other needs, or
- they share similar fundamental characteristics, or
- both". (Kristof 1996)

This definition respects the multidimensionality of the concept and considers supplementary fit as well as complementary fit aspects (Kristof 1996).

The model displayed in the following figure visualizes the various fit perspectives between organisations and individuals. These distinct perspectives are not contradictory.
Often the optimum fit between an individual and an organisation can only be achieved when the needs of both parties are fulfilled (Kristof 1996).



FIGURE 2-6: VARIOUS CONCEPTUALISATIONS OF PO-FIT (Kristof 1996, p. 4)

In addition to value and goal congruence even demographic similarities have displayed relevance for PO-Fit. Pfeffer (1983) determined that a stronger demographic similarity between employees will increase their perceived fit to the organisation. In addition demographic similarity has been related to influence performance ratings (Judge and Ferris 1992) and turnover intentions (Jackson, Brett, Sessa, Cooper, Julin and Peyronnm 1991; Autry and Daugherty 2003). Besides values, skills, goals and demographics, also personality traits have been in the focus of investigations regarding PO-Fit (Bowen, Ledford and B.R. 1991). Personality traits in the context of Hogan's study (Hogan) have been defined as *"stylistic consistencies in a person's social behaviour"* (Hogan 1991). Based on this, people with similar personalities are expected to like people with the same personality and to strive to working with similar people. In addition individuals with congruent personality traits are expected to behave similarly (Byrene 1971) and they are likely to experience less stress and higher job satisfaction (Bretz and Judge 1994). Additional support for the relevance of personality traits for PO-Fit assessment has been given by Ryan and Kristof-Brown (2003) by determining that personality traits

have displayed stronger stability in behaviour prediction than values have. According to them, personality-based fit should have at least as much influence on attitudes and behaviours as value-based fit has (Kristof-Brown et al. 2005). Unlike value congruence, however, personality similarity might sometimes not be desirable (Carson 1969). For the measurement of personality traits, Erhart (2006) calls for the use of the Five Factor modes (FFM). This personality model has shown to generalize across cultures and in his study their relevance for PJ-Fit assessment has also been shown. His studies supported the assertion of Schneider, Goldstein and Smith (1995), that people prefer specific organisations over others based on their perceived PJ-Fit (Erhart 2006).

Values have been identified as being of fundamental importance for PO-Fit, because they influence organisational as well as individual behaviour and decision making (Chatman 1989). Value congruence has further displayed stronger influence on PO-Fit than any demographic or social characteristic has (Cable and Judge 1997). Based on these findings, recruiters are well advised to consider value congruence when evaluating PO-Fit (Kristof-Brown et al. 2005). Researchers are convinced that a high value congruence between individuals and their organisations leads to more positive experiences for the employee and better performance for the organisation (Kristof 1996).

An additional support for value-congruence as a fit determinant is the fact, that the degree to which employees share the same values also determines the strength of an organisation's culture (Chatman 1989; Schein 1990) and culture strength has been linked to organisational performance (Deal and Kennedy 1982; Schneider 1987). Also employees, who share the same values, frequently behave in a similar way towards external stimuli, which in turn can lead to easier communication and coordination (Meglino and Ravlin 1998).

Schneider et al. (1995) propose that the perceived congruence between an individual and his/her work environment determines the attraction to a specific organisation. The fit between the individual's personality and values and the organisational culture, structure and processes is decisive. Based on this proposition Schneider (1987) developed the so called ASA-model (Attraction-Selection-Attrition). This model suggests that people make their job choice based on their perceptions of organisational values (Autry and Daugherty 2003). Chatman (1989) has developed the Organisational Culture Profile (OCP) as a tool to determine PO-Fit (McConnell 2003). For the

assessment of PO-Fit it is important to be able to rely on results of organisational analysis in the areas of work contexts and work processes (Werbel and DeMarie 2001). Such information can then be used to determine the needed skills, values and behaviours among the workforce which appear necessary for successful business (Bowen et al. 1991).

Silverthorne (2004) tested the relation between PO-Fit and job outcomes in three different cultural settings in Taiwanese organisations, which were a bureaucratic culture, an innovative culture and a supportive culture. Results indicated that the degree of fit could be related to job satisfaction, organisational commitment and turnover rates in all three cultural settings. This supports the fit theory, showing that organisational culture only provides a framework within which the PO-Fit occurs. Good knowledge about the prevailing organisational culture among employees and the consideration of value congruence in the personnel selection process can result in higher PO-Fit and can therewith increase job satisfaction and organisational commitment among employees (Silverthorne 2004).

PO-Fit has been linked to behavioural and attitudinal outcomes, such as commitment, satisfaction, and turnover intentions (O'Reilly et al. 1991; Valentine et al. 2002; Verquer et al. 2002; McConnell 2003; Silverthorne 2004; Huang, Cheng and Chou 2005).

Morley's (2007) meta results based on the analysis of six PO-Fit publications summarized the recent results on the relation between PO-Fit and work outcomes as follows:

"Hoffman and Woehr indicate that PO-Fit is weakly to moderately related to job performance, organisational citizenship behaviour and turnover. In their most recent meta-analysis Kristof-Brown et al. (2005) find that PO-Fit has strong correlations with job satisfaction and organisational commitment and a more moderate correlation with intention to quit. (...) Specifically on the issue of performance Kristof-Brown et al. (2005) find that PO-Fit has low correlation with overall job performance and task performance and moderate correlations with contextual performance." ... (Morley 2007, p. 111)

Although the person-organisation-fit (PO-Fit) concept is widely represented in literature, the evidence for a direct relation between PO-Fit and job performance is still

lacking (Kristof-Brown et al. 2005; Arthur Jr., Bell, Villado and Doverspike 2006) and the inferences therefore problematic.

In the measurement of PO-Fit, value congruence has been the most frequently used criteria. In addition, personality traits have frequently been included in the measurement approaches. Due to the fact that most studies have however not considered the different perspectives of fit, as defined by Kristof (1996), and their relation to work outcomes, there is still limited knowledge about the degree of influence of the different variables. Since values have been identified to be strongly related with individual attitudes and behaviours (Chatman 1989, 1991), the relevance of value-congruence for PO-Fit determination is widely accepted. However, complementarily issues in the fields of KSAs or personality might plausibly add to fit perception as well (Piasentin and Chapman 2006).

Based on the challenges emphasized by Kristof-Brown et al. (2005), Morley (2007) emphasizes that particularly the conceptualisation and measurement of the fit concept remain problematic. Werbel and DeMarie (2005) furthermore emphasize the difficulty of distinct sub-cultures within organisations, which need to be considered when it comes to personnel selection based on person-organisation-fit (PO-Fit).

In conclusion it can be stated, that PO-Fit can be based on congruence between individual and organisational values, goals, personalities and demographical aspects. The fit can in addition also depend on how well employee needs are satisfied by the organisation (Cable and Judge 1994) or on how well the individual and its characteristics meet organisational requirements (Bowen et al. 1991; Kristof 1996; Valentine et al. 2002). Compared to PJ-Fit, PO-Fit focuses on general organisational attributes rather than job-specific characteristics. KSAs have therefore mainly been in the focus of PJ-Fit. However, there might be organisation wide, rather than job specific, needs for particular KSAs as well. Based on this some KSAs are sometimes also considered for PO-Fit determination (Kristof-Brown 2000).

2.4.3 Person-Job-Fit (PJ-Fit)

Person-job-fit (PJ-Fit) has been defined as the congruence between the characteristics of an individual employee and the characteristics of the job. As such, this match between the individual's knowledge, skills and abilities (KSAs) and the specific job requirements, has been the traditional measurement for personnel selection and placement for many years. Focusing on PJ-Fit in order to find the right people for the job has on the one hand led to a more structured recruitment approach and on the other hand given organisations a selection measure that was widely accepted and legally defensible (Werbel and Gilliland 1999). Based on a review of the PJ-Fit literature, Edwards (1991) extended this PJ-Fit definition, which is rather defined from an organisational perspective, with an employee perspective. As such, PJ-Fit exists not only when an individual's KSAs match the specific job requirements (demand-ability fit) but also when the job fulfils the specific needs and demands, which the individual requires from the job (needs-supplies fit). This means that the job incumbents or applicants will determine PJ-Fit from their perceived view on how well the job matches their needs, while recruiters or personnel managers will refer to the demand-ability fit to determine person-job-fit, being concerned with matching the relevant KSAs to the job requirements (Kristof-Brown et al. 2005).

PJ-Fit can further be measured subjectively or objectively. For a subjective PJ-Fit determination, the individual can be asked to determine how they perceive their fit to the job. For a more objective fit determination, individuals need to be asked to report their demands and characteristics and these will be tested for their correspondence with the job characteristics (Kristof 1996; Erhart 2006). Accurate job analysis can facilitate the determination of the relevant job requirements and characteristics. The more appropriate the identified job requirements can be determined, the easier it is to identify the necessary KSAs for the job (Werbel and DeMarie 2001) and the better the characteristics and tasks of a job can be described, the more will this enable the individual to assess their perceived PJ-Fit (Carless 2005).

2.4.4 Person-Group-Fit (PG-Fit) and Person-Supervisor-Fit (PS-Fit)

Person-group-fit (PG-Fit) has been conceptualized as a supplementary as well as complementary fit concept (Werbel and Gilliland 1999). The supplementary PG-Fit is defined as being high in a situation of high congruence between individual and group characteristics. Complementary PG-Fit in contradiction, is high when an individual is able to provide a characteristic, skills or abilities which are lacking in the group (Werbel and DeMarie 2001). Although the meta-analysis by Kristof-Brown et al. (2005) expressed the relevance of this construct and related constructs such as person-supervisor-fit (PS-Fit), the overall attention by literature is still limited (Kristof-Brown et al. 2005). PG-Fit has shown to rely on goal, value and sometimes personality

homogeneity between the individual and the specific group which is similar to PO-Fit definitions. Also similarity in demographics can increase the perception of PG-Fit (Kristof 1996). Kristof (1996) found clear support for the distinctness of this construct from PO-Fit: Although value and goal congruence also play a major role for the determination of PO-Fit, research shows that sub-units of organisations, such as groups, may be very different from the overall organisation. The degree of fit between an individual and its group can therefore differ strongly from the fit to the overall organisation.

P-S-Fit concerns the relationship between individual employees and their supervisor(s). Fit occurs when subordinates and supervisors share common characteristics such as personality characteristics (Bauer and Green 1996; Schaubroeck and Lam 2002), goal congruence (Witt 1998) or value congruence (Meglino, Ravlin and Adkins 1992; Krishnan 2002; Colbert 2004; Tak 2010). PS-Fit has not been much in the focus of Person-Environment-Fit (PE-Fit) investigation but several studies from recent years find support for its relevance for job outcomes such as job satisfaction or turnover intention (Yoo and Hyun 2003; Choi and Yoo 2005). The influence on organisational commitment was however lower than on job satisfaction (Kristof-Brown et al. 2005).

2.4.5 Fit-Measurement Approaches

In the field of actual fit assessment, literature differentiates between objective, subjective and perceived fit assessment and between direct and indirect assessment. In the meta-analysis by Kristof-Brown (2005) these distinctions have led to the use of the following three measurement distinctions:

- "perceived fit, when an individual makes a direct assessment of the compatibility between P and E
- subjective fit, when fit is assessed indirectly through the comparison of P and E variables reported by the same person
- objective fit, when fit is calculates indirectly through the comparison of P and E variables as reported by different sources"

When an individual possesses characteristics which are distinct from the characteristics of the other employees but of value for the organisation, this is defined as complementary fit. The perceived fit between an organisation and an individual is however determined by the individual's perspective. While some individuals think that being different will hinder a fit into an organisation, others perceive that characteristically differences will make them unique and therewith valuable for the organisation, enabling them to fit in. The latter individuals have a complementary interpretation of PO-Fit, while the former consider only similarity as a fit measure (Piasentin and Chapman 2007). Research results by Piasentin and Chapman (2007) supported the distinction between supplementary and complementary fit perspectives. This also supports the use of self-reporting measures, because only individual fit perceptions can display the distinct perspective of employees.

The meta-analysis by Kristof-Brown et al. (2005) shows that perceived fit measures reached higher predictability of several job outcomes than objective fit assessments did and the need-supply fit also tested better than the demand-ability perspective.

This meta-analysis further indicates that the distinct fit-concepts vary in their influential impact on Work Outcomes. job satisfaction (JS), as one of the measured outcomes, shows to be best predictable by the fit of the individual into the specific job (PJ-Fit). organisational commitment, as a second potential Work Outcome, was best determined by PO-Fit and satisfaction with supervisors and groups was best predictable with PG and PS-Fit. The majority of research has focused on the assessment of PO-Fit, but Carless (2005) stated that a stronger relation to work outcomes can be detected when assessing PO-Fit and PJ-Fit together (Barber 1998).

The assumption that PE-Fit can be determined by just adding up the different fit constructs, such as PO-Fit, PJ-Fit, PG-Fit and PS-Fit has been disclaimed by Jansen and Kristof-Brown (2006). These state that certain circumstances will influence the impact of the different environmental factors on the individual. Some fit concepts will therefore be more relevant in certain situations and for certain individuals than others. Jansen and Kristof-Brown (2006) have for example identified individuals past work experience as one of those influential factors.

PE-Fit overall, has been related to job satisfaction (Lauver and Kristof-Brown 2001), organisational commitment (Cable and Judge 1996) and intentions to quit (Saks and Ashforth 1997). Despite several measurement definitions, particularly in the PO-Fit literature, a conceptual approach to these areas is still missing and an adequate measurement of the constructs still insufficient (Arthur Jr. et al. 2006). Another problem about this field of research is the diverse approaching to fit and performance

assessment, which makes research difficult to compare and combine (Piasentin and Chapman 2006).

Ehrhart (2006) supports the distinction between the PJ and PO concept, emphasizing that individuals might perceive a greater fit with their job than with their employing organisation or vice versa. A study by Lauver and Kristof-Brown (2001) brought similar results that PJ and PO-Fit should be treated as distinct concepts. In their study the distinct fit concepts displayed different impacts on work outcomes, such as job satisfaction and intention to quit. Jansen and Kristof-Brown (2006) also called for a P-E model, which combined the different fit dimensions. While most studies assume, that the effects of the distinct fits will add up, Kristof-Brown et al. (2005) state, that poor fits in one of the dimensions can spill over to the fit perception in the other areas.

Kristof-Brown et al. (2005, p. 316) summarize that

"these results underscore the uniqueness of each type of fit and the ability of individuals to discern among aspects of their work environments when assessing fit. (...) In particular, the relationship between PS-Fit and the other types were small, suggesting that employees do not view supervisors as isomorphic representations of the organisation".

This further supports the approach to treat PE-Fit as a truly multidimensional construct as suggested by Law et al. (1998).

2.4.6 Strategic Relevance of the Distinct Fit Concepts

Werbel and DeMarie (2001) have looked at the different fit concept with relevance for strategic management decisions. They propose that depending on the market situation and the existing dynamic in the organisational environment, a certain fit concept is more suitable than another one. They distinguish between three fit components of PE-Fit: PJ-Fit, PO-Fit and PG fit. As such, they used Kristof-Brown et al.'s (2005) distinction between PJ and PO-Fit, but summarized PG and PS-Fit within one sub-concept. A proposition was developed to determine which PE-Fit concept is most compatible with the organisational strategy:

• "Organisations emphasizing PJ-Fit are most likely to be successful in welldefined mature markets where competitive advantage is typically earned through gains in efficiency or process innovation. These markets favour firms that build a highly proficient workforce - the key aim of PJ-Fit. Organisations that operate in these kinds of markets often implement a costs leader competitive strategy (Porter 1980). This strategy requires that a firm lowers its cost of production to levels below those of its closest competitors. Thus a primary way to achieve advantage in these markets is through increasing workforce productivity by matching employee skills and abilities to specific job requirements.

- Organisations emphasizing PO-Fit are most likely to be successful in entrepreneurial and evolving marketing where competitive advantage is based on in-house product (service) innovation or firm reputation. These markets favour firms that build a workforce that recognizes and supports the core values and objectives of the overall firm (Reger, Gustafson, Demarie and Mullane 1994). Organisations that operate in these markets tend to have effective R&D operations and build their firm reputation by bringing a steady stream of innovation products or services to the market ahead of their competition. These firms are best served in their human resource operations by emphasizing PO-Fit measures because it focuses on building a cohesive workforce.
- Organisations emphasizing PG-Fit are most likely to be successful in high velocity markets where competitive advantage is based on inter-firm alliances and intra-firm cross-functional collaboration (Eisenhardt and Schoonhoven 1990). These markets favour firms that can achieve strategic flexibility by building a workforce with requisite aggregate skills and abilities to support effective inter-firm and cross-functional collaboration. These firms are best served in their human resource operations by emphasizing PG-Fit because it focuses on creating an appropriate mix of people to provide for both complementary and supplementary workgroup needs. (Werbel and DeMarie 2001)"

As stated above Werbel and Gilliland (1999) have in addition looked at the three fit concepts from a dynamic perspective and identified different dynamic levels among the concepts. person-job-fit (PJ-Fit) was identified as being rather static. Fitting people in jobs means fitting appropriate candidates into defined vacancies. Person-group-fit (PG-Fit) on the other hand can be a very dynamic fit. Although the group members know what kind of person they are looking for, the role of the individual within the group is

an evolving process which is influenced by all members of the group through interaction and existing roles of other individuals may change in the process as well. PO-Fit can be situated in the middle of the dynamic scale, because supplementary fit is often not as precise and static as complementary fit may be, but PO-Fit is not as evolving and flexible as PG-Fit. This model is proposed to align the PE-Fit concepts with strategic management calling for the alignment of strategy and HRM functions, but so far the scientific support for this conceptual approach is lacking.

In the area of PO and PJ-Fit literature a shift in the focus of fit aspects is observable. While personnel-selection used to focus on work-analysis and the determination of specific job requirements in the fields of knowledge and skills, more recent literature has focussed on the fit between the incumbents' personalities and values compared to the organisations culture and norms (Morley 2007). This trend could be based on the environmental changes and increasing market dynamics. Carson and Stewart (1996) even proposed that PJ-Fit has entirely lost its relevance due to the high dynamic in today's work environments. In times when the nature of work constantly changes and when external change places challenges on organisations to quickly adapt and respond to external forces, other selection measures are called for (Werbel and Gilliland 1999).

Werbel and Gilliland (1999) developed a concept to summarize two of the key characteristic differences (complementary vs. supplementary and dynamic vs. static dimension). This is visualized in *Figure 2-7: Multidimensional view of distinct fit types*. They indicate that the three distinct fit concepts can be categorized along the scale of complementarity and supplementarity. While supplementary fit is high when the environment and the individual are similar in characteristics, complementary fit exists when individuals can fill a gap in the environmental part (job, organisation, and group). As such Werbel and Gilliland (1999) state that although there are complementary as well as supplementary elements to all three of the concepts, the focus and relevance of the perspectives differs among the sub-concepts.

In the area of PJ-Fit the complementary fit concept is often dominant, because matching people and jobs is much about filling specific requirements and needed tasks with the according skills and abilities of an individual. In the other fit-concept fields, such as PO and PG-Fit the supplementary fit has been in the focus. In these areas fit is more frequently associated with congruence and similarity between individuals and their environments (Kristof-Brown et al. 2005). While supplementary fit is dominant for PO-

Fit, PG-Fit may need to consider complementary issues as well. While congruence between individuals in a workgroup can improve effective cooperation (Werbel and Gilliland 1999), diversity among the workforce may be needed to balance strength and weaknesses or to add divergent perspectives. Diversity may also be needed in order to meet legal requirements for diversity in areas such as gender, age and ethnicity.



FIGURE 2-7: MULTIDIMENSIONAL VIEW OF DISTINCT FIT TYPES (Werbel and Gilliland 1999, p. 216)

Another important issue in measurement of PE-Fit is the differentiation between actual fit and perceived fit. While actual fit requires objective information about the individual and the environment perceived fit can be determined by the individual itself. Perceived fit it therewith determined through the comparison of the objective measures, while perceived fit is a subjective assessment about the fit itself (Caldwell et al. 2004).

2.5 Work Outcomes

In order to answer the research question properly, an assessment of work outcomes for each employee is required. The literature in the fields of change response (readiness & resistance) and Person-Environment-Fit (PE-Fit) is thus screened for relevant Work Outcomes (WOC). These two fields are core research fields for this study and relate to the employees on an individual level. This literature screening revealed a repeated use of the following three outcome factors:

- 1. organisational commitment
- 2. job satisfaction
- 3. turnover intention

In the area of change response these three outcomes have displayed relevance in many of the quantitative studies of the last decades. As the review by Oreg, Vakola and Armenakis (2011) also indicate, organisational commitment was most frequently considered as an outcome variable (Schweiger and Denisi 1991; Judge et al. 1999; Martin et al. 2005; Fedor, Caldwell and Herold 2006; Oreg 2006; Holt et al. 2007b), closely followed by the outcome of job satisfaction (Schweiger and Denisi 1991; Judge et al. 1999; Mossholder et al. 2000; Wanberg and Banas 2000; Martin et al. 2005; Amiot, Terry, Jimmieson and Callan 2006; Oreg 2006; Rafferty and Simons 2006; Holt et al. 2007b) and turnover intention (Mossholder et al. 2000; Wanberg and Banas 2000; Bordia, Hunt, Paulsen, Tourish and DiFonzo 2004; Martin et al. 2005; Cunningham 2006; Oreg 2006; Rafferty and Simons 2006; Holt et al. 2007b). Factors 1 and 2 have frequently been positively related to change readiness and negatively related to change resistance. and the factor onturnover intention has been related imposingly in several of these publications.

Literature in the other relevant research fields indicates stronger relation between the PE-Fits and the Work Outcomes (WOC) job satisfaction (JS), organisational commitment (OC) and turnover intentions (TI) than to the general concept of job performance. PE-Fit has been positively related to WOC such as job satisfaction and organisational commitment and negatively associated with employee turnover intentions (Hollenbeck 1989; Chatman 1991; Bretz and Judge 1994; Harris and Mossholder 1996; Kristof 1996). Job satisfaction was more strongly related to PJ-Fit than to the other fits while organisational commitment showed the strongest relationship to PO-Fit (followed closely by PJ-Fit) and turnover intention was highest for PJ-Fit (Kristof-Brown et al. 2005).

Findings in the area of PE-Fit are however inconsistent in terms of the influence of the distinct sup-concepts on different work outcomes such as job satisfaction, commitment or turnover intention (Lauver and Kristof-Brown 2001; Choi and Yoo 2005; Kristof-Brown et al. 2005). These inconsistencies, however, only regard the degree of impact of the sub-concepts while the general impact of PE-Fit on outcomes has been supported by the magnitude of research in the field.

Based on the links to both key research fields, these three variables have been included in this study as primary determinant of individual work outcomes (WOC).

These three outcome factors are very popular in studies which require an assessment of the outcome or of performance by the individuals themselves. In studies where no objectives performance measures are available, these three appear most suitable to evaluate the outcome of an employee's work. There is however, disagreement about the inference from these factors to actual job performance. Extensive research has been conducted on the relationship between job satisfaction and job performance from the 1930s onwards. Results, however, vary greatly. Several meta-analyses have shaped the conclusion that there is little or no relationship between the two (Brayfield and Cerockett 1955; Petty, McGee and Cavender 1984; Iaffaldano and Muchinsky 1985). A more recent and far more comprehensive meta-analysis has been conducted by Judge et al. (2001) covering 312 samples (254 studies) with combined N=54417 respondents. They come to the conclusion

"that the mean true correlation between job satisfaction and Job Performance is moderate in magnitude (.30) and distinguishable from zero" (p. 385).

Although this is higher than former studies indicated, the present study does consciously not draw inferences from satisfaction to performance. In order to include a potential performance factor in the study anyhow, a new item covering the topic of exploited potential (EP) is included. The aim is to measure performance in relation to the specific jobs and work conditions of individual employees. In order to these insights the respondents are asked to rate how well they are able to exploit their individual potential in their specific job. This question thus covers the performance of an individual not in absolute terms but in relation to their own potential. External factors such as lack of competencies or capacities due to the job environment can therewith be incorporated.

2.6 Chapter Summary

Chapter 2 covers the review of the relevant literature in the four fields defined as relevant for the proposed research. All important concepts related to the proposed concept of PD-Fit are intensely described and applicable factors and items for the planned study are identified by comparing and analysing the existing measurement approaches. The four constructs of relevance for the development and exploration of the Person-Dynamic-Fit (PD-Fit) concept are Individual Dynamic Preference (IDP), Work

Environment Dynamic (WED), Person-Environment-Fit (PE-Fit) and Work Outcomes (WOC).

The entire research field is summarized visually in the following research framework (*Figure 2-2: Research Framework*). This includes all relevant concepts and factors including potential fields of influence.

The framework summarizes the formerly defined conceptual elements of the proposed study. The factors can further be described as independent, dependent, control and extraneous variables for the proposed Person-Dynamic-Fit (PD-Fit):

Dynamic-Pit (I D-Pit).

- Independent variables: IDP and WED
- Dependent Variables: WOC
- Control Variables: PE-Fit
- Extraneous Variables: Influencing Factors

This newly developed framework is a key contribution to the research field and will be subject to investigation in the present study.

In addition, this chapter gives an introduction into more general fields of research touched by this study.

The next chapter introduces the reader into the underlying research philosophy and the resulting methodological approach. Technical details will be discussed and a clear process structure is presented.





Chapter 3 Research Philosophy, Methodology and Process Factors

3.1 Introduction

It is the aim of this study to develop a Person-Dynamic-Fit (PD-Fit) concept and to analyse its relevance for key Work Outcomes (WOC). For this aim it is essential to determine the underlying research philosophy for this study. For the development of the right research approach the "research onion" developed by Saunders, Lewis and Thornhill (2008) will provide general guidance.



FIGURE 3-1: RESEARCH ONION

from Saunders et al. (2008) in (2009, p. 236)

The outer layer determines the philosophical stance of a researcher. Johnson and Clark (2006) argue that the most important issue about the determination of such a philosophical stance is less to have a philosophically informed research a priori but more about being able to reflect on the different choices and to defend the chosen

position in relation to the potential alternatives (Saunders et al. 2009). By drawing on this, the researcher has rather looked for a philosophy which suited her research aim and questions best than being fully rooted in a specific philosophical stance prior to the topic development.

RESEARCH AIM:

to develop a Person-Dynamic-Fit (PD-Fit) concept and to analyse its relevance for Work Outcomes (WOC). The concept will be based on knowledge about Person-Environment-Fit (PE-Fit) and related Work Outcomes (WOC) but with a focus on the fit between Individual Dynamic Preferences (IDP) and the Work Environment Dynamic (WED).

KEY RESEARCH QUESTION:

Can Person-Dynamic-Fit (PD-Fit), defined as the fit between Individual Dynamic Preference (IDP) and Work Environment Dynamic (WED), be introduced as a distinct sub concept of Person-Environment-Fit (PE-Fit) with influence on Work Outcomes (WOC)?

TABLE 3-1: RESEARCH AIM AND KEY RESEARCH QUESTION

As a result of this tactic as well as the result of an intensive reflection of her personal research understanding the author then rooted her research approach with comfort in the philosophical stance of a CRITICAL REALIST. The arguments for this choice as well as a brief introduction into this underlying research philosophy are explained in detail in the following section. The philosophical position is described along the areas of ontology, epistemology and axiology and the chosen research approach and the data collection techniques are also defined.

3.2 Research Philosophy

3.2.1 Ontological and Epistemological Research Position

This section deals with the question about what there is (ontological question) and what we can know (epistemological question) and about the position which the author of the present thesis has towards these questions.

"Ontology is concerned with nature of reality" (Easterby-Smith, Thorpe and Jackson 2008, p. 60) and has its origin in the Greek words "ontos" (being) and "logos" (theory of knowledge). It thus deals with the "essence of phenomena and the nature of their existence". The focus of Ontology is on the "what is" and on "whether or not some phenomena (...) actually exists independently of our knowing and perceiving it" (Gill and Johnson 2010, p. 200-201).

In this respect Ontology differentiates **PRO** between Objectivism and Subjectivism: while the Objectivists see reality as being independent of social actors, the Subjectivists hold that



FIGURE 3-2: RESEARCH PROCESS - STEP 5

"social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence." (Saunders et al. 2009, p. 110) For the proposed research both ontological views are of relevance, because the research includes objective aspects of the individual's reality, such as organisational structures and processes but focuses on the other hand on an individually perceived look at the key phenomenon of PD-Fit by each individual respondent. It thus recognizes that the fit-phenomenon is not an objective truth but rather the result of the individual's subjective interpretation of his or her own reality. As such, both ontological views are of relevance for the proposed research and also support the researcher's epistemological choice for critical realism, which is more closely explained in the next sections.

The term **Epistemology** derives from the Greek words "episteme" (knowledge / science) and "logos" (knowledge / information / theory) and thus means "knowledge about knowledge" or what is considered true and what is considered false in research (Gill and Johnson 2010, p. 191). Whatever theoretical perspective a researcher takes, it always

"embodies a certain way of understanding what is (Ontology) as well as certain way of understanding what it means to know (Epistemology)" (Crotty 1998, p. 10).

Both issues thus develop together.

Four key epistemological positions can be differentiated: positivism, realism, interpretivism and pragmatism (see table below).

PRESENT STUDY

TABLE 3-2: SUMMARY OF KEY RESEARCH PHILOSOPHIESaccording to Saunders et al. (2009, p. 113)

	POSITIVISM	REALISM	INTERPRETIVISM	PRAGMATISM
ONTOLOGY	External, objective and independent of social actors	Is objective. Exists independently of human thoughts and beliefs or knowledge of their existence (realist), but is interpreted through social conditioning (critical realists)	Socially constructed, subjective, may change, multiple	External, multiple, view chosen to best enable answering of research question
EPISTEMOLOGY	Only observable phenomena can provide credible data, facts. Focus on causality and law like generalisations, reducing phenomena to simplest elements	Observable phenomena provide credible data, facts. Insufficient data means inaccuracies in sensations (direct realism). Alternatively, phenomena create sensations which are open to misinterpretations (critical realism). Focus on explaining within a context or contexts.	Subjective meaning and social phenomena. Focus upon the details of situation, a reality behind these details, subjective meaning motivating actions.	Either or both observable phenomena and subjective meaning can provide acceptable knowledge dependent upon the research question. Focus on practical applied research, integrating different perspectives to help interpret the data.
AXIOLOGY	Research is undertaken in a value-free way; the researcher is independent of the data and maintains an objective stance.	Research is value laden; the researcher is biased by world views, cultural experiences and upbringing. These will impact on the research.	Research is value bound, the research is part of what is being researched, cannot be separated and so will be subjective	Values play a large role in interpreting results, the researcher adopting both objective and subjective points of view.
DATA COLLECTION TECHNIQUES (MOST OFTEN USED)	Highly structured, large samples, measurement, quantitative, but can use qualitative	Methods chosen must fit the subject matter, quantitative and qualitative	Small samples, in- depth investigations, qualitative	Mixed or multiple method designs, quantitative and qualitative

The two extreme epistemological positions are those of the positivists and those of the interpretivists. The author of this study, however, does not root her research approach in

either one of these positions. Instead a critical realist position is adopted as a different epistemological system, which is a particular form of realism and which will thus be illuminated in more detail.

Critical realism has been promoted by several key authors (e.g. (Hesse 1966; Harré 1970; Benton 1981)) but Bhaskar (1975; 1989) is certainly the most influential one, as Collier (1994) puts it. According to Bhaskar one of the key weaknesses of positivism is the fact that laws in that philosophy always relate to closed systems (such as in experiments) and that it is difficult to say which conditions do also relate to open systems (Bhaskar 2008, p. 13-14). This problem specifically accounts for the human sciences, which are – according to Bhaskar (2008) – much less advanced than the natural sciences. He stresses the difficulty of experiments in the human sciences, because there are only open systems with

"a multiplicity of mechanisms (...) operating, conjointly bringing about a series of events, which would not have been brought about by any proper subset of those mechanisms" (Collier 1994, p. 44).

According to promoters of critical realism the external world does exist independent of human beings but is knowable to them. Human beings are however able to change this external world to some extent through their knowledge about this world (Bhaskar 1986).

Critical realists thus:

"make a clear distinction between the independently existing real beings, relations, processes and so on (the intransitive dimension), which are the objects of scientific knowledge, and the socio-culturally produced concepts, knowledge claims, and methods through which we attempt to understand them" (the latter frequently referred to as the transitive dimension (Benton 2004, p. 221)).

Critical realists thus argue that knowledge about the external world is always socially constructed, but that the objects of knowledge actually exists independently of this construction (Danermark, Ekström, Jakobsen and Karlsson 2002; Denzin and Lincoln 2005; Bhaskar 2008).

Johnson and Duberley (2000, p. 154) summarize:

"(...) social and natural reality consists of intransitive entities which exist independently of our human knowledge" and "those entities may not be *observable and different people may apprehend different (i.e. transitive) realities (...) deployed through their human agency (...)".*

A theory-neutral observational language and a correspondence theory of truth are thus rejected. Easterby-Smith et al. (2008, p. 62) further state that

"critical realism makes a conscious compromise between the extreme positions: it recognized social conditions (such as class or wealth) as having real consequences whether or not they are observed and labelled by social scientists; but it also recognizes that concepts are human constructions."

Critical realism thus promotes a stratified view of the external world with three distinct levels of reality (Collier 1994; Bhaskar 2008)

The empirical level: events and phenomena as they are experienced The actual level: events and phenomena as they exist in reality The real level: structures and mechanisms which underlie those events or phenomena

The principal realist philosophy of science is put simply by Bhaskar (2008)

"that perception gives us access to things and experimental activity access to structures that exist independently of us" (Bhaskar 2008, p. 9).

He (1989) further argues that:

"...you are only able to understand what is going on in the social world if you understand the social structures around the phenomena."

This is due to the fact that critical realists recognize that all things that we experience in the real world are only sensations of the things and not the things directly. Knowledge is thus a result of social conditioning and its interpretation always requires an understanding of the people involved ((Dobson 2002) in (Saunders et al. 2009)). A critical realist further emphasizes the relevance of change in the research process and the importance of multi-level analysis (e.g. individual, group and organisational level). In this stance it is thus accepted that different levels of a phenomena interact with each other and that all elements are subject to change (Saunders et al. 2009).

PRESENT STUDY

The critical realist position fits well with the proposed research which recognizes these distinct organisational levels. The concept of Person-Dynamic-Fit (PD-Fit) will be analysed from the perspective of each individual and with reference to the individual's specific experiences from past and present, and the views on the distinct environmental levels, such as the organisation, the groups and the job specific settings.

While the positivist tends to aim for law-like generalisations similar to the natural scientists and the interpretivist emphasizes the role of humans as social actors, the critical realist system takes account of "real" things as well as of the corresponding interpretations of the actors involved (Saunders et al. 2009). Although critical realism can be seen as being rather antipositivist, as a version of realism it does recognize the objectivity associated with positivism.

Bhaskar (2008) acknowledges the role of discourse in influencing how we apprehend reality and by implication in how we think and behave. Therefore a central issue in critical realism is the active role of the human agent, but this is with reference to their interaction with an independent external reality which can constrain or facilitate human action.

"So while our transitive explanations of events change (...), intransitive causal mechanisms located in external reality do not change unless they are themselves dependent upon action and intent (...)" (Johnson and Duberley 2000, p. 153).

Similar to this view of Bhaskar are the views of Margolis (1986) and Trigg (1980)

Margolis (1986, p. 283) argues

"that there is a clear connection between what he calls metaphysical (i.e. ontological) realism – that the structures of the world do not depend upon the cognitive structures of human investigation – and what he calls epistemological realism – the view that such structures are cognitively accessible to those investigators" (Johnson and Duberley 2000, p. 151).

For him much of realism considers both aspects.

Trigg (1980, p. 55-59) argues

"...that what reality is and how we have conceived it are different questions since many things are beyond our conceptual and linguistic capacities".

Subsequently they both see the key realist orientation as a meta-physical commitment to unobservable entities, which means that things we cannot measure or observe can still be real (Johnson and Duberley 2000).

The author takes account of these two parts of reality by collecting data from the respondent's own perceptions and interpretations about the four required constructs as previously defined (IDP, WED, PE-Fit, WOC). And although the author generally aims to "measure" a potential relationship between different factors, she is – as a critical realist – well aware of the limitations of this attempt. While outcomes can well be calculated in closed systems (e.g. experiments), quantification in open systems such as the human sciences is very vague. When the focus in human sciences research is on such mathematical calculation, Bhaskar stresses that often the crucial qualitative distinctions remain unnoticed (Bhaskar 2008). The author will tackle this potential problem with a mixed-method research approach and an emphasis on qualitative analysis procedures. This is done not for validity purposes but to gain broader insights into the topic of the proposed PD-Fit.

3.2.2 Axiology

"Axiology is a branch of philosophy that studies judgements about value" (Saunders et al. 2009, p. 116).

The choice of the philosophical stance, the topic itself as well as the methodological design and focus of the research thus always reflect the researcher's own values as well. The topic of reflexivity is a very important issue for a critical realist and thus explicitly addressed in *Section 6.6* to reflect on the study conducted and the interpretation of the results.

PRESENT STUDY

The focus of this study is on PD-Fit, looking at individuals in very diverse work situations and settings. This shows that the researcher values individual differences to a large extent and the researcher is aware that her own cultural experiences and values will also impact the research. Values thus play a large role in data gathering and interpretation and the researcher allows objective as well as subjective points of view in the study. This axiological view can be strongly linked to the philosophical stance of the critical realist. The author is a German researcher and thus holds the values of this cultural background. Besides this, she has a Master's Degree in International Marketing and several vears of working experience in this field. She thus acknowledges the influence of distinct cultural backgrounds on behaviours of individuals and groups. The motivation for the choice of the research field was also influenced by her own work practice, as she experienced very distinct responses towards organisational changes among different individuals during her time as a marketing professional. Therefore she decided to study the phenomenon of change on a micro-level rather than the more common macro-level (organisational).

The author has also considered these value-laden conditions for her sample collection, as she decided to include a maximum of variation in her sample in order to ensure a large variety of different perceptions and value systems. However, she purposely decided to stay within one cultural setting (Germany) in order to limit the value variations to this cultural set within this sampling framework. The sampling procedure is further explained in *Section 3.4*.

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3.3 Research Methodology

3.3.1 Deduction vs. Induction

Saunders et al.'s (2009) second layer of the research onion (see Figure 3-1: Research Onion

from Saunders et al. (2008)) further entails the decision of whether the researcher uses a deductive (theory-driven) or an inductive (data-driven) approach – a decision which is of great importance for the research design. In the case of deduction the researcher usually develops a theory and tests this theory by developing hypotheses and a corresponding research design. Induction in turn is more about building theory, where the researcher collects data and develops theory out of the data analysis. Apart from this differentiation Saunders et al. (2009) have summarized the main differences between induction and deduction as follows:

TABLE 3-3:	DEDUCTION	VS. INDUCTIO	N
according to	Saunders et al.	(2009, p. 127)	

Deduction emphasis			Induction emphasis		
•	Scientific principles	•	Gaining an understanding of the		
•	Moving from theory to data		meanings humans attach to events		
•	The need to explain causal relationships	•	A close understanding of the research		
	between variables		context		
•	The collection of quantitative data	•	The collection of qualitative data		
•	The application of controls to ensure	•	A more flexible structure to permit		
	validity of data		changes of research emphasis as the		
•	The operationalisation of concepts to		research progresses		
	ensure clarity of definition	•	A realisation that the researcher is part		
•	A highly structured approach		of the research process		
•	Researcher independence of what is	•	Less concern with the need to		
	being researched		generalize		
•	The necessity to select samples of				
	sufficient size in order to generalize				
	conclusions				

This frequently postulated "either/or approach" is, however, sometimes misleading. Blaikie (1993), for example, argues that the two approaches are often interlocked, recognizing the inter-relationship between theory-building and empirical testing.

In this research study the author will to some extent take a deductive approach, since many of the concepts used derived from literature and are thus based on existing theory. The proposed concept of PD-Fit can thus be related to a number of existing concepts underpinning a deductive approach of the research. The overall aim to answer the research question (of whether the proposed fit concept can be introduced as a distinct sub concept of PE-Fit with influence on WOC) also appears to require a deductive approach. However, the actual new fit concept which is at the centre of the research study has never been introduced in existing research and the author wants to gather data which will support the new concept. With reference to this, the analysis rather requires inductive approaches, because the author wants to gain general understanding of the potential new fit-concept and of the role of the research context. In summary this means that the study uses a deductive approach for the determination of the underlying constructs but a rather inductive inquiry for further exploration and to learn more about the proposed PD-Fit construct. The original idea was to use acknowledged approaches for the factor assessment to be able to expand the research to a larger sample if the inductive learning on PD-Fit support such further investigation. As a critical realist the emphasis of analysis is on the qualitative findings, acknowledging contextual issues of the respondents in order to gain understanding of the events and mechanisms reported by the participants. The inclusion of acknowledged quantitative elements will however help to link the study to previously conducted research and to enlarge applicability.

PRESENT STUDY

3.3.2 Research Design: the three inner layers of the Research Onion

According to Saunders, Lewis et al. (2009) the research design is the general plan of how the research question(s) shall be answered and how these can be transferred into adequate methodological procedures and strategies. It contains clear objectives and requires a description of the data collection sources.

As a precursor of the design choice, it is important to clarify the purpose of the proposed research, which can be exploratory, descriptive or explanatory.



FIGURE 3-3: RESEARCH PROCESS - STEP 6

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In this respect, the proposed research has no entirely clear position. It entails explanatory as well as descriptive purposes. An explanatory study aims to detect causal relationships between variables with an emphasis on studying a situation or a problem in order to explain these relationships. Explanatory studies frequently use statistical tests, such as correlations to analyse the relationships and/or collect qualitative data to explain the reasons for specific relationships (Saunders et al. 2009). In the case of this research several acknowledged concepts were identified in literature and integrated in the study and one of the key aims is to understand the relationships among them (IDP, WED, PE-Fit, WOC).

However, a core focus of the study is also to determine the applicability of the different concepts and to what extent they can be combined together to determine and evaluate the newly proposed Person-Dynamic-Fit (PD-Fit) concept. Although a thorough literature review is conducted it remains uncertain whether the chosen items and factors are appropriate in this composition. Therefore the author has included qualitative aspects in the study to better understand the statements and conclusions of the individuals and to understand the surrounding conditions and mechanisms. The study aims to understand each respondent as an individual and to understand the specific environmental conditions of him or her. In addition to the explanatory purpose to understand the relationships between the acknowledged constructs, this area has a rather descriptive purpose. If this study reveals the applicability of the sub-concepts and if the initial results do not contradict the proposed idea of the new fit concept, further research will be needed to support these initial findings – potentially among a larger sample group.

This combination of explanatory and descriptive purposes justifies a mixedmethod strategy, because quantitative as well as qualitative data need to be collected in order to gain substantial knowledge in the related fields. This requirement, and resulting methodological approach, is further explained in the next section.

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3.3.3 Research Approach: using Mixed-Methods

Research differentiates between mono-method approaches and multiple-method approaches. While mono-methods use only one single method to approach the research question and to analyse the data, multiple-method approaches use more than one approach to collect and analyse the data (Saunders et al. 2009).

According to Tashakkori and Teddlie (1998) multiple methods are useful:

"...if they provide better opportunities to answer research questions and where they allow to better evaluate the extent to which research findings can be trusted and inferences made from them" (in Bryman 2006; Saunders et al. 2009, p. 153).

In the area of multiple-method approaches Saunders et al. (2009) further differentiate between mixed-method and mixed-model approaches: they refer to mixed-method approaches when quantitative as well as qualitative data collection and analysis techniques are used. These can be used at the same time (parallel) or one after the other (sequential) but not in combination. When they are combined, this is referred to as mixed-model research, which

"means that you may take quantitative data and qualitise it, that is, convert it into narrative that can be analysed qualitatively. Alternatively, you may quantitise your qualitative data, converting it into to numerical codes so that it can be analysed statistically" (Saunders et al. 2009, p. 153). In the present research, quantitative and qualitative data collection techniques are used within the same semi-structured interviews. This combination will suit best to answer the research questions and to understand the results. The respondents are, for example, asked to determine their job satisfaction on a Likert scale first, followed by an open question to give reason for their choice. In addition several research fields are covered by quantitatively oriented and closed questions as well as by qualitatively oriented open questions. This tactic can thus be referred to as mixed-model approach. This will also be apparent in the analysis process of the data. The qualitative results will be evaluated quantitatively (counting of codes) and the quantitative findings will be interpreted also with reference to the qualitative results. A mixed method approach to research is not unusual among critical realist researchers (Onwuegbuzie, Johnson and Collins 2009).

By combining qualitative and quantitative data the author can serve the two distinct research purposes as stated above.

Further reasons for the adopted mixed-method or mixed-model approach can be adopted from Bryman (2006; in Saunders et al. 2009, p. 154): A main advantage of this procedure is that of triangularity, which describes the process of using one set of data to test the validity of another set of data derived from another research method, allowing the corroboration of research findings within a study. Another reason for mixed-method designs is Facilitation, stating that the use of one data collection method can aid another data collection method and can lead to synergies. A third supportive argument is that of complementarity, because the use of more than one research strategy allows different aspects to come together. According to Bryman (2006) the use of qualitative data can also help explain detected relationships between quantitative variables and can reveal the micro aspects of a phenomenon rather than just the macro aspects which are revealed by the quantitative analysis.

The mixed-method approach is not universally accepted. The opposing researchers argue that quantitative and qualitative research is incompatible, especially in philosophical terms. However, many researchers have supported the idea and highlighted the advantages of this approach throughout the last 40 years.

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The supporters of the mixed method approach highlight the advantages, such as the provision of "*partial images of reality*" which may be put together to describe the full picture (Bryman 2006). Some researchers even go as far as constituting the mixed-method approach as a distinctive third approach alongside the quantitative and qualitative research (Creswell, Plano Clark, Gutmann and Hanson 2003; Johnson, Onwuegbuzie and Turner 2007) and they further argue that this approach will overcome the limits attached to mono-method approaches.

The issue of triangularity, however, is strongly and diversely discussed in the scientific world. Sale, Lohfeld and Brazil (2002) as some of the critics for example argue that one set of data cannot be used to check the validity of another set of data. According to them these do not study the same phenomena, if one research method is quantitative and one is qualitative. However, the supporters argue that this is legitimate if one is "complementary" to the other, "for example, when a qualitative study might be undertaken to inform the development of questionnaire measures" (Bryman 2006, Introduction). The supporters argue that the results of different measures can be compared to see to what extent they are compatible. Similar results can confirm each other but there should be a discriminant validation alongside this comparison. Using more than one data collection technique can improve the confidence, particularly in scientific findings, of social phenomena and according to Webb, Campbell, Schwartz and Sechrest et al. (1966):

"Once a proposition has been confirmed by two or more independent measurement processes, the uncertainty of its interpretation is greatly reduced" (Bryman 2006, p. XXXV).

One reason for the disagreements in this area is the great misuse of the term of triangularity itself since it became popular in the 1970s. It has frequently been used to provide corroborating evidence for conclusions as a technique of validation. It should, however, not be seen as assisting validation, "*as each source must be understood on its own terms*", but rather as a way to add depth or breadth to a study (Bazeley 2002, p. 4).

Or as Denzin (1989, p. 246) puts it:

"The goal of multiple triangulation is a fully grounded interpretive research approach. Objective reality will never be captured. In-depth understanding, not validity, is sought in any interpretive study."

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In summary it is important to note that the author of this study has used the mixed-method approach not in order to test one set of findings against another but rather to increase the insights into a phenomena from distinct perspectives in order to gain an increased understanding of the proposed PD-Fit concept without the limitations of a mono-method approach. The conclusions drawn from the comparison will thus be taken with the adequate caution.

This approach is supported by a recent meta-analysis by Johnson et al. (2007, p. 123) in the field of mixed-method analysis. They define the term "mixed-method research" as follows:

"Mixed method research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purpose of breadth and depth of understanding and corroboration"

They further came to the conclusion, that the term mixed-method research is sometimes misleading and that the term "mixed research" would perhaps fit the issue much better, because it would less imply the limitations of mixing methods. However, the term "mixed-methods" research has become the most popular term and is widely used to describe this movement. A broad interpretation of the term "methods" is however helpful because it:

"...allows inclusion of issues and strategies surrounding methods of data collection (e.g., questionnaires, interviews, observations), methods of research (e.g., experiments, ethnography), and related philosophical issues (e.g., ontology, epistemology, axiology)." (Johnson et al. 2007, p. 118)

It is thus possible to refer to an approach as being mixed-method, even if the mixing only occurs on other stages of the research process (e.g. data analysis), which well fits the present study. As such the approach of the present study is referred to as a mixed method approach and can more specifically be described as a concurrent mixed method design involving a form of concurrent triangulation. The latter is defined as follows:

"The three concurrent mixed methods designs identified by Creswell et al. (2003) are the following: (a) concurrent triangulation, (b) concurrent nested, and (c) concurrent transformative designs. In each of these designs, the quantitative and qualitative data are collected during the same stage, although priority may be given to one form of data over the other. The purpose of concurrent triangulation designs is to use both qualitative and quantitative data to more accurately define relationships among variables of interest. In concurrent nested designs, both qualitative and quantitative data are collected during the same stage, although one form of data is given more weight over the other."(Castro, Kellison, Boyd and Kopac 2010, p. 3)

Please refer to Creswell et al. (2003) and Tashakkori and Teddlie (2003) for further references.

3.3.4 Research Methods used in Present Study

In the case of a purely deductive orientation with an emphasis on the generalizability of the results, the study would need to focus on issues such as sample size, data collection procedures and analysis, and as stated earlier, if the author was fully confident about the composition of the different sub-concepts, this purely deductive orientation would well have suited this research. However, due to the need to first determine the applicability of the proposed concept composition and to understand the context and reasoning of the respondents, the study needs to include a variety of qualitative elements with a rather descriptive emphasis in addition to the quantitative items, in order to further explore potential relationships.

In a first phase, however, it is of primary relevance to assess the distinct attributes and the setup of these elements. Therefore the author is combining the elements of an analytic and a descriptive procedure, always being aware of the weakness, that the sample size and selection will limit the preliminary results of the quantitative (deductive) parts to simple assumptions and to a point of origin for further results.

The study will thus focus on the requirements for a descriptive study and only consider the requirements for a valid quantitative analysis to a limited extent. For the data collection the study relies on a mixture of analytical and descriptive elements. The challenges for the sampling strategy and the proceeding process steps are described in more detail in the next sections. The study is further conducted as a cross-sectional study and not as longitudinal. The reason is that over time the judgements and perceptions of individuals are subject to change (view of the critical realist). A longitudinal study or a diary study would also be interesting, as it might allow detecting changes in the perception of one's own PD-Fit and might capture some aspects that the cross-sectional approach is unable to offer. However, it would cause an enormous increase in complexity of the data and would go beyond the focus of this investigation. For this study it is the key aim to answer the research question whether the proposed fit-concepts actually exists. This will be easier to answer in a snapshot one-time perspective. Therefore the author also decided to collect all data (quantitative as well as qualitative) within the same interview session simultaneously.

3.4 Data Collection Techniques and Procedures

3.4.1 Sampling Strategy

The determination of the research sample is very challenging for this research. As Gill and Johnson (2010) put it, all research is concerned:

"...with identifying the "research population" which will provide all the information necessary for answering the original research question." (p. 127)

However, in many cases it is not possible or reasonable to include the entire population into the study. Sampling and a thorough selection of study participants is thus critical. In this study the research population would be the working population in Germany, but limited to white collar workers aged between 25 and 55. The age limitation is due to the fact that the participants should be able to look back on some experience with organisational change (age starting with 25) but not be too close to retirement, which could



FIGURE 3-4: RESEARCH PROCESS - STEP 7

make them be influenced by this fact in terms of their openness for change. The limitation to white collar workers has two main reasons: one is that an inclusion of blue collar workers would increase the diversity of job environments to an unclear mass and make the sample too heterogeneous and on the other hand it is expected that white collar workers are more familiar with the used terms and organisational descriptions due to their more homogeneous education. The remaining population is still very broad and not generally accessible to the researcher. The use of probability sampling methods would thus not work, because the researcher does not have the (potential) access to each element of the population. The core characteristic of probability sampling is that

"...the chance of each case being selected from the population is known and is usually equal for all cases." (Saunders et al. 2009, p. 213)

The fact that the total population is not fully accessible also limits the choice among the non-probability sampling methods:

"For non-probability samples the probability of each case being selected from the total population is not known" (Saunders et al. 2009, p. 213)

and it is thus more difficult to draw generalisations from these samples.

For a purely deductive and explanatory approach the quota sampling (a non-probability sampling method) would best suit this study to test the relationships between the different defined constructs and to determine the relevance of the proposed fit-concept. This would allow for some generalisations for the whole population. Potential quota variables could be gender, age, hierarchy level, seniority or education. Each of these potential variables has shown to be relevant for one or more of the integrated constructs in literature. However, this also indicates the challenge to define which quota variables would be the right choice for the newly proposed PD-Fit concept, because so far no research data is available about this concept. Due to these limitations the use of the quota sampling method is not possible at this stage, although the Federal Bureau of Statistics (Statistisches Bundesamt) in Germany provides general data about many of the potential variables and their distribution among the working population in Germany. An identification of relevant quota variables could, however, be possible as a result of this study and could be valuable for subsequent studies within this research field.

Due to the large total population the use of more than one or two quota variables would, however, lead to a disproportionate increase of required respondents, because:

"...decisions on sample size are governed by the need to have sufficient responses in each quota to enable subsequent statistical analyses" (Saunders et al. 2009, p. 235).

This can easily lead to sample sizes of several hundreds or thousands. Due to the complexity of the topic and the need for the coverage of a broad field of questions, it would be "impossible" to conduct the present study among such a large sample.

The author decided also to have an inductive and thus qualitative focus within this study as well. For such a qualitative approach the author needs to care less about representativeness of the sample and can focus on lower sample sizes. This is due to the fact that the focus is on depth and on the understanding of the overall phenomenon as well as of each element or case or respondent individually. However, the study still aims to draw some generalisations from the results and aims to understand the relevant issues which might represent the full working population. Therefore a structured sampling procedure is no less important. A purely convenient sampling, which "... involved haphazardly those cases that are easiest to obtain for the sample" (Saunders et al. 2009, p. 241) is thus not chosen, although this method is widely used and though the detection of respondents willing to participate in such an extensive and very intimate study is challenging. Convenient sampling is often too much biased by the interviewer and influenced by factors which cannot be controlled. Due to these different requirements as well as limitations the non-probability sampling strategy chosen by the author of this study is thus the Purposive Sampling Method. This methods describes sampling for the specific purpose of the research and participants are selected upon specific criteria, which are defined by the researcher (Holloway and Wheeler 2009). This form can ensure a wide cross-section of people within the sample (Denscombe 2010).

Although these samples are not statistically representative of the overall population, this method allows for conscious and sensible choices of cases which are particularly informative for the research. One common purposive sampling method is maximum variation sampling

, which

• "enables you to collect data to describe and explain the key themes that can be observed".
- A small sample can thus "contain cases that are completely different".
- The strength of this method is that "any patterns that do emerge are likely to be of particular interest and value and represent key themes" and,
- this approach "allows you to document uniqueness".
 (Saunders et al. 2009, p. 239)

Maximum variation sampling has been described by Patton (1990)as one of 15 different strategies for purposefully selecting information-rich cases, which fit the study. In order to ensure this maximum variation the different characteristics to be included in the study are defined prior to the sampling and data collection. Since none of the construct characteristics such as high or low environmental dynamic or dynamic preference is used for sampling, because these are not known, the focus is on socio-demographic characteristics to ensure variation. This can be justified by the multiplicity of studies which showed the relevance of these issues for some of the integrated constructs. The chosen characteristics require to:

- include male and female respondents
- include respondents aged between 25 and 55 (with coverage of different age groups within the range)
- include respondents working for private and public organisations
- include respondents from diverse industries
- include respondents from different company sizes (between 50 and 10,000 employees)
- include respondents from different occupational backgrounds
- include respondents from different educational backgrounds
- include respondents working in different hierarchy levels
- include respondents with different seniority and work experience levels

In contrast to a quota sampling method, where each variable would need to be represented in combination with each other variable by one of the elements, the purposive sampling allows the interviewer to select some cases which suit the study and with distinct combinations. The study aims for a maximum variation in order to detect potential impacts of these characteristics; however, there are no fixed quotas to be met within the sample, which allows for a much smaller sample than with a quota sampling technique.

The author conducted three test interviews and 25 main interviews. The distribution of the distinct characteristics is displayed in the descriptive analysis section in *Section 4.2*.

3.4.2 Questionnaire Format

The questionnaire format determines the structure and form of the overall questionnaire. Most important about the format is to make it intelligible to the respondents. Gill and Johnson (2010, p. 141) have emphasized the following issues to be considered for the design decisions:

- Questionnaire focus (extend to which questions cover the various aspects of the research problem adequately)
- Question phraseology (are questions intelligible to respondents)
- Form of response (form must permit subsequent analysis, e.g. suitable for statistical analysis and reliable and valid scales and codes)
- Question sequencing and general presentation (questions should have natural and logical order, quality of overall presentation is especially important for high completion rate for written questionnaires e.g. via e-mail)

This study followed the above steps to create an accurate format for the questionnaire. The following section covers the item development as well as phraseology of the questionnaire.

The form of data collection was to be done by interviews. Generally three forms of interviews are available: structured, semi-structured and in-depth interviews. Semi-structured and in-depth (unstructured) interviews are designed as non-standardized. In these cases the interviewer only has a list of themes or topics he or she intends to cover. Structured interviews are in contrast very "standardized" and each question is fixed (Saunders et al. 2009). As stated earlier, in this study the researcher will use the structured interview format for a large part of the interview in those parts of the study where the quantitative data is gathered. However, even for the qualitative parts the author has defined a set of questions to follow (semi-structured interview). For these parts, however, the interviewer might decide to switch the order or to ask side questions in between in order to gain further understanding of the respondents' answers. With this flexibility in the qualitative parts of the interview the research can place higher emphasis on understanding the relationships between the different variables and the context of each individual respondent which can help to identify general patterns and to

gather information on individual concept perceptions. The structured quantitative part on the other hand intends to identify the relationships in a more objective sense.

3.4.3 Item Development

As stated earlier, the research framework contains the distinct constructs which shall be evaluated in this study (please refer to *Figure 2-2: Research Framework*). This is a very quantitative approach, but also served as a guide to develop the more qualitative parts of the interview. The constructs can be divided into four main areas:

AREA A:	Individual Dynamic Preference (IDP)
AREA B:	Work Environment Dynamic (WED)
AREA C:	Work Outcomes (WOC)
AREA D:	Influencing Factors

In most areas the author drew existing items from literature or slightly adapted existing items in order to make them fit the proposed research. Due to the fact that the original items were all available in English, the author had to translate these items within the questionnaire development process into German as the study is conducted in Germany only. *Appendix D* gives an overview over the development of the source questionnaire (English) and its derivation. In addition the target questionnaire (German) is fully attached in *Appendix F*. In order to pay attention to the careful translation of the items, the author, who is well familiar with both languages, conducted a conscientious translation and gave this translation as well as the source questionnaire to two other independent people to check the wording and meaning. The feedback then resulted in a good wording of the target questionnaire. In addition one of the author's supervisors is also very familiar with both languages and verified the translation as well.

3.4.3.1 AREA A: Individual Dynamic Preference (IDP)

According to Holt et al. (2007a) change readiness – a concept which can be interpreted as closely related to Individual Dynamic Preference (IDP) – is determined by four fields of influence. These are the change context, the individual characteristics, the change content and the change process (please refer to *Section 2.2.3* for more detailed information). Since the author aims to determine a PD-Fit which is independent of the

specific changes taking place, the author has not included change content specific issues. In terms of the change process - meaning how an organisation actually accomplishes a specific change process, in terms of communication, participation or other factors – these are also frequently change specific and were thus predominantly excluded. There are, however, a few items in Area B, which involve some process competences of the organisations (e.g. Communication within the Organisation). In addition the interviewer (author) aims to get an impression of the process conditions within the organisation through an open question (Item 6.18). Regarding the change context, the author decided to integrate questions regarding the working environment, but these were part of the analysis for the Work Environment Dynamic (WED) factor. The main influencing factors for this specific study and for Individual Dynamic Preference (IDP) are thus the individual characteristics. The meta-analysis of influencing factors introduced in Appendix B gives an overview over potential factors to be included here. For the quantitative analysis the author fully relies on these individual characteristic for the change dynamic preference (IDP) determination. The reason for this is, that there are on the one hand quantitative measurement approaches available and on the other hand because the selected items already reflect process and context factors. This is due to the fact that the respondents do not answer the questions regarding their individual characteristics in a "vacuum" but within their specific environment and with reference to their individual experience with change. The author thus argues that even with a reliance on the individual characteristics in this study she does not neglect the influence of the other three factors defined by Holt et al. (2007a).

24 items in Area A were formulated as closed questions with a 5-point Likert scale ranging from:

1= I disagree 2= I rather disagree 3= I am undecided 4= I rather agree 5= I agree

The full item derivation and phraseology in English is displayed in Table 6-5: IDP items (*quantitative*) in *Appendix D*.

In addition the author included 12 open-ended questions covering the IDP-topic as well as the topic of experience with change and change in private life for the qualitative and descriptive purposes of this study. The developed items are fully displayed in *Table 6-6: IDP items (qualitative) in Appendix D.*

In addition two of the qualitative items on Work Environment Dynamic (WED) included issues of emotions and change evaluations which give further insights into the Individual Dynamic Preference (IDP) of the respondents. Please refer to *Table 6-11: Qualitative work environment in Appendix D* for the full items.

3.4.3.2 Area B: Work Environment Dynamic (WED)

Area B consists of five parts:

Part 1: Dynamic of Job Environment

Part 2: Dynamic of Organisational Environment

Part 3: Real/Ideal World choicePart 4: Dynamic Scales (complexity, predictability, impact and speed of changes for job, group, organisation and external environment level)

Part 5: Qualitative WED-assessment

The results of Part 1 to Part 5 are analysed separately and then drawn together for the data interpretation in *Chapter 5*.

Area B, Part 1: Dynamic of Job Environment

Area B, Part 1 consists of six closed questions regarding the dynamic of the specific job environment of the respondent. These items are drawn from the turbulence scale of Ansoff and McDonnell and Ansoff et al. (1993) and adapted by the author for this specific research study. The scale includes five different options specific to each question and is interpreted as ordinal.

The selected items are presented in *Table 6-7: WED Items on job dynamic in Appendix D*.

Area B, Part 2: Dynamic of Organisational Environment

Area B, Part 2 consists of 14 closed questions regarding the dynamic of the organisational environment of the respondent. These items are drawn from the turbulence scale of Ansoff and McDonnell (1990) and Ansoff et al. (1993) and adapted by the author for this specific research study. While they focused merely on

environmental factors outside the organisation they also determined the internal turbulence level with the help of several factors. The author of the present study drew these items from the latter section. It includes five distinct answering options specific to each question and these are interpreted as ordinal. Please refer to *Table 6-9: WED-items on organisational dynamic in Appendix D*.

Area B, Part 3: Real/ideal work environment choice

This inductive part is mainly a tool to discuss the different aspects of organisational dynamic openly with the respondent. But the results can be analysed quantitatively as well as qualitatively. In this part the author has described five distinct work environments with parameters described by Ansoff and McDonnell (1990) and Ansoff et al. (1993) which are already used in the deductive Part 2 above. These work environments differ from each other in terms of the underlying dynamic. The respondents are asked to read the five descriptions of environments carefully and then decide in which world they would like to work most. They are further asked to explain their decision and emphasize the characteristics of the environment which influenced their decision most. After the discussion of their ideal work environment the respondents are asked to match their current work environment into these descriptions as closely as possible.

This latter question (item 6.3) can thus further be seen as a control question to check the applicability of Part 2 because the descriptions of the five work environments correspond to the scales and questions in Part 2 (please refer to *Section 4.4.6, Table 4-12: Comparison of main quantitative PD-Fit assessment and Part 3 PD-Fit assessment* for the results of this consistency check between the deductive and the inductive assessment approach). The results also allow for a very simplified assessment of the fit into the current work environment in terms of their individually defined ideal choice. The full text of this part is enclosed in English language in *Table 6-8: WED: Real / ideal work environment choice items in Appendix D.*

AREA B, Part 4: Dynamic Scales

This part is placed at the very end of the questionnaire and attempts to measure some additional characteristics of environmental dynamic. These characteristics were again identified by Ansoff and McDonnell (1990) as applicable topics of the environment and are

- complexity of changes
- predictability of changes
- extent of changes
- speed of changes

The author is aware of the complexity of the questions and of the potential difficulty to answer these questions without a substantial education in change or business management. The pre-study phase with three test respondents showed different reactions towards this part (ranging from "*no problems to answer questions at all*" to "*evaluating the questions as rather difficult to answer*"). The author still decided to include the questions as planned and evaluate the results with the appropriate care. As it turned out, potential comprehension difficulties could be tackled by further explanations or examples given by the interviewer. Limitations in terms of the findings however remain and are described in *Section 6.4*.

Part 4 consists of four sub-parts, which each covers one dynamic topic and a scale which allows for a classification of the four levels of:

- individual
- group
- organisation
- external environment

The author uses a 7-point Likert scale ranging from very low to very high.

The respondents are thus asked to answer four questions per environmental characteristic (16 items in total). The full items are presented in *Table 6-10: Dynamic scale items - overview in Appendix D*.

Area B, Part 5: qualitative WED assessment

For the qualitative Work Environment Dynamic (WED) assessment the respondents were asked to describe their experiences with change in the past. They were asked to differentiate between small every-day changes and a major change experience of the last few years. Please refer to *Table 6-11: Qualitative work environment* for the full text of the items.

The aim is to analyse the reported experiences with regard to acknowledged change classifications as well as to compare the dynamic within the respondents' jobs to those of the other participants in the study.

Unlike the rest of the study the assessment in this area is actually change specific. It is however not done in order to measure the influence of a specific change event but the gain an understanding of the kind and intensity of changes that the respondent deals with on an every-day basis. The question regarding a major change event in the past can give further insights into the individual's understanding of what a major change event is like to them. The findings are only used within the qualitative analysis section.

3.4.3.3 AREA C: Work Outcomes (WOC)

In the area of Work Outcomes (WOC) the author decided to include the factors job satisfaction (JS), organisational commitment (OC), turnover intention (TI) and exploited potential (EP) into the analysis. For this section a 7-point Likert scale is used.

Please refer to Table 6-12: WOC items overview in Appendix D for the full items.

The factor job satisfaction (JS) consists of only one item, while organisational commitment (OC) needs to be determined based on four distinct items and the factor turnover intention (TI) is based on two items. Each item regarding these three factors is followed by an open-ended question allowing for an explanatory statement or specifications and for a deeper analysis of the work outcomes.

The newly developed factor regarding exploited potential (EP) is based on a single item. An open-ended question regarding a specific reasoning is added in order to generate further insights into this outcome factor. The latter is done in order to understand the scope of the item and identify potential influencing areas on outcomes in general. The inductive approach shall increase overall understanding of the work context and conditions.

3.4.3.4 AREA D: Influencing Factors / Control Variables

A wide range of questions covering potential influencing factors is further included in the study due to the high complexity of the research field.

• Part 1: demographics

- Part 2: work conditions
- Part 3: PE-Fit

Area D, Part 1: Demographics

As a main control variable or influencing factor, demographics are added to the study concept (please refer to Table 6-13: Demographic items - overview in Appendix D for full items). Considering demographic issues in this study is highly recommended because they can serve as a control variable and allow for more detailed analyses of the research results. The frame for these demographics is set by the sampling criteria described in Section 3.4.1. In most research studies the analysed concepts have also been tested for their relationship to respondents' demographics. Although the impact of demographics has not shown consistency in the field of individual change readiness and PE-Fit research, it is still important to integrate them into the study in order to contribute to the research in this field and to control the impact of demographical variables on the tested WOC. Demographics to be included in the study are gender, agerange, education, marital status, children and length of time with the organisation. These were common variables used in PE-Fit research as well as in change response studies. For some of these variables research shows interesting relations with these constructs. As stated earlier, most of these have not been supported by large sample sizes, but it is worth integrating these factors in the planned study.

Area D, Part 2: Work Conditions

In the area of work conditions six items regarding distinct characteristics describing the specific job of the respondents are included and a 7-point Likert scale is used. The items were adapted from items developed by Cammann, Fichman, Jenkins and Klesh (1983) and are presented in *Table* 6-14: Work conditions item overview *in Appendix D*. They cover topics such as decision making power, influence or work load.

Area D, Part 3: Person-Environment-Fit (PE-Fit)

Other PE-Fit factors are very important for this study in order to answer the research question, whether PD-Fit can be related to other PE-Fit concepts. It is thus essential to be aware of the other fits as well as their potential influence on WOC.

In line with the current research in the field of PE-Fit, the proposed study measures the distinct sup-concepts simultaneously in order to show a representative picture of the fit

status. In congruence with several other researchers the present study focuses on the three sub-concepts of PJ-Fit, PO-Fit and PG-Fit (Kristof-Brown 2000; Kristof-Brown et al. 2005). Due to the results of a pre-test study person-supervisor-fit (PS-Fit) was later added to the study as well.

In line with Caldwell et al. (2004) as well as the meta-analysis by Kristof-Brown et al. (2005) perceived fit measures are used in the study because they have shown stronger relation to individual's behaviour and job outcomes than the objective congruence did. Direct questions regarding the distinct fits were thus included in the interview outline. This is also in line with the critical realists philosophy which highly regards perceptions of participants. This approach is further chosen, because an inclusion of more objective or third-party assessments would have strongly increased the complexity and exceeded the suitable investment to determine these variables. The questions represent the different fit constructs according to current research.

PE-Fit Concepts	Study Focus	
person-job-fit	Focus on perceived PJ-Fit.	
	One question focusing on KSA-Fit.	
	One question focusing on demand-fit.	
person-group-fit	Focus on perceived fit to values and goals.	
person-organisation-fit	Focus on perceived fit to values and goals.	
person-supervisor-fit	Focus on perceived fit to values and goals.	

 TABLE 3-4: PE-FIT CONCEPTS OVERVIEW

Please refer to Table 6-15: PE-Fit item overview in Appendix D for the full items.

In addition the respondents were asked to justify their scale response. The results of these open questions can give insights into the individual interpretation of each fit, e.g. in terms of supplementarity or complementarity issues in order to take account of individual differences and contextual issues as Jansen and Kristof-Brown (2006) mentioned as influential factors.

It was decided to include four other PE-Fits into this study and to assess them on a self-reported and perceived individual level. A 7-point Likert scale ranging from 1 = very weak to 7 = very strong is used to evaluate the magnitude of these fits.

The full items which are used for the assessment are presented in *Table 6-15: PE-Fit item overview in Appendix D*.

As an additional and concluding question for this sub-part the author added an openended question to determine the importance of the different fits for the specific respondent.

3.4.3.5 Area E: Interview Critics

The semi-structured interview concludes with questions regarding interview critics and study results. The items are listed in *Table 6-16: Items on interview critics in Appendix D* and cover such issues as understanding, clarity and unambiguity and completeness. These shall serve as a direct feedback within the data collection phase to make potential amendments during this process in case of major difficulties (did not take place) and to gain additional information for future research.

3.4.4 Sequencing of Questionnaire

The former sections cover the general areas of the study. The sequencing of these questions and items differ from this order, however. In the first developed version of the questionnaire outline the author aimed to cover the research fields from narrow to broad, intending to start with those questions more closely related to the individual and his or her experiences and closing with the more general parts on the organisational level. A conducted pilot study with three respondents however revealed that the individually related questions caused some obstacles. The topic of IDP for example, which is also the most sensitive and intimate area made the respondents feel somehow overwhelmed. The order was thus changed in some parts prior to the main study: after being asked for general demographic information, the respondents then started off with rather general questions regarding their PE-Fits and their WOCs before they moved to the topics of IDP and WED.

3.4.5 Opening the Interviews

In order to generate a comfortable and open interview atmosphere, the author conducted several steps in order to make the participants feel comfortable and ready for the interview situation. When asked for their participation in the study they were already emailed the entire interview outline including some additional background information

regarding the study purpose, the research team as well as the terms of their participation Appendix E. This intended to decrease the insecurity in that they might feel unsure of what to expect from the interview. When opening the actual interview the interviewer went through this detailed information again and particularly stressed some of the main issues. These were of course the reconfirmation of confidentiality as well as a general introduction of what was about to follow. The experience of the interviews showed that most respondents had not looked at the provided information in detail (author had explicitly mentioned prior to the meeting that no preparation was necessary by the respondents). They were thus interested in hearing about the research topic and questionnaire structure in the opening phase of the interview. The interviewer also asked the respondents for their permission to tape-record the entire interview. It was again stressed that the information was kept confidential and that, in cases where the respondent mentioned names of people or companies, these would not be included in the interview transcripts or in any quotes within the thesis. It was further emphasized that the participants did not need to answer to all questions if they did not wish to and that they could ask questions whenever necessary. It was further stressed that although a range of answering options (e.g. Likert scales) was offered in many areas of the questionnaire they were welcome, and even encouraged, to comment on questions and answers openly whenever they felt like it.

3.4.6 Audio-recording

All interviews in the present study were audio-recorded in order to be able to make a full record of the interviews. This procedure entails a range of advantages as well as disadvantages (please refer to Saunders et al. 2009, p. 341 for detailed explanations). The main arguments for the author were that you have a record of the exact words spoken in the interview as well as the option to re-listen to the interview in the analysis phase. It further allows for direct quotes to be used and facilitates the process of interviewing because the interviewer can well concentrate on the answers and the reactions of the respondents without being distracted by too extensive note-taking. The interviewer could thus focus on making only notes which covered non-spoken behaviours or aspects or note topics for deeper questioning for the descriptive information. One of the frequently mentioned disadvantages is the fact that respondents often feel uncomfortable when being recorded, particularly when talking about a sensitive topic. In this study the experience was however, that the preceding

confirmations of confidentiality as well as a comfortable interview atmosphere made the respondents quickly forget about the tape-recorder. In addition the interviewer had offered all respondents in advance the opportunity to pause the recording whenever they wished.

3.4.7 Transcription and Translation

The key advantage of recording the interviews is the option of a verbatim transcription of the entire conversation. Therefore audio-recorded interviews are normally subsequently transcribed. Due to the large amount of data (25 interviews of 1-2 hours each) the present study used the help of a professional typist to transcribe the audiorecordings (the result was about 1,000 pages / 325,000 words of transcripts). Besides the expenses of this service, this can also lead to other problems and mistakes such as ignorance of non-verbal communication or other mistakes within the transcriptions. In order to decrease such negative side effects the author carefully verified all transcripts herself. This was done with the help of the analysis software NVivo (qualitative analysis software), which allows listening to the recorded audio file while simultaneously being able to read and change the relevant passages in the transcripts. This further allowed for changes and particularly additions of information regarding non-verbal aspects (such as laughing, hesitation, smiling, sarcasm, etc.). It should be mentioned, however, that the professional typist had already included a wide range of such "background" information in the transcripts.

In addition the author decided to transcribe five of the interviews herself in order to familiarize herself with the data directly.

The interviews were fully conducted in German as was the coding and analysis process. However, for writing up the results and for the interpretation, all relevant quotes were translated into English. In order to avoid a biased translation the quotes were given to a professional and certified translation office (Toptranslation GmbH, Hamburg). A first person translated the quotes and an independent second person verified the translation. In addition of course the author herself carefully checked the translations again and made all necessary changes to keep the meaning between source quote and target quote as close as possible. Emphasis was again put on accuracy and on correct meaning.

3.5 Data Analysis Procedures

3.5.1 Quantitative Analysis Procedure

3.5.1.1 Approach Overview

The quantitative analysis is conducted with the help of the quantitative analysis software SPSS and can be summarized in five key steps:

Step One:	Determine Individual Dynamic Preference (IDP)		
	Calculate means for each factor of Individual Dynamic Preference (IDP)		
	Calculate overall mean for Individual Dynamic Preference (IDP) for each		
	respondent		
Step Two:	Calculate means for Work Environment Dynamic (WED)		
Step Three:	Calculate means for Work Outcomes (WOC)		
Step Four:	Determine Person-Dynamic-Fit (PD-Fit): Margin between Individual		
	Dynamic Preference (IDP) and Work Environment Dynamic (WED)		
Step Five:	Analyse relationship between Person-Dynamic-Fit (PD-Fit) and Work		
	Outcomes (WOC)		

Each step is explained in detail in Section 4.4.

3.5.1.2 Statistical Methods

For this quantitative analysis procedure several statistical methods and parameters are used. These are briefly listed and explained in the following section (please refer to (Bryman and Bell 2003; Eckstein 2008):

Arithmetic mean	Average (total of the distribution divided by number of values)
Factor Analysis (not	Statistical technique used for large number of variables to
used)	establish whether there is a tendency for groups of them to be inter-related
Cronbach's Alpha	coefficient of internal consistency of multi-item constructs represents the average of all possible split-half correlation
Visual Binning	process of creating new variables based on grouping contiguous values of existing variables into a limited number of distinct categories
Correlation Analysis	Approach to the analysis of relationships between variables that seek to assess the strength and direction of the relationship between these

TABLE 3-5: STATISTICAL METHODS USED IN PRESENT STUDY

Regression Analysis	statistical method for assessing the relationships among variables (quantify the relation by a bivariate linear equation)
Durbin-Watson	tests to detect autocorrelation in the residuals from a statistical regression analysis

The mentioned factor analysis was not possible due to the low number of respondents. The author undertook factor analysis anyhow in order to check for potential insights but the results indicated the statistical problems related to such low sample sizes. The used mean calculations will allow for some first insights into the quantitative data. Potential limitations to this approach especially in the area of IDP will be covered in *section 6.4 Limitations*. It should be emphasized again that the focus of this study is on the qualitative part in order to add depth to the newly proposed field

3.5.2 Qualitative Analysis Procedure

3.5.2.1 Approach Overview

The qualitative analysis of the collected data is conducted with the help of QSR NVivo 9, which is qualitative analysis software. The twenty-five audio files were loaded into the program and the accompanying transcripts as well. For the analysis the author decided upon a structured coding scheme as described in section 3.5.2.2

In a first step all transcripts were structured according to the interview outline and were coded according to the underlying research fields:

- Part 1 Interviewee Characteristics
- Part 2 Person-Environment-Fit
- Part 3 Job Outcomes
- Part 4 Individual Dynamic Preference (qual.)
- Part 5 Individual Dynamic Preference (quant.)
- Part 6 Job Characteristics
- Part 7 Job Dynamic
- Part 8 Environmental Dynamic (5 Work Environments)
- Part 9 Environmental Dynamic (B)
- Part 10 Dynamic Scales
- Part 11 Interview Critics

The author included the full transcripts into NVivo, due to the fact that in many areas the quantitative and qualitative questions are closely linked and some of the comments or explanatory statements in the quantitative parts can be of relevance for the qualitative analysis as well. Part 1 (Interviewee Characteristics), Part 5 (IDP quant) and Part 11 (Interview Critics) are however of no relevance for this qualitative part of the analysis.

The following approach is used for the qualitative analysis:

Individual Dynamic Preference (IDP)

- Develop key codes for the factors of Individual Dynamic Preference (IDP).
- Analyse the answers which can be linked to the different IDP-Factors and code the interviews according to the defined codes.
- Define which codes can be used to cluster respondents into groups of low, medium and high IDP groups.

Environmental Dynamic (WED)

- Define key characteristics for low, medium and high dynamic environments.
- Apply acknowledged change typologies from Dunphy and Stace (1993) to the reported change experiences.
- Analyse the change experience of the respondents and cluster their descriptions into low, medium and high dynamic environments.
- Analyse other interview parts (where applicable) for relevant characteristics (e.g. Part 2, 3, 6, 7).
- Cluster the respondents into groups of low, medium and high Work Environment Dynamic (WED).

Work Outcomes (WOC)

- Cluster Respondents into groups of low, medium and high Work Outcomes (WOC)
- Screen the explanatory statements in Part 3 for relevant themes (if valuable)

Person-Environment-Fit (PE-Fit)

- Cluster Respondents into groups of PE choice and evaluate their fit assessment in this area
- Screen the explanatory statements in Part 2 for other relevant themes

Person-Dynamic-Fit (PD-Fit)

- Compare results of IDP and WED of each individual for fit assessment
- Relate these fit results to Work Outcomes (WOC) and analyse the relationship

3.5.2.2 Coding Methodology

Due to the complexity of the research topic and the collected data, the author found that a single coding method would not suffice to capture the topic. She thus developed a multi-step coding approach. This is in line with several researchers, who "...*feel that more than one coding method and at least two different analytic approaches should be explored in every study to enhance accountability and the depth and breadth of findings*" (Coffey and Atkinson 1996; Mello 2002; Leech and Onwuegbuzie 2005). The author took the generic approach adapted from Saldana (2009, p. 48) as a starting point for her coding process:

First Cycle Coding

- 1. Attribute coding
- 2. Structural coding or holistic coding
- 3. Descriptive coding
- 4. NVivo coding

Second Cycle Coding

5. Pattern coding and/or focused coding

According to Saldana in first cycle coding several coding methods may be "*mixed and matched*" for best application to a particular study (2009, p. 51).

- 1. In the first step the author thus conducted attribute coding, adding all relevant descriptive information of the data set to the respondents. In this initial step she connected the following data to the transcripts:
 - gender
 - organisational size
 - age
 - status
 - industry

- hierarchy level
- organisational tenure
- working experience
- education

Attribute coding is particularly suitable for those studies with multiple participants, sites or data forms and provides important background information for analysis and interpretation (Saldana 2009, p. 56).

- 2. In a second step the author conducted structural coding, which usually "applies a content-based or conceptual phrase representing a topic of inquiry to a segment of data that relates to a specific research question used to frame the interview" (in MacQueen, McLellan-Lemal, Bartholow and Milstein 2008, p. 66; Saldana 2009). This coding method is particularly applicable for semi-structured datagathering. The author thus applied the structure of the interview outline to the interview transcripts and further integrated the tested constructs from the area of IDP into the coding schemes.
- 3. In the third step the author used the descriptive coding method in order to discover all relevant topics in the interview transcripts. This method allows identifying the basic topics and the important themes for the data analysis.
- 4. NVivo coding is recommended as a fourth step for first cycle coding and focuses on the actual language used by the respondents. The author of this study decided that this coding method would be of no additional use for her and thus did not use it.
- 5. Pattern coding is recommended as a second cycle coding method. "The primary goal during Second Cycle coding, if needed, is to develop a sense of categorical, thematic, conceptual, and / or theoretical organisation from your array of first cycle codes." (Saldana 2009, p. 149). Before the author conducted pattern coding she recoded and reorganized the existing codes again to make it more efficient. "Pattern coding is a way of grouping those summaries into a smaller number of sets, themes, or constructs" (Miles and Huberman 1994, p. 69 in ; Saldana 2009, p. 152).
- 6. Before the pattern coding was conducted the author used magnitude coding in the areas of IDP and WED. This is based on the suggestion by Tashakkori and Teddlie (2003) for mixed method studies. They explored that qualitative data can sometimes be "quantitised" for statistical analysis and with magnitude

coding it is possible to apply numbers to codes and themes in order to do so (Saldana 2009, p. 49). The author used this approach to differentiate between low, medium and high dynamic work environments and between low, medium and high dynamic preferences of respondents.

3.6 Ethical Issues during Research

Throughout the process of doing research one is facing several areas where ethical issues may arise. These may already be a topic in the design process as well as in the phase of gaining access to the respondents, collecting the data as well as in the data processing and analysis phases. Ethics are thus a critical aspect throughout the entire research process. The main areas are privacy and confidentiality issues, potential reactions of participants such as stress or discomfort but also the researcher's behaviour and objectivity (Saunders et al. 2009). In the present study ethical behaviour has been an accompanying topic throughout the entire process. In the design process, the study relies for the most part on factors and items which have been used and tested in prior studies and which did not cause any ethically critical concerns as far as the author knows. In the phase of gaining access to respondents, emphasis was put on the voluntary aspect of the participation and on clear and unequivocal confidentiality. It was further intended in the data collection process to generate a very comfortable interview atmosphere and location (upon the choice of the participants). In most cases the interviewer visited the respondents in their homes or at a neutral place of their choice (e.g. university or quiet café). Some respondents also visited the interviewer in her home office when it was not too far away. Date, time and place were thus fully chosen by the respondents. In the phase of the data storage the author took care to eliminate all evidence of the identity of the respondents from the transcripts and quotes (such as, for example, company names or names of colleagues/supervisors). The included demographical data was reduced to an abstract level as to avoid any inferences on the identity of the participants. Throughout the entire thesis the respondents are only referred to by a consecutive number.

Ethical issues are of special importance to critical realist researchers. For them it should not only be a matter related to research practice but also to the interests which the research may serve. Critical realists are always aware of their own position within the research project and its influence on the research findings. It is thus necessary to not only maintain the normal ethical standards but also to expose oneself to criticism in order to avoid unwanted bias in the research (Cassell and Symon 2004). The *Section* 6.6 on reflexivity will cover these ethical considerations ex post the data analysis and interpretation phase.

3.7 Chapter Summary

This chapter deals with the topics of research philosophy, methodology and underlying process factors. For this, the author raised the following key issues along the research onion from Saunders et al. (2008) and emphasized her epistemological position as a critical realist.

First, in line with the two outer layers of the research onion, the author defines the underlying philosophical position as one of a critical realist with a mixture of deductive and inductive research elements.

In terms of the more inner layers of the onion, the best applicable approach for the proposed study shall be achieved with a mixed method, cross-sectional study using semi-structured interviews for the data collection.

Different approaches are intensely discussed in this chapter and their limitations and constraints are considered carefully. This included attention to detail in terms of the technical implementation and execution of the chosen approach.

In line with the adopted research position of a critical realist and the accompanying awareness of ethical concerns and own preconception this study aims to be open for distinct understandings from other standpoints.

The next chapter illustrates and describes the elaborative analysis of the quantitative and the qualitative data and compares the findings from these different methodological approaches for the highest potential benefits for theory contribution.





Chapter 4 Data Analysis

4.1 Introduction

The study is based on a mixed-method approach. For the analysis of the data a quantitative as well as a qualitative analysis of the collected data is carried out. In the first step all quantitative data is transferred into the analysis tool SPSS. This accounts for the demographic data and the Likert scale questions regarding Individual Dynamic Preference (IDP), Environmental Dynamic (WED) Work Outcomes (WOC) and Person-Environment-Fit (PE-Fit).

In the second step all interview transcripts are transferred into the analysis tool NVivo for the qualitative part of the analysis.

4.2 Descriptive Analysis

As a first step several descriptive analyses were conducted in order to better understand

the sample composition and ensure that the sampling goals were met appropriately.



FIGURE 4-1: RESEARCH PROCESS - STEP 8

		Frequency	Percentage
Age	< 30	4	16 %
	30 - 34	10	40 %
	35 - 39	5	20 %
	40 - 44	3	12 %
	> 44	3	12 %
Gender	Male	13	52 %
	Female	12	48 %
Hierarchy Level	Assistance	4	16 %
	Management without HR	14	56 %
	responsibility		
	Management with HR responsibility	4	16 %
	(<10)		
	Management with HR responsibility	3	12 %
	(≥10)		
Tenure to the	< 5 years	11	44 %
Organisation	5 – 10 years	6	24 %
	>10 years	8	32 %
Organisational	Private Sector	19	76 %
Form	Public Sector	6	24 %
No. of	< 50	3	12 %
Employees	50-200	3	12 %
	201 - 1000	6	24 %
	1001 – 4999	6	24 %
	≥ 5000	7	28 %

TABLE 4-1: OVERVIEW OVER SAMPLE DESCRIPTIVES

N=25

4.3 Identification of Critical Questions

In the second analytical step all interview transcripts as well as the interviewer's notes were searched for those items and questions which showed to be problematic in some way. This was done after all data was collected and is a result of the interviewer's experience as well as a rough primary analysis of the data. This analysis led to a liquidation of the items listed in *Table 4-2: Critical Items of Study* before further analyses were carried out. The twelve items listed in the table were excluded in order to ensure better validity.

TABLE 4-2: CRITICAL ITEMS OF STUDY

ITEM	TEXT COMPONENT	ARGUMENT FOR DELETION
4.15	I often change my mind. (agree / disagree scale)	Several respondents felt uncomfortable to answer this question due to the lacking point of reference. The comment "this depends" came up in more than 50 % of all cases.
4.18	If I were to be informed that there's going to be a significant change regarding the way things are done at work, I would probably feel stressed. (agree / disagree scale)	The term "stress" caused distraction among the respondents and was interpreted very differently.
4.21	When things don't go according to plans, it stresses me out. (agree / disagree scale)	
4.32	I don't change my mind easily. (agree / disagree scale)	Several respondents felt uncomfortable to answer this question due to the lacking point of reference. The comment "this depends" came up in many of the cases.
4.35	Once I have come to a conclusion, I'm not likely to change my mind. (agree / disagree scale)	Methodologically this item is questioned because it is very similar to an item developed by Oreg (2003) for the short-term focus Factor which was formulated "Once I have made plans, I'm not likely to change them.". However, that item and full factor is rated imposingly in its influence on Resistance to Change (CR high > RTC low; STF high > RTC high). For the present study CR values were rated as positive influence on IDP while STF items were used as reverse codes. Due to the translation into German it is questionable whether the new item fully hit Oreg's construct issue in terms of cognitive rigidity. Therefore the full item was excluded from further research afterwards.
4.36	I view risk of a job loss as a situation to be avoided at all costs. (agree / disagree scale)	Phrase "at all costs" caused discrepancies and several respondents felt uncomfortable to answer the question. Based on the interview experience it appears doubtful whether this question reflects the extent to which someone is willing to take risks in the job due to the strong relation to private life
6B8	Which factors does the organisation view as critical	In many cases this questions was considered as difficult to answer due to the "official"

ITEM	TEXT COMPONENT	ARGUMENT FOR DELETION
	for success? 1 Stability; continuity 2 Efficiency	positioning of the organisation versus the operative positioning as experienced by the respondents in every-day situations.
	 3 Response to market needs 4 Strategic positioning; flexibility 5 Creativity / Innovation 	In addition the scale options could be seen as critical in terms of ranking as the respondents' answers revealed.
6B12	What are the main criteria for the incentive system in your organisation? 1 length of service 2 past performance (budget fulfilment) 3 Performance development; contribution to future growth 4 Entrepreneurship; contribution to diversification in familiar future growth segments 5 Creativity; contribution to development of future options	Difficult to answer for a majority of respondents. In Germany people often only know their own salary and are not familiar with arrangements of other employees or in other departments. The fact that no respondents chose 4 or 5 on the scale further shows that the question lacks dynamic differentiation.
6B15	What are the internal drivers of the organisation? 1 Lobbyism (bureaucracy) 2 Production / purchasing / sales 3 Marketing & Sales 4 Strategic management 5 R&D	The offered scale was evaluated as difficult and respondents were very insecure to answer. Differences in organisational structure and foci caused distractions and difficulty to answer properly. It is questionable whether the scaling is suitable for all organisations.
6B16	How would you describe the organisational structure? 1 Strongly hierarchical; many levels; strong department orientation 2 Hierarchical; functional responsibilities 3 Hierarchical basic structures with self-	The fact that no respondents chose 4 or 5 on the scale further shows that the question lacks dynamic differentiation. Due to the limitation of sample to companies with 50+ employees no small agile, network structure like agencies were included in study.

ITEM	TEXT COMPONENT	ARGUMENT FOR DELETION
	orientation 4 Some hierarchical basic structures with high degree of self-responsibility 5 Self organisation; minimal hierarchical structures; networks	
3.3	Do you think you will work for this organisation five years from now? (very unlikely / very likely scale)	The interviews were conducted in a phase of economic uncertainty and many respondents felt that it was not only upon them whether they would stay with their organisations. Many mentioned external conditions which could threaten their jobs and which might urge them
3.7	How likely is it that you will look for a new job within the next year? (very unlikely / very likely scale)	to leave the organisation. The answers do thus not necessarily display their personal "wish" to stay with their employer as originally intended by this question.

4.4 Quantitative Data Analysis

4.4.1 Introduction

The general approach of the quantitative analysis is formerly described in *Section 3.5.1*. Five steps were identified as essential for the analysis and basic statistical methods were used for the factor assessments.

4.4.2 Step One: Calculate Individual Dynamic Preference (IDP)

It is the aim of this study to determine the fit of individual employees into their specific work environment in terms of their dynamic profile. A range of 24 items formerly listed in section 4.B (*section 3.4.3.1*) is used to determine the IDP of each respondent. These items were drawn from acknowledged publications and were supposed to add up to those seven key factors, which were identified in the literature review as relevant influencing factors for IDP.

After the interviews were conducted the resulting codes were transferred into a measuring scheme were all high scores would be supportive of high IDP and low scores were supportive of low IDP. This is required because some items were coded reversely

and because some influencing factors measure supportive characteristic on IDP and other are decreasing IDP. This transfer into a joint scaling scheme is further necessary because of the further analysis with the help of means. A factor analysis was not possible due to the limited number of cases. *Table 6-4: IDP item coding - overview in Appendix C* gives insights into the transfer of the different items.

In a first analysis the chosen factors were tested for their internal consistency by conducting the tests of Cronbach's Alpha.

FACTOR	Items	Cronbach's Alpha
routine seeking (RS)	14,16,(25),29	0.661 Without item 25: 0.822
self-efficacy for change(SEC)	(13),27,28,33,34	0.567 Without item 13: 0.653
cognitive rigidity (CR)	15,32,35	0.845
locus of control (LOC)	17,19,22,23,24	0.541
risk aversion (RA)	20,31, (36)	0.159 Without item 36: 0.936
short-term focus (STF)	26,30	0.584
emotional reaction (ER)	18,21	0.195

TABLE 4-3: IDP FACTORS AND CRONBACH'S ALPHA VALUES

Values > 0.600 were considered as sufficient. Therefore item 36 was excluded due to the low Cronbach's Alpha value for risk aversion. In addition items 13 and 25 were excluded in order to optimize the values for the factors routine seeking and self-efficacy for change. The locus of control factor and the short-term focus factor however remained in the analysis with all items, because no single items could be excluded for a major improvement and the alpha values are close to 0.6.

The analysis revealed very low consistency for the factor of emotional reaction which led to the exclusion of this whole factor before further analyses.

Due to the critical findings formerly identified in *Table 4-2: Critical Items of Study* on the cognitive rigidity items (15, 32, and 35) these items and the whole factor had to be excluded accordingly before further research as well.

There were thus only five factors remaining for the analysis which were evaluated as useful to determine overall IDP of the respondents (routine seeking (RS); self-efficacy for change(SEC); locus of control (LOC); risk aversion (RA); short-term focus (STF)).

For the determination the overall mean for Individual Dynamic Preference (IDP) the means for each relevant factor were calculated and used as the basis. *Table 6-17: Quantitative IDP in Appendix G* shows the results for the 25 respondents and the distribution of overall IDP among the sample. The underlying scale results from the 5-point Likert scale used in the questioning Area A. It can be evaluated as 1=very low to 5=very high. Due to the fact that the numbers already reflect the means the numbers can be uneven and the distribution does not show extreme values of single items.

As the overview already indicates most factors have only a limited range of answers and the overall means are relatively high. Potential reasons are discussed in *Section* 5.2.

The results further show that the IDP scores are distributed among the sample as displayed in *Figure 6-4: Individual Dynamic Preference (IDP) Distribution - visually binned (in Appendix H).* This visual binning leads to the following classification of the respondents in terms of their IDP score.

LOW ≤3.74	MEDIUM < MEAN	MEAN	MEDIUM > MEAN	HIGH ≥4.47
Respondent 5	Respondent 2		Respondent 1	Respondent 6
Respondent 7	Respondent 9		Respondent 3	Respondent 20
Respondent 8	Respondent 11		Respondent 4	Respondent 21
Respondent 14	Respondent 15		Respondent 10	Respondent 25
Respondent 19	Respondent 23	08]	Respondent 12	
	Respondent 24	4.1	Respondent 13	
			Respondent 16	
			Respondent 17	
			Respondent 18	
			Respondent 22	
5 respondents	6 respondents		10 respondents	4 respondents

 TABLE 4-4: IDP DISTRIBUTION AMONG SAMPLE

The grouping was conducted assuming a normal distribution among the sample and setting cut-off points at mean and selected standard deviation of +/-1 based on scanned

cases. The normal distribution curve is included in *Figure 6-3: Normal distribution Individual Dynamic Preference (IDP) (quant. assessment) in Appendix H.*

4.4.3 Step Two: Calculate Means for Work Environment Dynamic (WED)

For the determination of the dynamic of the Work Environment Dynamic (WED) of the individuals, data was drawn from four distinct sources of the study (*Figure 4-2: WED Factor Composition*).

The author included six items in order to directly determine the dynamic level of the specific job environment of the respondents and 14 items to determine the dynamic of the overall environment (organisational level). As stated earlier some items were identified as critical in the area of organisational dynamic due to problems in the data collection phase. This applies to the items 6.B.: 8,12,15,16 which were deleted accordingly. This reduction slightly reduced Cronbach's Alpha to 0.720. The results of the Cronbach's Alpha analyses are displayed in the table below. In addition the data from the Job Dynamic Scale and the other three Environmental Dynamic Scales were used for the Dynamic assessment.

Factor	Item	Cronbach's Alpha
Specific job dynamic	5B7-5B12	0.700
Organisational dynamic	Originally items 6B4-6B17	0.801
	but reduced by items	(for the reduced Factor:
	8,12,15,16*	0.720)
Job dynamic scale	7.1 J, 7.2 J, 7.3 J, 7.4 J	0.740
Environmental dynamic		
scales:		
organisation	7.1 U, 7.2 U, 7.3 U, 7.4 U	0.558
group	7.1 A, 7.2 A, 7.3 A, 7.4 A	0.497
overall environment	7.1 E, 7.2 E, 7.3 E, 7.4 E	0.516

TABLE 4-5: WED FACTORS AND CRONBACH'S ALPHA VALUES

*Excluded due to critical aspects discovered during the interview phase (see Table 4-2: Critical Items of Study).

The Cronbach's Alpha values for the dynamic scales were sufficient for the Job Dynamic Scale but rather low for the other three areas. However, high values could not be expected due to the different issues summarized within each factor (complexity, predictability, speed and impact of change). A control check of Cronbach's Alpha Values for each of these factors across the distinct environmental levels (organisation; group; job; external environment) gained slightly better results, except for the predictability-factor:

Factor (Environmental Dynamic Scales)	Items Cronbach's Alpha	
Complexity	7.1 U,A,I,E	0.669
predictability	7.2 U,A,I,E	0.380
speed	7.3 U,A,J,E	0.713
impact	7.4 U,A,J,E	0.731

TABLE 4-6: DYNAMIC SCALES FACTORS AND CRONBACH'S ALPHA VALUES

For the calculation of the means the environmental dynamic scales (items 7.1-7.4) had to be converted to a 5-point Likert scale because they were originally put on a 7-point Likert scale in order to facilitate the response for the interviewees. In order to standardize their weight in the mean calculation this dissimilarity had to be removed.

In the mean calculation phase the items for the job level were weighted higher than group, organisation or external level values by excluding the scale value for the job level as a separate value beforehand (see *Figure 4-2: WED Factor Composition*). This was done intentionally due to the assumption that the closer job environment would have a stronger impact on the perceived Work Environment Dynamic (WED) than the other three levels of group, organisation and external environment.



FIGURE 4-2: WED FACTOR COMPOSITION

While the assessment with the Ansoff and McDonnell environmental scale worked very well for the sample group, the scaled questions regarding the topics of complexity,

predictability, impact and speed of change in Area B, part 4, were evaluated as more difficult to answer for some of the respondents. Due to the difficult terminology (e.g. complexity) and in some cases insecurities about the respondents own competence to answer the broader level questions (e.g. organisational or external environmental level) it was necessary that the interviewer offered additional information or examples in some cases. The results thus had to be interpreted with the appropriate care. The broad distribution of answers (see *Table 6-18: WED assessment dynamic Scales (7-point Likert scale) in Appendix G*), however, confirms the importance of these criteria for the dynamic assessment and gives reason for the inclusion of these results into the overall WED-assessment. Please refer to *Table 6-18: WED assessment dynamic Scales (7-point Likert scale)* and *Table 6-19: WED scale means in Appendix G*.

The data reveals that the scores for the external environmental dynamic get the highest dynamic scores, followed by the direct job environment. The areas of group and organisation score clearly lower. For the analysis the job level was evaluated separately and the other three levels were summed within a single factor for the above mentioned reasons. Looking at the four dynamic characteristics more closely, the means reveal that complexity is rated as rather high, while the other three score significantly lower.

The analysis of the scale results is interpreted in *Section 5.3. Table 6-19: WED scale means* in *Appendix G* shows the resulting means for the distinct sub-sections of WED-assessment as well as the overall Work Environment Dynamic (WED) value for each respondent. The results show that the average means in the area of Work Environment Dynamic (WED) are much lower than in the area of Individual Dynamic Preference (IDP) which might cause some of the divergences in the fit assessment later described in *Section 4.4.5*.

Generally the WED scores are distributed among the sample as displayed in *Figure 6-6: Work Environment Dynamic (WED) Distribution - visually binned* and listed below in *Table 4-7: Work Environment Dynamic (WED) distribution among sample.* The grouping was conducted assuming a normal distribution among the sample and setting cut points at mean and selected standard deviation of +/-1 based on scanned cases. The normal distribution curve is included in *Figure 6-5: Normal distribution Work Environment Dynamic (WED) (quant. assessment) in Appendix H.*

LOW ≤ 2.59	MEDIUM < MEAN	MEAN	MEDIUM > MEAN	HIGH ≥3.57
Respondent 5	Respondent 9		Respondent 1	Respondent 6
Respondent 7	Respondent 12		Respondent 2	Respondent 10
Respondent 8	Respondent 15		Respondent 3	Respondent 11
	Respondent 18	3	Respondent 4	
	Respondent 20	81	Respondent 13	
	Respondent 21	3.0	Respondent 14	
	Respondent 22		Respondent 16	
	Respondent 25		Respondent 17	
	Respondent 24		Respondent 19	
			Respondent 23	
3 respondents	9 respondents		10 respondents	3 respondents

TABLE 4-7: WORK ENVIRONMENT DYNAMIC (WED) DISTRIBUTION AMONG SAMPLE

4.4.4 Step Three: Calculate Means for Work Outcomes (WOC)

Three relevant WOCs were identified in the literature and included in the study: job satisfaction (JS), organisational commitment (OC) and turnover intention (TI). In addition a new item with a focus on exploited potential (EP) was developed for the study and thus added. A Cronbach's Alpha test is used to check the consistency of the items within each outcome factor:

Factor	Items	Cronbach's Alpha
All Outcome Items	3.1-3.8	0.697
Job satisfaction (JS)	3.1	only 1 item
Organisational commitment	3.2, 3.4, 3.5, 3.6	0.598
(OC)		
Turnover intention (TI)	3.3, 3.7	0.340
Exploited potential (EP)	3.8	only 1 item

TABLE 4-8: WORK OUTCOME (WOC) ITEMS AND CRONBACH'S ALPHA VALUES

Due to the results of the Cronbach's Alpha test and also due to the critical aspects concerning question 3.3 and 3.7 discovered during the interview phase (please refer to *Table 4-2: Critical Items of Study* for further details) the factor of turnover intention (TI) was excluded from further quantitative analysis. Only the other three outcome factors were included in the analysis (a 7-point Likert scale was used in this section).

Job satisfaction (JS) and exploited potential (EP) were both covered by only one item. A mean calculation beforehand was thus only required for the factor of organisational commitment (OC). The results are displayed in *Table 6-21: Quantitative assessment of work outcomes (WOC) based on means in Appendix G*.

The underlying normal distribution curve is displayed in *Figure 6-7: Normal distribution Work Outcomes (WOC)* (quant. assessment) in Appendix H.*

The resulting distribution among the sample is listed in the table below:

LOW ≤ 4.64	MEDIUM < MEAN	MEAN	MEDIUM > MEAN	HIGH ≥ 6.253
Respondent 8	Respondent 2		Respondent 4	Respondent 1
Respondent 12	Respondent 3		Respondent 9	Respondent 10
Respondent 18	Respondent 5		Respondent 11	Respondent 20
Respondent 23	Respondent 6	7	Respondent 15	Respondent 25
	Respondent 7	146	Respondent 17	
	Respondent 13	5.4	Respondent 19	
	Respondent 14		Respondent 21	
	Respondent 16		Respondent 22	
			Respondent 24	
4 respondents	8 respondents		9 respondents	4 respondents

 TABLE 4-9: WORK OUTCOME (WOC) DISTRIBUTION AMONG SAMPLE

4.4.5 Step Four: Determine Person-Dynamic-Fit (PD-Fit)

The difference between the two means of IDP and the determined mean for WED is calculated in order to determine the proposed PD-Fit for each respondent.

All generated values turned out to be positive. It was thus not necessary to calculate the absolute values for PD-Fit. While the scale for IDP and WED scores are consistent with those in the previous sections (1=low/5=high), a different reference must be set for the PD-Fit. This is due to the fact that the lower the value in this area the better is the fit of the individual in its environment in terms of dynamic.

In this sample the fits range from 0.14 for a very good fit to 1.77 as a rather weak fit.

TABLE 4-10: QUANTITATIVE ASSESSMENT OF PD-FIT

Respondent	IDP	WED	PD-Fit
1	4.40	3.47	0.93
2	4.05	3.44	0.61
3	4.38	3.32	1.06
4	4.23	3.14	1.09
5	3.38	2.24	1.14
6	4.6	3.75	0.85
7	3.68	2.55	1.13
8	3.59	1.58	2.02
9	3.87	2.99	0.88
10	4.42	3.93	0.49
11	3.89	3.62	0.27
12	4.24	2.8	1.44
13	4.45	3.17	1.28
14	3.65	3.36	0.29
15	4.10	2.93	1.17
16	4.21	3.50	0.71
17	4.19	3.46	0.74
18	4.23	2.75	1.47
19	3.66	3.19	0.47
20	4.51	3.01	1.50
21	4.56	2.83	1.73
22	4.17	3.01	1.17
23	3.76	3.12	0.64
24	3.78	3.02	0.76
25	4.69	2.86	1.83

The normal distribution curve is included in *Figure 6-9: Normal distribution of Person-Dynamic-Fit (PDF) (quant. assessment) in Appendix H.*

As a result of a binning process (*Figure 6-10: Fit Distribution - visually binned in Appendix H*) the respondents could be structured into four groups of PD-Fit. The distribution among the sample is displayed in the following table:

VERY GOOD FIT ≤ 0.562	MEDIUM FIT < MEAN	MEAN	MEDIUM FIT > MEAN	VERY LOW FIT ≥ 1.492
Respondent 10	Respondent 1		Respondent 3	Respondent 8
Respondent 11	Respondent 2		Respondent 4	Respondent 20
Respondent 14	Respondent 6		Respondent 5	Respondent 21
Respondent 19	Respondent 9	68	Respondent 7	Respondent 25
	Respondent 16	.02	Respondent 12	
	Respondent 17	1	Respondent 13	
	Respondent 23		Respondent 15	
	Respondent 24		Respondent 18	
			Respondent 22	
4 respondents	8 respondents		9 respondents	4 respondents

TABLE 4-11: FIT DISTRIBUTION AMONG SAMPLE

4.4.6 Control Question Area B, Part 3: real / ideal work environment choice

The study design also included a separate section on work dynamic and its preferences in Area B. Part 3. In this part the study described five distinct work environments with parameters described by Ansoff and McDonnell (1990). The respondents were asked to choose one out of five potential work environments as their ideal work environment. After that, they were asked to choose the environment which is closest to their current environment. Although there were only five different environments to choose from, the respondents were also allowed to choose two environments if they had trouble to make a clearer decision (e.g. ideal work environment between 3 and 4). The author transferred these results into an ordinal scale from 1 to 5 with half values possible (e.g. 3.5). The results are displayed in *Table 6-22: Ideal / real work environment choice (Part 3 of interview) in Appendix G*. The five environments ranged from low dynamic (environment 1) to high dynamic (environment 5). The numbers in *Table 6-22, column 2 and 3* can thus be interpreted accordingly. The scores for the difference have a similar scale as the PD-Fit with a range of 0 for very good fit to 2.5 for the lowest fit within this sample.

The results allow for a very simple fit assessment by measuring the difference between their ideal and their real work environment choice. Interestingly 23 out of 24 rated their ideal work environment as higher or equal in dynamic to their real work environment setting.

Most respondents further reported a close fit into their environments with a difference of 1 maximum. However, six respondents reported a difference of 1.5 or more. These cases require further investigation and are compared to their measured fit in main PD-Fit assessment in the previous section. In addition the highest misfits of the main PD-Fit-assessments are also compared to the results of this interview part (*Table 4-12: Comparison of main quantitative PD-Fit assessment and Part 3 PD-Fit assessment*). For the comparative analysis the fit-results of part 3 are used as the initial point for a subtraction. This is due to the rather simplified and rough fit estimation in this area which leads to a broader range. The more differentiated and sophisticated PD-Fit assessed in the last Section is thus subtracted from this control fit score. Especially high differences of some respondents will be analysed in more detail in *Section 5.6*.

Respondent	PD-Fit*	Source of Misfit	Control PD-Fit: ideal work environment – real work environment choice	Source of Misfit	Measured Comparison of Fits	Notes
1	0.93		2	ideal work environment choice 2 higher than real work environment choice	1.07	ideal work environment choice 2 higher than real work environment choice
2	0.61		0		-0.61	
3	1.06		2	ideal work environment choice 2 higher than real work environment choice	0.94	
4	1.09		0		-1.09	Determined IDP 1.09 higher than determined WED
5	1.14		0.5		-0.64	
6	0.85		n.a.		n.a.	
7	1.13		1		-0.13	
8	2.02	Determined IDP 2.02 higher than determined WED	1		-1.02	Determined IDP 2.02 higher than determined WED
9	0.88		0		-0.88	

TABLE 4-12: COMPARISON OF MAIN QUANTITATIVE PD-FIT ASSESSMENT AND PART 3PD-FIT ASSESSMENT

Respondent	PD-Fit*	Source of Misfit	Control PD-Fit: ideal work environment – real work environment choice	Source of Misfit	Measured Comparison of Fits	Notes
10	0.49		2.5	ideal work environment 2.5 higher than Real Work Environment	2.01	ideal work environment 2.5 higher than real work environment
11	0.27		0		-0.27	
12	1.44		1		-0.44	
13	1.28		0.5		-0.78	
14	0.29		0.5		0.21	
15	1.17		1		-0.17	
16	0.71		1.5	ideal work environment 1.5 higher than Real Work Environment	0.79	
17	0.74		0.5		-0.24	
18	1.47		2	ideal work environment 2 higher than Real Work Environment	0.53	
19	0.47		0.5		0.03	
20	1.5	Determined IDP 1.5 higher than determined WED	0.5		-1	Determined IDP 1.5 higher than determined WED
21	1.73	Determined IDP 1.73 higher than determined WED	1		-0.73	
22	1.17		0		-1.17	Determined IDP 1.17 higher than determined WED
23	0.64		1.5	ideal work environment 1.5 higher than Real Work Environment	0.86	
24	0.76		1		0.24	
25	1.83	Determined IDP 1.83 higher than determined WED	1		-0.83	

*as determined in *Section 4.4.5* on the basis of IDP5-WED (quantitative Fit assessment)

Highest Differences within separate Fits (≥ 1.5)

Highest Differences between Fits (≥ 1.5)
However, comparing the ideal work environment choice to the determined IDP score and the real work environment choice to the WED score demonstrates that many results show few differences, which indicates that the determined measures are quite close to the control assessment (*Table 4-13: Comparison of IDP and Ideal Work Environment and WOC and Real Work Environment*).

TABLE 4-13: COMPARISON OF IDP AND IDEAL WORK ENVIRONMENT AND WOC AND REAL WORK ENVIRONMENT

Respondents	Difference between ideal work environment choice - Individual Dynamic Preference**	Difference between Work Environment Dynamic - real work environment choice	Notes
1	-0.6	0.47	
2	0.55	-0.06	
3	0.38	1.32	Determined work environment 1.32 higher than real work environment choice
4	0.23	-0.86	
5	0.38	-0.26	
6	-0.4	N.A.	
7	0.68	0.55	
8	0.59	-0.42	
9	0.87	-0.01	
10	-0.08	1.93	Determined work environment 1.93 higher than real work environment choice
11	0.89	0.62	
12	1.24	0.8	Ideal work environment choice 1.24 higher than determined IDP
13	1.45	0.67	Ideal work environment choice 1.45 higher than determined IDP
14	0.15	0.36	
15	1.1	0.93	Ideal work environment choice 1.1 higher than determined IDP
16	-0.29	0.5	
17	1.19	-0.04	Ideal work environment choice 1.19 higher than determined IDP

	*		
Respondents	Difference between ideal work environment choice - Individual Dynamic Preference*	Difference between Work Environment Dynamic - real work environment choice	Notes
18	0.23	0.75	
19	0.16	0.19	
20	0.51	-0.49	
21	0.56	-0.17	
22	1.17	0.01	Ideal work environment choice 1.17 higher than determined IDP
23	0.76	1.62	Determined work environment 1.62 higher than real work environment choice
24	0.78	1.02	Determined work environment 1.02 higher than real work environment choice
25	0.69	-0.14	

*as determined by simple subtraction due to the same scale from 1 to 5

Highest Differences between factors (>1)

The Area B questions on the ideal and real work environment choice are only used for this comparative analysis and not for further analyses, due to the fact that this measurement procedure has been used for the first time in this manner and also respondents often referred to only one or two characteristics within that environment to justify their choice. For control purposes, however, a regression analysis was conducted in order to detect a potential relationship between this fit assessment and Work Outcomes (Dependent Variable: Outcome Mean (without TI); Independent Variable: Person-Dynamic-Fit based on (Ideal minus real work environment choice)). The analysis showed no significant relationship between the two included factors (please find the full regression results in *Table 6-24: Regression Analysis: PD-Fit (based on Work Environment choice)/WOC in Appendix G*).

The respondents were, however, further asked to state which characteristics played the most important role for their "ideal work environment choice". The results are displayed and analysed in the qualitative analysis in *Section 4.5.3.5*.

4.4.7 Step Five: Analyse Relationship between PD-Fit and WOC

A regression analysis was conducted in order to detect a potential relationship between the two variables.

Dependent Variable:	Work Outcomes (mean):		
	Job satisfaction / organisational commitment / exploited		
	potential (exclusion of turnover intention)		
Independent Variable:	Person-Dynamic-Fit (Difference IDP-WED)		

TABLE 4-14: REGRESSION ANALYSIS OF PD-FIT AND WOC

Model Summary						
				Std. Error of the		
Model	R	R Square	Adjusted R Square	Estimate	Durbin-Watson	
1	.065 ^a	.004	039	.82205	1.612	

ANOVA							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	.067	1	.067	.099	.756	
	Residual	15.543	23	.676			
	Total	15.609	24				

Coefficients

				Standardized		
		Unstandardized Coefficients		Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	5.563	.405		13.720	.000
	PD-Fit	113	.361	065	314	.756

Residuals Statistics Minimum Std. Deviation Maximum Mean Ν Predicted Value 25 5.3345 5.5320 5.4467 .05272 25 -1.58454 1.56096 .00000 .80474 Residual 25 Std. Predicted Value .000 1.000 -2.127 1.618 Std. Residual -1.928 1.899 .000 .979 25



FIGURE 4-3: SCATTER-PLOT: RELATION OF PD-FIT AND WOC (QUANT. ASSESSMENT)

The regression analysis shows no significant relationship between the two included factors (WOC; IDP).

As a back-up test the same analysis was also undertaken with turnover intention (TI) included into the WOC mean but the comparison of the two different regressions showed little difference. The results for the Durbin-Watson test even slightly deteriorated from 1.619 for the regression without turnover intention to 1.769 for the regression with all outcomes included. Durbin Watson determines the correlation between two succeeding residuals. A value of D close to 2 determines no correlation between the residuals.

The regression analysis shows that the proposed PD-Fit could not be related to the chosen Work Outcomes (WOC) as proposed in the study design. The author is aware of the small sample size which limits the informative value of the statistical analysis. Other control tests about other fits such as person-job-fit (PJ-Fit) or person-organisation-fit (PO-Fit) showed disparate results. While PJ-Fit correlated significantly to the overall Work Outcomes (WOC), the other sub-fits could only be related to some of the sub-factors of Work Outcomes (WOC) (please refer to *Table 4-18, Table 4-19, Table 4-20*

and Table 4-21 for detailed results). The relation of PD-Fit was also checked for relation to JS, OC and EP separately as displayed in *Table 4-15: Correlation between PD-Fit and WOCs*.

			Organisational	
		Job Satisfaction	Commitment	Exploited
		(JS)	(OC)	Potential (EP)
PD-Fit	Pearson Correlation	.027	.242	332
	Sig. (2-tailed)	.899	.244	.105
	Ν	25	25	25

TABLE 4-15: CORRELATION BETWEEN PD-FIT AND WOCS

The Correlation Analysis reveals that PD-Fit did not correlate significantly with any of the outcome sub factors either.

4.4.8 Relevance of Person-Environment-Fit (PE-Fit) for Work Outcomes (WOC)

A correlation between the distinct PE-sub-fits and the identified Work Outcomes (WOC without TI) reveals that only the summarized PJ-Fit factor (reduced to mean) shows a significant correlation to the overall WOC factor:

		PJ-Fit	PG-Fit	PS-Fit	PO-Fit
Work Outcomes**	Pearson	.472*	235	.333	.177
	Correlation				
	Sig. (2-tailed)	.017	.270	.226	.397
	Ν	25	24	15	25

*. Correlation is significant at the 0.05 level (2-tailed).

** turnover intention excluded

A deeper analysis of the two underlying items of PJ-Fit even reveals that particularly item 2.2 as a sub question of PJ-Fit significantly correlated with WOC.

		ITEM2.2. How well does your job fulfil your
	•	personal expectations of a job?
Work Outcomes**	Pearson Correlation	.693**
	Sig. (2-tailed)	.000
	Ν	25

TABLE 4-17: CORRELATION OF ITEM 2.2 (PJ-FIT) AND WORK OUTCOMES (WOC)

**. Correlation is significant at the 0.01 level (2-tailed).

** turnover intention excluded

When split into the different Work Outcomes of job satisfaction (JS), organisational commitment (OC) and exploited potential (EP) the analysis shows that PJ-Fit correlates especially with the newly developed outcome factor of exploited potential (EP) but also with job satisfaction (JS). There is however no significant relation to organisational commitment.

TABLE 4-18: CORRELATION OF PJ-FIT AND WOC

		Exploited	Organisational	Job
		Potential	Commitment	Satisfaction
PJ-Fit	Pearson Correlation	.511**	023	.450*
	Sig. (2-tailed)	.009	.912	.024
	Ν	25	25	25

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The other PE-Fits (person-group-fit; person-organisation-fit; person-supervisor-fit) showed only significant correlations to some of the single work outcomes. PG-Fit) for example only correlates significantly with JS and PO-Fit only correlates with OC. PS-Fit on the other hand (only available for N=15) did not correlate significantly with any of the work outcomes. The results of these correlations are shown in the following tables:

TABLE 4-19: CORRELATION OF PG-FIT AND WOC

		Exploited	Organisational	Job
		Potential	Commitment	Satisfaction
PG-Fit	Pearson Correlation	155	.215	460*
	Sig. (2-tailed)	.469	.313	.024
	Ν	24	24	24

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

TABLE 4-20: CORRELATION OF PO-FIT AND WOC

		Exploited	Organisational	Job
		Potential	Commitment	Satisfaction
PO-Fit	Pearson Correlation	.024	.424*	.034
	Sig. (2-tailed)	.908	.035	.870
	Ν	25	25	25

*. Correlation is significant at the 0.05 level (2-tailed).

TABLE 4-21: CORRELATION OF PS-FIT AND WOC

		Exploited Potential	Organisational Commitment	Job Satisfaction
PS-Fit	Pearson Correlation	.150	.114	.489
	Sig. (2-tailed)	.593	.685	.065
	Ν	15	15	15

Following the questions regarding the four fits the respondents were asked to determine which of these fits was the most important one to them individually. They were asked to choose only one; some respondents were however undecided and mentioned two distinct fits as being equivalent in terms of importance (in some cases one choice is put in parentheses if the author was able to diagnose a slight order between the two choices).

The results are displayed in Table 6-23: Person-Environment-Fit: choice of most important sub-fit in Appendix G.

The data shows that the majority of the respondents focus on a very micro level such as the job itself (in terms of tasks and requirements) and on the colleagues and team around them. The number in parentheses indicates their individual evaluation of this fit on a 7-point Likert scale ranging from 1=very low fit to 7=very good fit. These numbers show that all respondents rate their preferred fit as good or very good. Two exceptions are only in the area of PS-Fit, which were both, however only mentioned as their second most important fit choice (and thus potentially less influential on work outcomes).

4.4.9 Other Influencing Factors

The following potential influencing factors were included in the study:

- demographics (gender and age)
- work conditions

Besides the direct influence on the newly proposed PD-Fit concept their impact on the contributing constructs of IDP, WED and WOC were also analysed. The study restricted this impact analysis on the quantitative results for these factors. The following figures show only those factors where the results indicate potential influences on the assessment and perception of the respondents. The results are explained in the following section and interpreted in *Chapter 5*.



FIGURE 4-4: ROLE OF GENDER ON IDP (QUANT)

Figure 4-4: Role of Gender on IDP shows the distribution of the quantitative IDP results among the sample split by gender. The analysis reveals that the average scores of IDP are higher among the male participants than among the female participants.



FIGURE 4-5: ROLE OF AGE ON IDP (QUANT)

The analysis of the distribution of IDP among the different age groups must be taken with the appropriate care, because of the very low numbers of respondents in each of these groups. A general tendency towards higher IDP scores with older age groups appears however palpable.

As a second potential area of influence several questions regarding the specific work conditions of the respondents were collected. In this are 6 items added up for the evaluation (please refer to *Table 6-14: Work conditions item overview*) covering topics such as decision making power, influence or work load. The relation of these work conditions to the respondents IDP scores is displayed in the following figure:



FIGURE 4-6: ROLE OF WORK CONDITIONS ON IDP (QUANT)

As the figure indicates, there appears to be a potential relationship between better work conditions and higher IDP scores.



FIGURE 4-7: ROLE OF GENDER ON WED ASSESSMENT

The impact of gender was also analysed on the WED factor. As with IDP the male respondents scored higher on this factor than the female respondents.



FIGURE 4-8: ROLE OF GENDER ON PD-FIT

The analysis of the potential relationship between gender and the determined PD-Fit shows that the PD-Fits are generally better among male respondents with also a lower standard deviation.

Potential explanations for the various detected relationships are discussed in Chapter 5.

4.5 Qualitative Data Analysis

4.5.1 Introduction

The general approach of the qualitative data analysis is formerly described in *Section 3.5.2* including the defined coding schemes for each of the four relevant research fields of IDP, WED, WOC and PE-Fit.

4.5.2 Individual Dynamic Preference (IDP)

In the area of IDP the author created the following coding scheme and generated the results as summarized and described in the following table and sections.

Name	Sources
INDIVIDUAL DYNAMIC PREFERENCE	25
routine seeking (RS)	25
routine negative routine positive routine is boring surprise negative surprise positive clearly prefer routines clearly prefer surprise	15 12 13 13 19 5 10
self-efficacy for change (SEC)	23
SEC easy SEC depends SEC sometimes difficult	15 8 5

Name	Sources
short-term focus (STF)	25
short-term focus low	10
STF sometimes	15
insecurity	5
convenience (e.g. because of additional work or expenses)	9
locus of control (LOC)	25
locus of control – restricted	16
locus of control high	9
LOC subject to personal commitment	8
risk aversion - job security (RA)	23
job risk aversion high	14
risk aversion high due to family or environmental factors	11
high in job decision phase, not for every-day decisions	8
RA low due to confidence to find new job	5
emotional reaction (ER)	15
feeling some kind of stress when plans change	12
open for changing plans	16
depends on condition of change	6
plans change is every-day live	6
trying to look ahead	5
short moment of stress only	3
cognitive rigidity (CR)	19
it depends	13
need to be convinced	11
cognitive rigidity high	9
cognitive rigidity low	6

The following sub sections give further insights into these different areas. Two to four quotes are further provided as supportive example for most of the codes. Multiple coding was possible in some areas, meaning that the same section of a quote can be coded more than once within a factor area. The distribution of codes among the respondents is visualised in a coding matrix for each factor.

4.5.2.1 Routine Seeking (RS)

Routine seeking, defined as "the extent to which people feel comfortable with, and enjoy, having routines in their lives" (Oreg 2003) was to be evaluated through the following item:

4.6 If you would have to decide between a day full of routine and a day full of surprises, how would you decide? Which thoughts do you associate with the two alternatives?

The results give very interesting insights about the respondents. In contrast to many of the other items this question really shows strong differences between the employees included in this study. The author coded all answers as follows:

	CODES						
	RS_1	RS_2	RS_3	RS_4	RS_5	RS_6	RS_7
Respondent	routine negative	routine positive	routine is boring	Surprise negative	Surprise positive	clearly prefer routine	clearly prefer surprise
1		Х			Х		
2	Х				Х		Х
3		Х		Х	Х		
4	Х	Х	Х	Х	Х		
5		Х		Х		Х	
6					Х		Х
7		Х		Х		Х	
8		Х				Х	
9	Х		Х	Х	Х		Х
10	Х		Х		Х		Х
11	Х		Х		Х		Х
12	Х		Х	Х	Х		
13	Х				Х		Х
14		Х		Х			
15		Х		Х		Х	
16	Х		Х		Х		Х
17	Х		Х		Х		Х
18	Х		Х		Х		
19	Х	Х	Х	Х	Х		
20	Х		Х		Х		Х
21	Х		Х		Х		Х
22	Х		Х	Х	Х		
23		X		Х		Х	
24	X	X	Х	Х	X		
25		X		Х	X		
Sum	15	12	13	13	19	5	10

TABLE 4-23: ROUTINE SEEKING CODING MATRIX (MULTIPLE CODES POSSIBLE)

TABLE 4-24: ROUTINE SEEKING (RS): CODES AND QUOTES

Codes	Quotes			
routine negative	Q1: Well, a full day of routine, I would say: I have to go into the system. I have to work through my Email. I need to create documentation. I must put in hand appointments, create a diary, and so on. So pulling things together - yes? -exactly, yes. Yes, that is what I associate with routine. Monday: wash clothes, cook food, and so on. Whatever, I associate with routine - this is necessary, but not necessarily fun. (Respondent_16)			
	$Q2$ () and routine is what one has to do, it also belongs to day by day business, but then of course, a certain monotony also builds up. (Respondent_22)			
	Q3: And so one day which does not go around as fast as the others and for me that is a routine day because you're working away just simply on what comes in. It is like a huge wedge of paper, () (Respondent_4)			
routine positive	Q1: This is for us the shortcoming, I think that through the chaos and turmoil too much is lost in friction, so you also need a certain amount of routine somewhere, but that is just now and again / () And if I think of routine, I actually think about tasks that I have to do that I can schedule, on time, substantially and in a well organised manner and this is of course/These are obviously different levels, depending on what people do, but that is presently how it is / (Respondent_14)			
	Q2: B: The sequence is clear, the day is structured clearly, everyone knows what he has to do and the staff is not sick. That is my ideal. (Respondent_23)			
	Q3: No, it happens to me also, when I have such a day that I get some rest. So that allows me to get a bit of sorting out done, to sort out folders, clean up, put in order application processes or something like this. That is such a day routine. But it's also fun. I need both to be in balance. (Respondent_25)			
routine is boring	Q1 : Yes, boredom, boredom in some way, something to work out according to the standards which perhaps must be handed in for figures which must be supplied. (Respondent_18)			
	Q2 : If every-day was just routine, it would be totally boring, then you would turn off, every-day would be lost. (Respondent_19)			
	Q3: Well, the worst that could happen would be when you start at 7:30 and you begin at 8 clock to look for the first time at the clock and think about, how then/ when the finishing time is. () So, from there, a day without change is really a boring day, totally boring day. (Respondent_20)			
surprise negative	Q1 : It is certainly not always beautiful, the day full of surprises, because it can be very stressful and exhausting. (Respondent_9)			
	Q2: In the day of surprises, I think just about reports, about what does not function, or what went wrong or about what did not go according to the intended plan. (Respondent_14)			
	Q3 : And surprises - as I said - rather in our area - given the social focal point – means that surprises are for us the synonym for – indeed – for problems, for troubles, for larger conflicts. (Respondent_23)			
surprise positive	Q1: With a day full of surprises - because you just never know: Is this dangerous? Can I get it done? Is this a big problem? Is it something wonderful? Are there any new ideas, initiatives? In most cases, yes, indeed a kind of a mixture. But at least it's exciting. (Respondent_16)			
	Q2: B: The surprising day, of course, is much more exciting because what is indeed exciting, is that you come to work in the morning and suddenly an event happens and yes, one notices it (), so the whole thing comes alive. But of course it is interplay. (Respondent_1)			
	Q3: A day with surprises, I associate with slightly hectic activity, but I like it actually.			

Codes	Quotes
	<i>I:</i> Well, but a surprise needs not to be necessarily positive, yes? <i>B:</i> No, no, exactly, it does not necessarily have to be positive, but there is a certain rush and <i>I</i> like especially when I've mastered this surprise, at the end of the day. (<i>Respondent_2</i>)

While some respondents were unsure about their choice and could think of positive and negative aspects of both choices, the answers still showed a clear difference between a group of people which openly prefer a day of routine and a group which strongly prefer days of surprises (see code RS6 and RS7).

Prefer routine	Middle Prefer Surprises	
Respondent_15	Respondent_12	Respondent_9
Respondent_23	Respondent_18	Respondent_10
Respondent_5	Respondent_1	Respondent_11
Respondent_7	Respondent_19	Respondent_13
Respondent_8	Respondent_22	Respondent_16
	Respondent_24	Respondent_17
	Respondent_25	Respondent_20
	Respondent_4	Respondent_21
	Respondent_3	Respondent_2
	Respondent_14	Respondent_6
5	10	10

TABLE 4-25: RS DISTRIBUTION AMONG SAMPLE

Another interesting finding is that 13 out of 25 associated routines with boredom without specifically being asked about this topic. However, none of the people who chose routines as their preferred day associated routines with boredom and only half of the people in the middle group. In the group of preferred surprises however, 8 out of 10 had this association to boredom without being particularly asked for it.

4.5.2.2 Self-Efficacy for Change (SEC)

The following question is used to evaluate the factor of self-efficacy for change, defined as "peoples' beliefs about one self's competences to deal with changes and master such situations" (Herold et al. 2007):

4.4 Is dealing with changes for you rather easy or rather difficult? Please explain your decision?

This question allowed very little for differentiation between the respondents. The majority answered with "easy or rather easy" right away. Only eight out of twenty-three (2 missing) explained that they felt rather easy but stated that it also depends on the change type and content. Only five could be coded in a way that they would agree that change would in some situations be somehow difficult for them. However, no one said that dealing with change was in general rather difficult for them.

TABLE 4-26: SELF-EFFICACY FOR CHANGE CODING MATRIX (MULTIPLE CODES POSSIBLE)

	CODES			
	SEC_1	SEC_2	SEC_3	
Respondent	SEC easy	SEC depends	SEC sometimes difficult	
1	X			
2		Х	Х	
3	Х			
4	Х			
5		Х	X	
6	X			
7		Х		
8		Х	X	
9	X			
10	X			
11		X		
12	X			
13	X			
14				
15		V		
16	V	X		
17	X			
18				
19				
20				
21				
22	A	V	v	
23				
24	V	Λ	Λ	
25	<u>А</u>			
Sum	15	8	5	

TABLE 4-27: SELF-EFFICACY FOR CHANGE (SEC): CODES AND QUOTES

Codes	Quotes
self-efficacy	Q1 : Rather easily, because otherwise I could not do the job. (Respondent_10)
easy	Q2: Well I have already said that I need that, so rather easily. (Respondent_17)
	Q3 : In general it is positive, if I do not overdo it. Basically, once every one or two years to make a big correction, to change the system, to change the context, deconstructing an organisation is ok. This is very helpful. (Respondent_6)
self-efficacy for change– depends	Q1 : () I think really easy. Well, () I am sometimes maybe even a bit sceptical at the beginning, I'm not by nature immediately against something, but I'm not immediately hooked either. I'm say like, okay, let's see. I have to construct my own picture. But if it is like that, I think I can handle it, I can also accommodate to the degree required and say okay, if things are as they are, I must either learn to come to terms with the change, or I've accordingly to seek an alternative, () that would be to look for another job. (Respondent_11)
	 Q2: Well, I'm someone who does fight for ideas, and not just because they are the flavours of the month which throws overboard a good idea from the previous month. You must convince me that this makes sense. And I also like to think about it initially, yes? It's not that I say: "Great idea, now let's simply try it. It interests me what you have done there", But that's not it. It is important to me that I say: "Yes, there is an advantage", or "what can I get out of it?" But I need a moment to think about it and weigh it up. (Respondent_16) O3: B: It depends on the situation, and on the subject. (Respondent 23)
self-efficacy	Q1: If I alone must tackle a change, it is difficult for me. (Respondent_24)
for change– sometimes difficult	Q2 : B: Yes / it depends. When something is new, from the beginning it is not easy and if it becomes routine, it's just normal. First, such a change is not always easy, of course! (Respondent_5)
	Q3 : B: Well, at the outset rather more difficult, because I might have a bit, as one says then here, worry and I fear what's coming, but actually I would take it even more easily then (Respondent_8).

4.5.2.3 Short-Term Focus (STF)

Short-term focus, defined as the "tendency of people to focus primarily on the potential and immediate inconveniences caused by the change" was to be evaluated with the following question:

4.8 Do you sometimes find yourself avoiding or delaying changes, although you know that they will be beneficial for you in the future? Please explain your decision.

	CODES					
	STF_1	STF_2	STF_3	STF_4		
Respondent	short-term focus low	STF sometimes	Convenience (e.g. because of additional work or expenses)	Uncertainty (whether it will really be positive)		
1		Х		Х		
2	Х					
3		Х	Х			
4	Х					
5		Х		Х		
6	Х					
7	Х					
8		Х		Х		
9		Х	Х			
10	Х					
11		Х	Х			
12		Х	Х			
13		X*				
14		Х	Х			
15	Х					
16		Х		Х		
17	Х					
18		Х	Х			
19		Х	Х			
20	Х					
21		Х	Х			
22	Х					
23	Х					
24		X	X			
25		X		X		
Sum	10	15	9	5		

TABLE 4-28: SHORT-TERM FOCUS CODING MATRIX (MULTIPLE CODES POSSIBLE)

* other reason than convenience or uncertainty

The results show that 10 out of 25 clearly stated that they would not avoid or delay changes which they knew would be good for them. Two of these respondents, however, stated that a delay could be necessary for them in their role as supervisors regarding the right moment to inform subordinates, for example.

The other fifteen respondents stated that a delay of changes was possible for them either for convenience and/or uncertainty reasons. Convenience was mentioned in situations when they for example would need to learn something new or have some other kind of additional work in the first place, although knowing that it would be beneficial for them in the long run. Uncertainty was mentioned by five respondents who questioned the fact that you really know that a change will be beneficial for them. Sometimes this is not as clear as it might sound or they question the benefits and would thus be delaying the changes.

Interesting about this part of the interview is that none of the respondents said that they would actually "avoid" a change, they all emphasized that it would only be a "delay" of implementation.

Codes	Quotes
short-term focus low	Q1 : Rule. No 1, in order not to make yourself stressed work through the negative because otherwise you'll get a hassle which you do not need. (Respondent_10)
	Q2: No, definitely not. The problem is, after all that it is only a matter of time. (Respondent_22)
	Q3 : Basically, I don't postpone any changes, if things are necessary, then I implement them but well / in spite of everything you as a manager have some freedom of manoeuvre, on when the decision becomes effective. (Respondent_23)
short-term	Convenience:
focus – sometimes difficult	Q1 : Yes, that can be the case if you are too lazy and say, okay, I've always done it like this, I know how it works. Although, probably, I do this 10 times a week, I would save each time two minutes when I do it differently but I would have to stop once an hour to read how it works. One does it as it has always worked up until now and then.
due to	I: And pushes itself to the front or something like that.
convenience	B: Exactly. (Respondent_11)
(e.g. because of additional work or expenses)	Q2: B: Oh, but, well, I do think that I might still in that moment, what it might somehow mean that I need to do more or I must change myself so that it would be better overall, I still think, I'm sure I do that. (Respondent_18)
	Q3 : Yes, that's normal for me, yes. As with SAP, for example, there may be 25 000 procedures, which might be easier if I would learn them once. I: Yes, and you don't?
or	B: No, (Laughter) Because I hope that I can pull through it without.
	<i>I:</i> Okay. So although you know that it would be positive for you? <i>B:</i> Yes, probably, they would be positive for me because then I could do something faster, right? But I do not know exactly what I could do faster. All I see is that it works here and there and I see that it works. I prefer to ask someone then, because I do not need it as often, but if I would once learn it, I also could probably be faster
due to	myself. (Respondent_21)
uncertainty (whether it will really be positive)	Uncertainty: Q1: This is hard. Well, the first part of the question, I absolutely would answer with "yes". That's because I'm not entirely sure if this is really useful and positive. I think In the moment when you have this security, this is better. It is incredibly easy then to say: "then I do that", but just because it is not so, and no one, has the guarantee that that happens. (Respondent 16)

Codes	Quotes
	Q2: Yes, I would say, because one is certainly a creature of habit, I at any rate for sure. If you do not know what the future brings, even if it could be positive, it can be indeed after all somewhat be negative in that case one is too bogged down. (Respondent_8)

4.5.2.4 Locus of Control (LOC)

The factor of locus of control, defined as a "personal control" factor, reflecting the "source of control over events affecting them" (Rotter 1966; Lau and Woodman 1995) was determined through the following item:

4.10 Do you think that you have the main influence on what happens to you in the future or that you have rather little influence on this? Please explain.

Some respondents felt somehow uncomfortable to answer the question and had trouble to give a general answer to this question. Some further felt they needed to differentiate between their business life and their personal attitude.

The following codes were generated in the analysis:

TABLE 4-30.	LOCUS OF	CONTROL	CODING MATRIX	(MILTIPLE	CODES POSSIBLE)
TADLE 4-30.	LUCUSUI				CODES I OSSIBLEJ

		CODES	
	LOC_1	LOC_2	LOC_3
Respondent	LOC - restricted	locus of control high	LOC subject to personal commitment
1	Х		
2	Х		Х
3		Х	
4	Х		Х
5		Х	
6		Х	
7	Х		Х
8		Х	Х
9		Х	
10	Х		
11	Х		
12	Х		Х
13	Х		
14		Х	
15	Х		
16	X	X	
17	Х		
18		Х	
19	Х		

		CODES	
	LOC_1	LOC_2	LOC_3
Respondent	LOC - restricted	locus of control high	LOC subject to personal commitment
20	Х		
21	Х		Х
22	Х		Х
23		Х	Х
24	Х		
25		Х	
Sum	16	9	8

TABLE 4-31: LOCUS OF CONTROL (LOC): CODES AND QUOTES

Codes	Quotes
locus of control	Environmental Influence:
restricted e.g. due to environmental influences or destiny	Q1 : Yes. () I do not know now, I think it is a mixture of both. You can certainly specify a certain direction through any role changes and so on but you can, I imagine, not force, as sometimes if you now say, you want to somehow make a career, you have to be sometimes at the right time and at the right place and in the proper form to in some way put the right questions into the discussion, or something like that. So I say, one can certainly give a bit of direction in the right direction but ultimately you cannot force matters 100%, that you eventually become CEO of Daimler Chrysler, (). (Respondent_11)
	Q2: () generally I would say that I myself have the greatest influence on it. But about such things as the company going bankrupt or unpredictable things, I then have not such a great influence. (Respondent_2)
	Q3 : Now again a very clear answer comes: impact. If I were in a company with 500 employees in total, then I would tell you meekly: Yes, I have an influence on it. But in these big corporations and in these hierarchical levels, in which we find ourselves, you have no control. And even at the highest level you have no control. These big companies you have never influence on it. Since there are so many factors, starting with the works council, with the board, and with Daniel S. and what else As a consequence, I can you can have a small impact on your future, but you never know what the future will be. (Respondent_10)
	e.g. DESTINY
	 Q4: I: And on the whole? How would you see this question considering life in general? B: I can, concerning myself As I I always think positively. If you think positively, the positive will happen. But if something is bad, this all has a reason in life. That's how it is. It must be so that you missed the flight because it crashed. So it is. It is as it is. I: So somehow a certain feeling of destiny, that one does not know everything P: I'm pagaionate about motorwooling. and everyon above area ""

	motorcycling, dangerous", and so on and all that. And then I say: No. You just
	have to have healthy respect for it and if it is your D- Day, then I can also walk in
	the street or stay out in a storm, as it thunders, then it is your day! This is how I
	see it by now. (Respondent_10)
	05: And I've followed some biographies and destinies when I tell myself "what a
	poor bastard " really "who toils and strives and always gets a kick between the
	knees and comes back stumbling and really can do nothing about it " So there are
	hoth views. (Respondent 16)
	Q6: And you have changes / I mean, you, you are still young, yes, but whether
	that now affects children or things that happen that are not planned or
	unforeseen illness, only the devil knows, which, in other words, you can affect the
	future, to a certain extent, to the extent possible, that you say: Well, now I plan
	this or that, yes? But, for God's sake, do not rely on it. (Respondent_21)
locus of control	Q1: B: () I would say that I have a very big influence on what happens to me in
hiơh	the future, if not the biggest influence, because I alone am responsible for myself
	and nobody else. (Respondent_9)
	${\it Q2}$: Oh, well, I grew up with the slogan: Everyone forges his own fortune. And to
	a large extent I believe in it. (Respondent_16)
	Q3: Everything that happens to me, I can influence myself. Although this is not
	always positive, then - yes? - But if something does not suit me, I do not have to
	do it. So, this / these / I myself alone completely influence this, yes!
	(Respondent_20)
subject to	Q1 Yes, at work, I think, depending on your effort, you can become something.
personal	<i>There you may have more influence than in general life.</i> (<i>Respondent_12</i>)
commitment	
	Q2: I: And because you just said, regarding your job you would answer the
	question differently?
	<i>B:</i> Because you can influence the future through personal commitment and, yes,
	by pushing various things. That's right, yes. (Respondent_21)
	03. I think if you perform well then one becomes essentially vested in the
	position and really appreciated and one always hopes to be really appreciated
	although one never exactly knows () (Respondent 22)
	uniougn one never exactly knows (). (Respondent_22)

16 out of 25 relativized their personal locus of control with environmental influence factors which they felt could influence their lives without their own power to change this. As the quotes reveal such environmental factors could be organisational size, economic developments, luck and others. Some further linked the questions to topics of disease or death and thus relativized their answers in this respect. Those people mentioned the topic of destiny and fate as a component which they also believed in. Still, nine respondents generally reported a high locus of control and eight felt that personal commitment would positively influence their personal level of control.

4.5.2.5 Risk Aversion (Job Security) (RA)

The author did not include a general question regarding risk aversion in the questionnaire; however, the topic of Job Security was included in order to evaluate the risk aversion tendency in respect to this topic. The underlying item is the following:

4.11 Which role does job security play for you? How strongly does the assurance of your job determine your decisions in your daily work?

The majority of the respondents display a high aversion of the risk to lose their jobs. Some, however, emphasize that risk aversion is mainly high in the job decision phase and not for everyday decisions. Some further specified the reason for their rather high risk aversion as being subject to their individual status (married, family, single, etc.) or to environmental factors. Only four respondents reported a low risk aversion and argued with high confidence to find a new job. Due to low disparity among the respondents this factor was not integrated into the further qualitative analysis.

	CODES				
	RA_1	RA_2	RA_3	RA_4	
Respondent	Job risk aversion high	risk aversion high due to family or environmental factors	High in job decision phase. not for everyday decisions	risk aversion low due to confidence to find new job	
1		Х	Х		
2	Х				
3	Х				
4		Х		Х	
5	Х				
6		Х		Х	
7	Х				
8			Х		
9	Х		Х		
10		Х			
11				Х	
12	Х				
13	Х				
14	Х	Х	Х	Х	
15		Х			
16	Х	Х			
17	Х	Х			
18			Х		
19		Х	Х		
20		X	Х		
21	X				

 TABLE 4-32: RISK AVERSION CODING MATRIX (MULTIPLE CODES POSSIBLE)

	CODES			
	RA_1	RA_2	RA_3	RA_4
Respondent	Job risk aversion high	risk aversion high due to family or environmental factors	High in job decision phase. not for everyday decisions	risk aversion low due to confidence to find new job
22	Х			
23	Х	Х	Х	
24	Х			
25				Х
Sum	14	11	8	5

TABLE 4-33: RISK AVERSION (RA): CODES AND QUOTES

Codes	Quotes
job risk aversion	Q1 : In the job, no, probably not, I'm willing to take risks, but rather not the decision in everyday work, but in the way in which I work. It affects the whole that
high	is the difference for me. I weigh up further reports, but I still monitor my daily work, so as not to give my employer reasons for complaints. I watch out that I stay on budget, I make sure that we are fully utilised, I simply take care that I manage my operations properly, that there are few complaints about me, I'm keeping to my appointment charges, the parameters that I create for me to secure my own job. (Respondent_23)
	Q2 : B: Yes. That's already the case (), I must say that it has influenced me greatly. () And, that I have a permanent contract, which I got directly. That is for me to get out of the probationary period and that is already very good, I must say. Others don't have it like this.
	And that's also a little bit, what I always think about which is that I also need naturally to be careful, and that I can actually be happy with it, right? () And / I: So I'm hearing now that the issue of job security somehow does determine as you maybe behave in your workplace, and how you behave or make decisions () So, does this have a high priority for you?
	B: Yes, job security has a very high, a very high priority for me. I have investments, car and stuff. So (), yes, it is very important. I: Okay
	B: At the end, that is always the most important issue – I would almost say – in all decisions. When it is always the case that it is playing in your head, then there is always the point to which I arrive, where I say, well (), I should be satisfied for a start. (Respondent_3)
	Q3: Well, this plays a big role for me. For me this is one of the most important issues concerning my job. () So, I secure myself already. I would not say anything now, say anything aloud in the company or as is said on my own when it comes to prices or something, so I do secure myself. But I have not such a great field of competence, that something could endanger me. (Respondent_7)
	Q4: B: () As I am single, to me the job security is very important. Although I have a very good family network that would support me, if yes, something unforeseen related to the job would happen to me, but basically I'm really a security-minded person. (Respondent_23)

Codes	Quotes
risk aversion	Family:
high due to	Q1: B: Well, at the moment a great (aversion), because I'm the single earner for
family or	my family and I have two school-age children and a husband who is unable to
environment	work. So far this is essential. It would be really something else, if my children had
al factors	their own careers.
	1: Sure, sure. And now much does this idea - the thought of job security - determine decisions in your everyday work?
	B: (Sighs) Well of course it affects specific issues to say: "Am I performing this
	<i>job?"</i> , Thus: "What decisions do I make?" (Respondent 16)
	Q2: B: That's a question of stage of life. So during my studies, it was very
	differently, but when one is married and has children and so on, yes, the values
	change a little. And one takes decisions differently from 10 or 20 years ago.
	I: () Because you look for more security?
	B: Yes, of course.
	R. That would be the main criterion security for the sake of the children
	(Respondent 1)
	Environmental Factors:
	Q4: B: Here is the example of the role of job security. As job security after a
	certain age becomes an issue, since the stupidity - I do not understand this world
	today – is that around the age of 50 one belongs to the scrap heap. This is the
	<i>Reuson. And that's the real reason. Although I would now not see myself like this.</i> <i>But other issues:</i> () So it is only made a subject by the community. But that's the
	only reason. If that wasn't so, if the community was not like this, that you – as far
	as I know – in the early to mid-50s belong to the scrap heap, the subject of job
	security would be a matter of indifference to me. (Respondent_10)
	Q5: B: Yes, that's the problem. 20 years ago I would have said, it does not matter
	to me, but eventually it will be even difficult to find a new job, although I do not
	believe, that I would have a problem in our market. But with increasing age, you think about it or at least it comes to mind at hit more. Ves. (Respondent 20)
high in ich	O1 : B: Yas yas sural But I'm thinking about it quite often So although I might
lligh in job decision	have even objectively considered a relatively safe job. I think I could still somehow
	manage to lose it or see the danger of that / I mean / Well, how does that affect my
phase not for	choices? In the daily content of the work less because I am less affected by it, so I
every-day	do not do now something especially substantial because I think otherwise I lose my
decisions	job! That's probably not the case! Nevertheless, I am concerned about risk and loss
	of job and so on, yes! (Respondent_14)
	Ω^2 : B: So my decisions in everyday working life, it does not affect at all, but the
	fundamental decision about what kind of company I go to, it has already affected.
	simply because I have had several companies now. I was in small agencies,
	advertising agencies, and have noticed how quickly people are there simply
	dismissed, as the jobs are insecure and also in larger companies. And therefore I'm
	rather security-oriented, and go rather for larger companies. (Respondent_18)
	03: B: In my daily operations not, on personal development, where you could say
	now I try sometime within the organisation something completely different and
	jump somewhere else – among those major decisions – it certainly has an
	influence. (Respondent_19)

Codes	Quotes
risk aversion low due to confidence to find new job	Q1: It depends on the job, but actually I'm quite relaxed. I think right now I'm at an age, I have no family, and I'm still relatively young. Even if the job loss would come, I had quite a few possibilities. So I am at the moment relatively relaxed about that. (Respondent_4)
	Q2: Otherwise, I just think sometimes, if it doesn't work, then I'll find something else. I already look around if there is something possible to establish a second mainstay with a certain number of hours in the week to have also something else. (Respondent_25)

4.5.2.6 Emotional Reaction (ER)

The factor emotional reaction, defined as covering "*people's feelings and emotions in the context of imposed change*" (Oreg 2003) was determined with the following question:

4.7 How do you usually react when plans are being changed or if things don't go according to plans?

The answers reveal that approximately 50% (12/25) of the respondents relate a change of plans to some kind of stress or tension. It should however be differentiated between people who feel generally stressed about changes of plans (only a minority of the respondents) and those who are rather frustrated or upset when plans stagnate or change for the worse. Some respondents also stated that there is only a short moment of stress in case of negative changes but that they were able to deal with them well after that and they were able to move on and are open for changes. 16 out of 25 respondents report that they are generally open for changes or emphasized that their primary aim in such a situation is the search for a resolution of potential problems or changes. Seven respondents stated that they generally did not care about changes of plans and another six even stated that a change of plans was everyday life to them.

The coding examples reveal the kind of stress reported and give insights into the different groups of respondents.

	CODES								
	ER_1	ER_2	ER_3	ER_4	ER_5	ER_6			
Respondent	feeling some kind of stress when plans change	open for changing plans	depends on condition of change	plans change is everyday life	trying to look ahead	short moment of stress only			
1		Х			Х				
2		Х				Х			
3	Х								
4	Х	Х							
5		Х							
6				Х	Х				
7	Х					Х			
8		Х				Х			
9	Х	Х							
10				Х	Х				
11				Х					
12		Х							
13		Х							
14	Х		Х						
15									
16	X		Х	Х					
17		Х		Х					
18	X	Х	Х						
19	X	Х		Х	Х				
20	X	Х	Х						
21	X	Х							
22		Х	Х						
23		Х							
24	X								
25	Х	Х	Х		Х				
Sum	12	16	6	6	5	3			

TABLE 4-34: EMOTIONAL REACTION CODING MATRIX (MULTIPLE CODES POSSIBLE)

TABLE 4-35: EMOTIONAL REACTION (ER): CODES AND QUOTES

Code	Quotes
feeling some	${\it Q1}$: There may also be times, of course, when you just become upset. Well, I
kind of tension	believe I am more like the case of the type who is outwardly rather calm and
when plans	agitated inside. (Respondent_14)
change	Q2: There are of course situations when you really think that it should have worked this way but doesn't, then this is a situation where you get into great stress and then you must consider how the matter can then develop. (Respondent_21)
open for	Q1: Well, generally, I find it rather easy because () - yes - because, I am open
changing plans	to new things and when now changes are pending, then I just do it and make the best out of it. (Respondent_12)
	Q2 : B: Then I try to make the best out of it! Any / no Idea / alternative plans, somehow /

Code	Quotes
	I: Does that stress you out?
	B: I'm almost always relatively relaxed, I respond to all things one after another
	as it comes and then it works sometime, somehow. (Respondent_5)
	Q3: I am trying to gather myself and try to consider briefly in quiet, what
	alternative plan I could pursue now. (Respondent_23)
depends on	Q1 : Well, in that case one has to decide. Thus, now if anything gets out of control, where absolutely no one, has an influence on it, then it's no pucklem
conditions of	control, where absolutely no one, has an injutence on it, then it's no problem.
change	develop quite rapidly new ideas. But if a plan that is specified is simply not
	implemented, for any reason whatsoever, then I think that is absolutely wrong.
	(Respondent 20)
	Q2: Well, to changes from my side or in consultation with me, I'm always really
	receptive but without my own consent, without me being able to say anything at
	all, I would have my difficulties. (Respondent_25)
plans change is	${\it Q1}$: Nothing results if we forge here giant plans that actually result anyway in
everyday life	nothing. I would say, that for me this is just quite normal that it does not work
	out. (Respondent_11)
	Q2: I think this is everyday life. Well, that a plan is a plan that is implemented
	from A to Z is – that is something I ve never experienced before.
	(Kespondent_10)
	03 . But this really doesn't bother me at all because - the change itself has
	become a routine matter. We'll get just every-day something entirely new and
	depending on whom I've just got around me, I do accept it and say "here's the
	new plan". (Respondent_6)
trying to look	Q1 : So basically, if I make a plan, then I examine what has already happened
ahead	before, what do I do if the plan does not work out as it should, because then I
	cannot be surprised or shocked, and I fall into no hole when it just does not go
	according to plan, but then I already know, what can I do in that eventuality.
	(Respondent_25)
	Ω . If this is do not run according to plan plan magning now self set and then
	62 . If things do not run according to plan, plan meaning now self-set goal, then it is really so that things do not suddenly stop running as planned, but that it is
	clearly seen and you have to, before anything, speak about it () to analyse what
	is going on and as soon as possible. (Respondent 1)
	${\it Q3:}$. I try quite often when I have some plans, have bigger plans, to always
	consider what happens when and where and to deal with the contingencies
	already in advance and to think about them. So to think ahead a little bit.
	(Respondent_10)
short moment	Q1 : I am worried for myself briefly and then respond to it. (Respondent_2)
of stress only	02. After a brief memory of names I'm adaptable
	Q2: After a brief moment of panic, 1 m adaptable.
	(Respondent_o)
	03 : Rather initially stressed and (\dots) / What do you call that? Not overwhelmed
	but initially somehow annoyed, because you had kind of a plan for yourself.
	Anyway, initially negative, initially a little bit stressed out, sort of annoved.
	indeed. (Respondent_7)

4.5.2.7 Cognitive Rigidity (CR)

The factor of cognitive rigidity, addressing the ease and frequency with which an individual is willing to adapt to a new situation (Oreg 2003), was evaluated with the following question:

4.9 Do you change your mind rather quickly or rather not so easy? Please explain.

The answers reveal that most respondents felt very insecure about this question. 13 out of 25 respondents felt that "*it depended*" and eleven stated that they needed to be convinced with good argument in order to change their mind. Nine tended to be rather high in cognitive rigidity (low tendency to change one's mind) and six tended to be rather low in cognitive rigidity. The answers reveal that the question seems insufficiently applicable to be able to give a clear picture of the respondent's personality and attitude.

Furthermore the answers were very much influenced by the changes that they personally had in mind in the very moment when the question was asked, partly influenced by the discussion in the former part of the interview. This question is thus evaluated as somehow problematic. The following table gives an overview over the relevant codes for this data part. None of these was however used for the assessment of overall IDP due to the detected problematic issues.

	CODES							
	CR_1	CR_2	CR_3	CR_4				
Respondent	it depends	need to be convinced	cognitive rigidity high	cognitive rigidity rather low				
1				Х				
2	Х							
3		Х		Х				
4		Х	Х					
5	Х							
6		Х	Х					
7		Х	Х					
8			Х					
9			Х					
10	Х							
11								
12	Х	X						
13			Х					

TABLE 4-36: COGNITIVE RIGIDITY CODING MATRIX (MULTIPLE CODES POSSIBLE)

	CODES							
	CR_1	CR_2	CR_3	CR_4				
Respondent	it depends	need to be convinced	cognitive rigidity high	cognitive rigidity rather low				
14	Х	Х						
15			Х					
16	Х		Х					
17	Х	Х		Х				
18	Х							
19				Х				
20	Х			Х				
21		Х	Х					
22	Х	Х						
23	Х	Х		Х				
24	X							
25	X	Х						
Sum	13	11	9	6				

TABLE 4-37: COGNITIVE RIGIDITY (CR): CODES AND QUOTES

Codes	Quotes
it depends	Q1 : This is a really great answer that I give you now: Yes and no. I cannot say one way or the other. There are matters where I say yep. Since I change my mind very quickly, but there are things where I say probably no. It all depends on which gives the greatest blood pressure or things like that. There are issues, as I say that for me -as a good Swabian – that really annoy me, whether it chases around or is around, I do not care . And there are issues where I say that is important or important for the department, for which I fight immediately? " (Respondent_10)
	Q2 : () Well, I quickly change my mind if I understand that this is definitely useful. It is difficult for me to change my mind if do not see any sense in it and that only one decides or any other department or whatever, to gain an advantage from it, to the disadvantage of our department, or the area where I work, then I have my difficulties and, of course, try to block it. (Respondent_22)
need to be convinced	Q1 : Well, not so fast, but I can be convinced of a different opinion. That definitely. But, only if there is some real foundation and there are good arguments in favour. So if I now decide something, and then someone says no, that is worthless. Then he has to justify and even convince me that his methodology is much better, or if it can be demonstrated. (Respondent_12)
	Q2 : I can change my mind very quickly when my staff give a reason for a different method or show a good alternative way to me, then I leave the matter to go down that route. (Respondent_23)
	Q3 : () When $I / if it / no$, I do not normally change my mind. It can be if I am convinced of the matter and I actually understand it. I cannot be persuaded with rhetoric, but I want to really understand. (Respondent_6)

Codes	Quotes
cognitive rigidity high	Q1 : Not so easy, because, yes, perhaps to the regret of my superiors and colleagues, because I then / well I always try to professionally tackle matters and simply just try to get the best for my clients and if I simply see, that there could be or should be changes to be made that are simply to the disadvantage of my clients then I can argue very long and hard, but technically and there some who lose their nerve because they run out of arguments, yes? It does not happen so easily that I change my mind. But it happens. (laughs) (Respondent_9)
	 Q2: B: Not so easy. I: Why or for what reason? B: Because I am unfortunately, like that I may sometimes take decisions too fast or commit to a certain opinion. Yes. () And that's why I find it sometimes difficult to change my mind. So if I have an opinion, then I mostly keep to it, but I allow myself to be convinced, but it's not like I'm like a little flag in the wind. (Respondent_7)
cognitive rigidity rather low	 <i>Q1:</i> B: Unfortunately, often too fast. <i>I:</i> Okay. How come, or () can you justify that? B: Yes, because I am often too fast, as I just said, quickly forming an opinion and then maintaining it to the end often then afterwards establishing in retrospect, that there is one thing or another you indeed had not considered here. I: So it is not hard for you to say then: "oh, we have to do things differently from what I previously thought?" B: Nope, I don't find it hard. I: There are people who say "No, I've decided that way and then nothing goes in and out." B: These people exist, yes. And I respect these people as well because they have also their strengths as a result. Because sometimes stubbornness is sometimes not wrong, sometimes stopping and really working through the matter. But I do not count myself among these people. (Respondent_1) Q2: B: () A boss, not my present one, the previous boss always said, had seen this as my strength, to challenge that and not to block everything immediately and listen to what the others want. I have a colleague who, who approaches things really quickly and determines an opinion and then. ()
	B: Rather easy, yes. You have to be certain and again convincing, knowing the arguments somewhere along the line and then trying it. (Respondent_19)

4.5.2.8 Assessment of Individual Dynamic Preference (IDP)

The qualitative assessment of the overall IDP is conducted by selecting all codes which point strongly on low IDP scores and all those which point clearly on high IDP scores. The amount of codes were counted and added to be used for the IDP classification of the 25 respondents (magnitude coding).

Respondent	tension	LOC - restricted	prefer routine	SEC - difficult sometimes	STF - sometimes	PJ-Fit: planability / struc. frame*	SUM IDP LOW
1		Х			Х		2
2		Х		Х			2
3	Х				Х		2
4	Х	Х					2
5			Х	Х	X	Х	4
6							0
7	Х	Х	Х			Х	4
8			Х	Х	X	Х	4
9	Х				X		2
10		X					1
11		Х			X		2
12		Х			X		2
13		Х			X		2
14	Х				X		2
15		Х	Х				2
16	Х	Х			X		3
17		Х					1
18	Х				X		2
19	Х	X			X		3
20	Х	X					2
21	Х	Х			X		3
22		Х					1
23			Х	Х		Х	3
24	Х	Х		X	X		4
25	Х				X		2
	12	16	5	5	15	4	

TABLE 4-38: IDP: LOW SCORES

* this factor / code was drawn from item 2.2

TABLE 4-39: IDP: HIGH SCORES

Respondent	plans change – every-day	LOC high	prefer surprise	SEC easy	STF low	fewer admin or routine tasks (WOC)*	SUM IDP HIGH
1				Х			1
2			Х		Х		2
3		Х		Х			2
4				Х	Х		2
5		Х					1
6	Х	Х	Х	Х	Х		5
7					Х		1
8		Х					1
9		Х	Х	Х			3
10	Х		Х	Х	Х		4
11	Х		Х			Х	3
12				Х			1

Respondent	plans change – every-day	LOC high	prefer surprise	SEC easy	STF low	fewer admin or routine tasks (WOC)*	SUM IDP HIGH
13			Х	Х			2
14		Х					1
15					Х		1
16	Х		Х			Х	3
17	Х		Х	Х	Х		4
18		Х		Х			2
19	Х			Х			2
20			Х	Х	Х		3
21			Х	Х		Х	3
22				Х	Х		2
23		Х			Х		2
24							0
25		Х		Х			2
	6	9	10	15	10	3	
* this factor / and	waa duaw	n from itor	m 2 Q				

* this factor / code was drawn from item 3.8

The enumeration of the codes is then analysed for its distribution among the sample assuming a normal distribution. Each respondent could then be classified into one of four groups of low as well as high IDP scores and also for overall IDP.

TABLE 4-40: ID	P LOW -	DISTRIBUTION	AMONG SAMPLE

LOW ≤ 1.258	MEDIUM < MEAN	MEAN	MEDIUM > MEAN	HIGH ≥ 3.301
Respondent 6	Respondent 1		Respondent 16	Respondent 5
Respondent 10	Respondent 2		Respondent 19	Respondent 7
Respondent 17	Respondent 3		Respondent 21	Respondent 8
Respondent 22	Respondent 4		Respondent 23	Respondent 24
	Respondent 9			
	Respondent 11	80		
	Respondent 12	28		
	Respondent 13			
	Respondent 14			
	Respondent 15			
	Respondent 18			
	Respondent 20			
	Respondent 25			
4 respondents	13 respondents		4 respondents	4 respondents

LOW ≤ 0.954	MEDIUM < MEAN	MEAN	MEDIUM > MEAN	HIGH ≥ 3.286
Respondent 24	Respondent 1		Respondent 9	Respondent 6
	Respondent 2		Respondent 11	Respondent 10
	Respondent 3		Respondent 16	Respondent 17
	Respondent 4		Respondent 20	
	Respondent 5		Respondent 21	
	Respondent 7			
	Respondent 8			
	Respondent 12	120		
	Respondent 13	5.		
	Respondent 14			
	Respondent 15			
	Respondent 18			
	Respondent 19			
	Respondent 22			
	Respondent 23			
	Respondent 25			
1 respondent	16 respondents		5 respondents	3 respondents

TABLE 4-41: IDP HIGH - DISTRIBUTION AMONG SAMPLE



FIGURE 4-9: NORMAL DISTRIBUTION OF OVERALL IDP (QUAL. ASSESSMENT)

TABLE 4-42: IDP DISTRIBUTION AMONG SAMPLE

LOW ≤ -2.153	MEDIUM < MEAN	MEAN	MEDIUM > MEAN	HIGH ≥1.833
Respondent 5	Respondent 1		Respondent 2	Respondent 6
Respondent 7	Respondent 12		Respondent 3	Respondent 10
Respondent 8	Respondent 14		Respondent 4	Respondent 17
Respondent 24	Respondent 15		Respondent 9	
	Respondent 19		Respondent 11	
	Respondent 23	16	Respondent 13	
		0	Respondent 16	
			Respondent 18	
			Respondent 20	
			Respondent 21	
			Respondent 22	
			Respondent 25	
4 respondents	6 respondents		12 respondents	3 respondents
This calculation / grouping will later be used to determine the PD-Fit of the respondents by relating it to their reported WED level.

4.5.2.9 Competence for Change

The topic of competence for change is covered by the following item in the study:

4.5 Which abilities do you consider to be important to deal well with changes? How would you judge your personal abilities to deal with changes?

The answers reveal a manifold variety of competences considered to be important for dealing with change. Multiple answers were possible and common. Three key topics turn out being considered as most important:

- openness
- flexibility
- thinking positively

TABLE 4-43: COMPETENCES CODING MATRIX (MULTIPLE CODING POSSIBLE)

	CODES						
	CC_1	CC_2	CC_3	CC_4	CC_5		
Respondent	Openness	flexibility	thinking positively	leadership competence	ability to see the whole picture		
1	Х		Х				
2		Х					
3					Х		
4		Х					
5	Х		Х				
6		Х	Х	Х			
7	Х	Х					
8	Х		Х				
9	Х						
10			Х				
11	Х						
12	Х	Х					
13	Х		Х				
14	Х						
15	Х						
16				X	X		
17			Х				
18	X		Х				
19	X	X			X		

	CODES					
	CC_1	CC_2	CC_3	CC_4	CC_5	
Respondent	Openness	flexibility	thinking positively	leadership competence	ability to see the whole picture	
20		Х		Х		
21	Х		Х			
22		Х				
23		Х	Х	Х	Х	
24	Х	Х	Х	Х		
25	Х	Х				
Sum	15	11	11	5	4	

TABLE 4-44: CHANGE COMPETENCE: CODES AND QUOTES

Codes	Quotes
openness	Q1: Openness I think is important () I must be open to accept the changes,
	which is surely not always completely easy, and yes, if a change comes about, you
	have to still get used to something, and to feel comfortable about it and then
	comes a big change. I must, indeed, just accept this and also cannot always stick
	to the old. And then, I think, it is undoubtedly easier. (Respondent_9)
	Q2: B: () Well, I would imagine it is just general somehow to be open to new
	ideas. So, at first, somehow also a willingness to learn, that you say okay, now
	I've just always done things from left to right and when it is now decided that the
	world should read from right to left, then although it stinks for me to a certain
	degree, I maybe must make friends with it (laughs). (Respondent_11)
	Q3: Basically, initially to be open, openness and not to make a quick assessment,
	too fast. Initially to let things happens, to be curious and not to depreciate
	immediately. (Respondent_1)
flexibility	Q1: Flexibility, absolutely. I can say nothing else about this. If you do not react
	flexibly to different situations, you cannot deal with change. Then you have a
	huge problem with it, right? I even see it in the circle of friends and colleagues. If
	someone is flexible, he is actually quite relaxed with change and if one has a rigid
	structure, he has extreme difficulties with it, indeed. (Respondent_20)
	Q2: Well, I would say, that it is most important to be flexible, and also in dealing
	with the implementation of any programs or whatever. So simply, if whoever no
	longer proceeds down a road as before, not just to say it is now not working any
	more, to shout at the boss and to see that you get back the way as you had it, but
	rather to see whether one can find a new path that leads to the same destination
	just in a different way. (Respondent_22)
thinking	Q1: Well, not seeking out the negative behind every change, but to think
positive	positively. The glass is half full. That's what comes to my mind spontaneously.
	(Respondent_21)
	Q2: The most important thing you need is a happy / no, a peaceful mind. You
	have to restrain the emotions, but be not emotion-free. You have to be able to
	control yourself and must always think / yes, to see the opportunities in the

Codes	Quotes
	change. And that moment when you say, "oh, now what is changing and what happens now?" and if you are pessimistic about it, I get down. (Respondent_6)
	Q3 : One's own abilities must be, that you simply, as is said, think positive, that you trust yourself and what you decide, also to stand by it. And through these changes, yes also supporting the changes. (Respondent_10)
leadership	Q1: Changes have also to do with, in our area at least, in the social sector,
competence	changes are in their manner always coupled to a lot of people. I can approach people well, convince people and encourage them, so personnel management is a strength of mine. (Respondent_23)
	Q2 : You must be very sensitive, because 90% of staff absolutely cannot deal with changes, you must be able to catch them in. (Respondent_6)
	Q3: () and that I can also communicate that to others, how things fit together, and how that might proceed. (Respondent_16)
ability to see	Q1: Well, in German I don't think we have a word for it. In English, that would be
the whole	called, one would say "Savvy". So, I think a basic competence is a high degree of tolerance of ambiguity to be able to andure in situations where one has only
picture	individual elements, and things that disturb one, to see the big picture, and to see
	patterns, and to place them in a picture - I think: this is my particular strength
	and I can also communicate to others how things fit together, and how that might proceed
	<i>I: Seeing the whole picture?</i>
	B: Also to have the imagination for this. (Respondent_16)
	Q2: B: Basically, to have the inner attitude to it () to be ready to move again to another position. Why does the change head my way and what are the needs of the entire organisation or department or for whom so ever and what is to my disadvantage. More work, to reschedule my day again completely or to completely again jump away from the work I'm doing, and again incorporate what is new. I think that's the most important thing. (Respondent_19)
	Q3: () Well, an important capability is that you manage to create a little bit, so to speak, to see the situation from a bird's eye view and now your personal () expectations, to let your personal expectations stay a bit to the outside and simply to analyse the overall situation. Basically any situation anywhere is justified by something or any change is also justified somewhere (), right? So from there I would say that is an important skill just that you can, that you can make sure that you regard yourself or the situation as neutral. (Respondent_3)

Interestingly, all of the respondents rated themselves as incumbents of those specific competences which they mentioned as most important. Intentionally this item was to be used for IDP classification as well but due to the fact that all respondents considered themselves as incumbents of the relevant competences the questions were not used for the IDP classifications and are thus covered at the end of this chapter.

4.5.2.1 Evaluation of Overall Change Experience by the Respondents

The respondents were further asked to evaluate their change experiences so far:

4.2 How would you describe your experience with change in general (rather positive or rather negative)? Which feelings do you connect to changes?

Very interestingly all 25 respondents answered that their overall experience was rather positive. Seven even explicitly mentioned that they equalled change with chance which emphasized their positive view about changes in general.

Only six respondents mentioned some negative experiences or negative feelings about changes at all.

TABLE 4-45: EXPERIENCE EVALUATION CODING

	Sources
overall experience rather positive	25
change = chance	7
also some negative experiences / feelings	6

Intentionally this item was to be used to gain further insights into the Dynamic Preferences of the respondents but due to the low divergence the data is not included in this part of the analysis but can be used as an additional code to determine WED.

4.5.3 Environmental Dynamic (WED)

4.5.3.1 Small every-day changes

In part 4 of the data collection phase the respondents were asked to openly answer the following question regarding their experience with change:

4.1 When you think of your daily work: which kind of small changes occur there and what do these changes mean to you? (How do you feel about them?)

The analysis of the 25 answers to this question reveals that there are certain themes which arise frequently and that it is possible to draw conclusions from these answers about the dynamic in the specific work environments.

Regarding the item about "small changes in daily work" the following themes have come up:

_	CODES					
Respondent	change of people	change of tasks, processes and requirements	increased controlling	additional work (on top)	very few changes	other
1		Х				
2	Х	Х		Х		
3				Х		
4				Х		
5	Х				Х	
6	X		Х			Х
7	Х				Х	
8	X				Х	
9			Х			
10						X
11	Х	X	Х			
12	X					
13			Х	Х		
14		Х	Х	X		
15		X				
16						X
17	X	X				
18	X	X				
19		X	X	X		
20						X
21		X				
22			X			
23	X	Х				
24	X					X
25					2	
Sum	11	11	7	6	3	5

TABLE 4-46: SMALL EVERY-DAY CHANGES - OVERVIEW

A "change of people" in terms of colleagues, customers or contacts is thus the most frequent change that the respondents need to deal with in their daily work. Eleven people reported of this kind of change. This is also the case for "change of tasks, processes and requirements" with eleven respondents. Seven out of the 25 respondents further reported of additional work which occurs frequently and creates change of the daily plans. An increased amount of controlling, either through supervisors or in form of new regulations, requirements or additional request is also named very often (6). Three people stressed that daily changes were rather unusual and that their daily routines were very clear. Besides these examples people reported of other change types such as "dealing with colleagues or customers' moods", "short-term plan changes" or else.

TABLE 4-47: SMALL CHANGES: CODES AND QUOTES

Codes	Quotes
change of	Q1 : What is, of course, constantly changing for us, I would say, are contact
people	persons, we are established in certain segments and people change as a matter of
-	course. So once someone goes, as now with us, someone retires, someone comes
	who is new to the matter, someone changes department, there are new contacts, such stories. (Respondent 11)
	${\it Q2}$: () due to the fact that we are in the renewable energy industry, we have
	relatively frequent turnover among the people. That is, a coming and going of
	employees. (Respondent_1 7)
	O3: () I've always different contacts, different teammates – teammates in the
	projects. (Respondent_18)
change of	Q1: Then, of course, often the environment changes during our projects. Such a
tasks,	project runs often a bit longer and you start off with some things and just before
processes or	the order, especially, then everything changes again and again then you can
requirements	<i>throw everything overboard, such stories.</i> (Kesponaeni_11)
-	Q2: Well, () what just changes once in a while, are just – what are they now
	called? – Policies or guidelines?
	Yes. That is – I do not know – consumer protection or food basic law or whatever
	it's called, and of course we would have to change everything from the entire
	analysis and evidence and everyining again men. And it is often me case, mu there is such movement within and then you have to watch out of course that still
	manage your things (Respondent_15)
	Q3: Small changes. Sometimes changes in the scope of work that are new sub-
	areas are added or tasks areas are dropped. (Respondent_1)
increased	Q1: What I sometimes find a bit stressful too, I would say, perhaps, is the topic of the large company business, where you just run for every fart as they say in
controlling	German from pillar to post and ask for permission from thousands of people.
	Something I would hope for, something a bit smaller and more dynamic.
	(Respondent_11)
	O2 . Ver momentations is constructed more and more. It occurs to ma have () more
	<i>Q2:</i> Yes, everything is controlled more and more. It occurs to me here () more and more controlling is undertaken. So it's actually no more about a development
	process, or getting things moving, it's that everyone is only controlling in the job.
	Additional things just keep coming. I would just say, these are the smaller
	changes. (Respondent_13)
additional	Q1: B: Yes and no, that is somewhere I can see the sense, that is right now, for
work (on top)	example, project management, requirements, and procedures. Inere are of course very useful topics which are good in theory, and also require quality in a sense
	but on the other hand, they burden you, because one has this extra effort and the
	time is not granted in principle, so that comes on top of everything /
	I: That means it is not mere change, where you have just one more effort to - I
	would say - to learn the new processes, new procedures, but is it permanently
	extra work?
	B: Yes, it's both. So in the beginning you have to overcome such a learning curve and if you have once introduced it it is easier but it's still extra work
	(Respondent 14)

Quotes
Q2: B: Well, the duties generally changed over time, because first I just came from university with an internship and initially many things had to be learnt and more and more areas of responsibility were added. For example, the coordination layout of the packaging: this was originally coordinated with the advertising agency and now I do it myself. And the advertising agency does not do anything anymore. Or for example if it is the press: now I write a lot of press releases myself. I just have more responsibility, so I can decide myself. I: So that means that you have got more responsibility, but also got more work overall? B: Yes. I: It has become more? B: Yes. I: And has anything fallen away? B: No. (Respondent_2)
Q3: Well I have a specific scheme that I apply, because one has many tasks and I categorize them a bit. I have tasks which I have to do in any case, and in between small tasks come in, which are incredibly urgent, and if they really are important, then, (), it often happens that I know that I must leave something I am working on, because I have to do something very quickly. (Respondent_3)
 Q1: B: Prices change or the economic situation/ I: And do the processes or other issues change for example? B: Yes, due to the SAP-Introduction, but that was rather a large change. I: and in your daily work? Do things sometimes run different than expected? B: We have new suppliers here and then, which are added, or others which are blocked, but besides that everything is pretty much the same every-day. (Respondent_5)
 Q2: B: Well, the daily procedures do not change very much. But I don't think this is a negative thing. Small changes occur for example when trainees change, which I supervise or when external visitors come in or wage negotiations, or else. And small changes, what kind of small changes? I: Does for example anything change in your work processes or tasks? B: The daily process is not the same in terms of order, but the tasks remain the same. (Respondent_7) Q3: B: The problem is that actually nothing changes? I: Okay, so everything is very routinized or how would you describe it?

Regarding the sub-question of how they felt about these daily changes 15 out of 25 evaluated their reported changes as normal and eight even said that planning the day was not possible. Only seven stated that they were able to plan well throughout the day.

TABLE 4-48: FURTHER CODES ON EVERY-DAY CHANGES EVALUATION

	CODES				
Respondent	daily changes are normal	day planning possible	not possible to plan the day		
1					
2					
3	Х				
4	Х		Х		
5		X			
6			Х		
7		X			
8		X			
9	Х				
10	X		Х		
11					
12	Х				
13	Х				
14	Х				
15		Х			
16	Х		Х		
17	Х		Х		
18		Х			
19	X		Х		
20	Х		Х		
21	X		Х		
22					
23	Х				
24	X				
25	X	Х			
Sum	15	6	8		

The following quotes give insights into these codes.

TABLE	4_49.	SMALL	CHANGES.	CODES	AND	OUOTES
I ADLL	T-T/.	SMALL	CHAIGES.	CODES		QUUILD

Codes	Quotes
daily changes are normal	Q1 : Typical small changes: that the phone rings or an e-mail comes and from one day to the next you must focus on something new. And someone needs something, immediately, or is stuck somewhere, and it must be immediate. These kind of topics – changes is "toujours" for me () For me, if you try to plan a day like – "I do this and that today" – forget it! (Respondent_10)
	Q2: This is normal. So that, indeed one always moves appointments, that subjects move, that additional priorities come in, that decisions have to be taken, to change times of study, seminar rooms, learning content – this is basically day to day business. To say that the systems do not function, that special questions arise, to say: "How is this actually so and so?" (Respondent_16) Q3: In fact, every-day is different from the one you have planned in the morning.

Codes	Quotes
	For example, 2 to 3 people are on vacation and you arrive in the morning. Usually I'm always thinking on the road to work or the day before about what I plan to be doing the next day, then you arrive and then something does not fit. Then you begin: you have to spend two hours to find the mistakes, which are the reason for it not going as planned. So that's normal. For me it is absolutely normal. The day usually looks different from the one I've planned in advance. (Respondent_4)
day planning	Q1: Yes, it is good, then I sort out, what I do, and keep to plans - I would say and
possible	then I – well – I know roughly when I get home and so on. (Respondent_15)
	Q2 : No, because those are more tactical, strategic projects and of operational nature, so I can plan quite well. (Respondent_18)
	Q3 : We have, for example, new suppliers who are added and others are locked. But besides that it is really all the same every-day. (Respondent_5)
not possible to plan the day	 Q1: B: This is different, well We do plan, but our schedule is for the most part not predictable. I: So it is the rule that then B: The rule is The rule is 95%, that the day cannot be planned (Respondent_10)
	Q2: That is actually how it is. Well, it is actually as it is that I am in the morning in the company, and think to myself: Well, let's see what happens today. (Laughs). (Respondent_16)
	Q3 : They say you should plan a maximum of 60 per cent of your daily work. Well, I think for me it's just 40 per cent that can be planned. The rest is just stuck somewhere on the building site because there are some other issues requiring urgent treatment. Well, I would say, one is not as in a public office, in a regulated work environment, but indeed rather in a highly changeable one. (Respondent_17)

4.5.3.2 Biggest change experience

The respondents were further asked the following question regarding their experience with bigger changes:

Think of **one of the strongest changes**, which you have experienced in the last few years and which personally affected you. How did you feel back then and how do you think about it today?

The respondents were free in their choice of change type which they wanted to refer to. The most frequent changes mentioned by the respondents were supervisor changes and Major restructuring, followed by change of tasks and change of the job as Table 4-50: Biggest change experience - overview reveals.

TABLE 4-50: BIGGEST CHANGE EXPERIENCE - OVERVIEW

	CODES			
Respondent	supervisor change	restructuring	job change	change of tasks
1			Х	
2				
3	Х	Х		
4				
5				Х
6		Х	Х	Х
7		Х		Х
8			Х	
9	Х	Х		Х
10	Х			
11	Х		Х	
12	Х			
13	Х			
14	Х			
15				Х
16	Х			
17				
18	Х			
19		Х	Х	
20				
21		X		
22	Х			
23		Х		
24		X	X	
25				Х
Sum	10	8	6	6

TABLE 4-51: BIGGEST CHANGE EXPERIENCE: CODES AND QUOTES

Codes	Quotes
supervisor	Q1: Exactly, my immediate supervisor, who has been transferred. And, well, just
change	due to this fact there was a new boss placed and I found it just difficult. So the (), the job in purchasing, that was really simple because I knew the manager very well and that has somehow helped immensely, indeed, as there was a good personal understanding. () And with the new, that was kind of nothing. (Respondent_13)
	Q2 : So this is actually the most serious change: The change of this particular supervisor actually generated the highest waves, and there was a also a change of some technologies to new platforms or customer changes, or $()/$ Those were actually peanuts however in comparison, so the biggest change to cope with was this supervision change. (Respondent_14)
	Q3 : We, yes, that is what I said earlier. Our former boss left in 2008. In that time for me the idea was, either he goes or I go and this had an impact on home life as well (), and I said, it will not work any longer, and my wife also said "a

Codes	Quotes		
	change must take place". () The burden related to the latent discontent, ()		
	where you just respond, we need to change. And then, however he quit and left		
	and then came a new supervisor, and then there came a man who yes, we two		
	are like We are 200% on the same wavelength. So that was a more than		
	positive change. So such a small matter can turn the picture by 180 degrees		
	(Respondent_10)		
restructuring	<i>Q1</i> : But surely the strongest was / That was for us the introduction / It is called		
8	"the introduction of programs of action", where you actually set out centrally		
	"how to work". How it is documented and is the work understandable. It has		
	also been introduced into Controlling, so you can simply see: where is the work		
	done? What will we do? Where does our money go? How effective is the whole,		
	where is our money spent? () And that was pretty much the most decisive		
	turning point accompanied by a new computer system, with completely new		
	organisational structures with new tasks, new bosses, and so on ()		
	(Respondent 9)		
	${\it Q2}$: The largest change experience was the sale of xxx from the family		
	ownership and into private equity hands. () From a family company with a		
	named owner to an owner in the background, who does not care about what		
	happens with the name.		
	() But due to the fact that they constantly restructure, one does have a great		
	chance of promotion (Respondent_6)		
change of job	Q1: The job changes itself and also the job content, which is basically, indeed,		
	the reason why I did make the change. It is now a completely different kind of		
	work. Now it is a free, more creative work, but indeed also, let's say, success-		
	oriented, and before it was precisely rather less dynamic, with established		
	operations. These have led to my motivation to change. (Respondent_1)		
	${\it Q2}$: So far I had only one real change and that was my move from the rural		
	area, () here to xxx (city name). And it was a very big change. () Also		
	professionally it was a very different environment and so on. (Respondent_24)		
	03. I personally only profited from the whole situation because the change		
	came and previously no one had promoted a 40-year-old to be a departmental		
	head. But these private equity guys do not care about that. They promote who		
	just fits into their scheme.		
	() In that they constantly restructure, one has a chance of promotion and it		
	was just coincidence that all my predecessors have given up this job.		
	(Respondent_6)		
	04. Wall that would got all he do a from a form of d		
	Q4 : well, that would actually be the change from one to the other company		
	That was a long decision making process because I was with the previous		
	company for a long time and I really felt comfortable there. Therefore it was		
	very difficult and I was curious what I would expect through the change		
	(Respondent 8)		
ahango of taska	01. And that really was the most decisive turning point accompanied by a new		
thange of tasks	computer system, with completely new organisational structures with new		
	tasks, with new bosses (). (Respondent 9)		
	,		
	Q2: That was also the case with the xxx (task-change). Anyhow, I wanted this		
	change already last year and had to fight for it to take place at all. And then		

Codes	Quotes
	when it came to action, I was totally happy. (Respondent_25) 03 : () with the SAP implementation, we have then obtained really a lot more
	responsibility, and for me that was very positive. We can now work more independently and can even make some decisions on our own and so on. (Respondent_5)

Looking at the reported experiences more closely it becomes evident, that there are some issues which are rather mentioned accompanying other changes or as additional experience but not as their biggest change ever experienced. Breaking the statements down to their most significant change issue, the distribution looks different:

In eight cases the respondents reported of a major restructuring as their key experience. Of course many of these respondents also reported of a change of tasks or a change of IT Systems or other issues accompanying the restructuring process. The second most frequent change experience is the change of the supervisor. In eight cases this change was the biggest change mentioned. Ranked third is the change of the job itself with three cases and the change of their individual tasks with three respondents. Four respondents reported of other topics such as for examples customer insolvency with major impact on projects, change of colleagues or new EDV systems or else.

Respondent	change type	short-term evaluation	long-term evaluation
1	change of job	positive	positive
2	other	negative	negative
3	supervisor change	negative	positive
4	change of task	negative	positive
5	change of task	negative	positive
6	restructuring	negative	positive
7	change of task	positive	positive
8	change of job	neutral	positive
9	restructuring	positive	positive
10	supervisor change	positive	positive
11	restructuring	negative	neutral
12	supervisor change	negative	neutral
13	supervisor change	negative	negative
14	supervisor change	negative	negative
15	change of job	positive	positive

Respondent	change type	short-term evaluation	long-term evaluation
16	supervisor change	negative	positive
17	emotional experience	negative	negative
18	supervisor change	positive	neutral
19	change of job	neutral	positive
20	emotional experience	negative	negative
21	restructuring	positive	positive
22	supervisor change	positive	neutral
23	restructuring	negative	neutral
24	restructuring	neutral	positive
25	change of job	positive	positive
SUMMARY	6 x restructuring 8 x supervisor change 5 x change of job 3 x change of tasks 3 x other	9 x positive 3 x neutral 13 x negative	5 remained negative 8 changes from negative to neutral or positive 3 changes from neutral to positive 7 remained positive 2 changes from positive to neutral

4.5.3.3 Evaluation of overall Work Environment Dynamic (WED)

Where possible, the reported changes experienced by the respondents were further coded according to the acknowledges scale by Dunphy and Stace (1993) as explained in detail in *Section 2.3.3*. The typologies were not applicable to all reported changes because in some cases the information on the changes was not exhaustive enough and in other cases they were rather personal experiences than related to organisational changes as classified by Dunphy and Stace (1993) (e.g. job changes or supervisor changes). In these cases column 5 contains the according topic instead of the change type 3 or 4.

Table 4-52: Major change Experience and Evaluation shows which respondents reported typical Type 1, 2, 3 or 4 changes.

In addition, reported every-day changes were screened for information about the scale and impact of the changes and then used to cluster the respondents into groups of low, medium and high dynamics in these contexts (*column 2 and 3 of Table 4-53: Analysis and Rating of reported change experiences*).

Respondent	scale of changes	impact of changes	low change types (1+2)*	high change types (3+4)**
1	М	М	2	job change
2	М	М	2	job change
3	М	М	2	supervisor change
4	М	М	1+2	3
5	L	L	2	3
6	Н	Н	1	3+4
7	L	L		job change
8	L	L		job change
9	М	М	1+2	4
10	Н	М	2	supervisor change
11	Н	М	2	3
12	L	М	2	supervisor change
13	М	М	1+2	supervisor change
14	М	М	2	supervisor change
15	L	L	2	3+ Job change
16	Н	М	2	3
17	Н	Н	2	3+emotional experience
18	L	Н	2	SC
19	Н	М	2	4+ Job change
20	М	М	1+2	emotional experience
21	М	М	1	
22	М	М	1+2	
23	М	М	2	3
24	М	М	2	3
25	М	L	2	job change

TABLE 4-53: ANALYSIS AND RATING OF REPORTED CHANGE EXPERIENCES

* lower level change types (1+2) according to the scale defined by Dunphy and Stace (1993)

** higher change types (3+4) according to the scale defined by Dunphy and Stace (1993)

The analysis of examples for changes in the respondent's working environment is used as an additional criteria among others to group them into four groups on a scale from low to high dynamic environments (WED). However, for this only the every-day / or normal day changes were analysed because the large-scale changes were often too specific and a large group of respondents reported only very personal job or supervisor changes which were not representative of the dynamic in their specific work environment. In addition it turned out that even people with rather low dynamic jobs on a normal day basis reported highly turbulent Type 3 or 4 changes due to organisational issues such as mergers or strategic shifts as experienced in the past. Often these were one time experiences and situations with very little relation to their specific work environment. This is based on the fact, that even in low dynamic jobs, people have sometimes experienced major reorganisations or they have changed their field of tasks or their jobs in the past. This is however, interpreted as less representative for the overall dynamic level. Besides the experiences other codes were used for the classification:

In the first step particularly two codes influenced the grouping. People who mentioned in the interview, that planning the day was difficult or impossible (8) were grouped as rather high dynamic and people who said that they could plan their day quite well (6) were grouped as rather low dynamic. There was no direct question regarding this topic of "day planning", However, as 14 out of 25 mentioned either one extreme these codes thus appear to be well applicable for the WED assessment. Another indicator for the existing dynamic in the work environment was the question about "changing plans" and "how the respondents felt about this". In this context 6 out of 25 mentioned that a change of plans was every-day life to them. These first classifications were supplemented with knowledge gained from the experience analysis and from insights gained through the open question in the first part of their interview, when the respondents were asked to generally describe their job and their tasks. The author took the experiences as well as the general job descriptions into consideration for the groupings. This resulted in the following qualitative classification of the respondents.

low dynamic	rather lower dynamic	rather higher dynamic	high dynamic
Respondent_5 Respondent_7 Respondent_8 Respondent_15 Respondent_25	Respondent_3 Respondent_12 Respondent_13 Respondent_18 Respondent_1 Respondent_9 Respondent_23 Respondent_24	Respondent_2 Respondent_4 Respondent_11 Respondent_14 Respondent_20 Respondent_21 Respondent_22	Respondent_6 Respondent_10 Respondent_16 Respondent_17 Respondent_19
5	8	7	5

TABLE 4-54: WED CLASSIFICATION

4.5.3.4 Change in private life

The respondents were asked in an open question to describe their attitude towards change in their private life in comparison to their business life:

4.12 Think of your private life. How do you deal with changes in your private environment?

The answers reveal that a large number of people have a distinct attitude towards changes in their private life compared to their working life. A majority of 16 respondents emphasized that stability in private life was very important for them and that they would thus rather avoid changes in their private environments. These 16 included some people who showed strong openness for changes in their work environments. The other nine respondents, who emphasized that they were open for changes in this environment, were mostly people who were also open for job changes. Only two respondents were rather cautious about changes in their job but open for changes in private.

4.5.3.5 Ideal work environment choices

In part 3 the respondents were asked to choose their ideal work environment. The results of this quantitative part are described in *Section 4.4.6*. The following table gives insight into what they stated was most important to them in terms of their ideal work environment choice:

TABLE 4-55:	REASONING FOR	IDEAL V	WORK ENVIRG	NMENT	CHOICES
					CHOICES

	References
ideal work environment 3	12
flexibility but within clear structural boundaries	10
intercommunication	7
personnel development opportunities	5
scope of design	4
low risk strategy – security aspects	3
other (focus on marketing + strategy; clear goals; self-responsibility)	3
ideal work environment 3-4	4

	References
some structures	3
marketing and sales as company drivers	2
personal development opportunities	2
flexibility	2
continuous optimisation	1
other (scope of design; continuous improvement; personal	5
responsibility; Target corridors; manageable risk)	
ideal work environment 4	5
some structures	5
flexibility	3
task variety	2
in one's own responsibility	2
development opportunities (HR)	2
Other (creativity / strategic orientation)	2
ideal work environment 4 plus elements of 5 /	2 / 2
ideal work environment 5	
creativity and innovation	4
high flexibility	3
some boundaries	2
free / flexible work structures	2
open communication	2
employee development	1

Finding for Work Environment choice 3 and 3-4: The coding shows that for lower level choices (ideal work environment 3 and 3-4) the emphasis is highest on "*flexibility but within clear structural boundaries*". This was mentioned by almost all respondents. All people emphasized the importance of flexibility and some openly pointed out the scope of design in these environments, but they all interpreted the structural framework as positive, necessary and preferable. For lower level choices (work environment 3) some respondents also emphasized the low risk strategy of organisations in these environments with a focus on security issues. In addition two other aspects were of high importance and that were "*intercommunication*" and "*personnel development opportunities*". Most of the people with a level 3 or 3.5 choice actually work in level 2 or 3 environments. The two aspects of "*intercommunication*" and "*personnel development development opportunities*" were thus often mentioned as desirable and to some extent still lacking in their organisations.

<u>Finding for Work Environment choice 4</u>: Most respondents who chose level 4 environments felt that the openness and flexibility of level 4 and 5 were very desirable, but most stated that they would prefer to have a more structured environment than described in work environment 5. Even for level 4 choices the topic of "some structures" was thus mentioned the most, but mostly in distinction towards level 5 and not towards lower level environments. The other key aspects were flexibility, development opportunities and task variety.

<u>Findings for Work Environment choice 4-5 and 5</u>: Only 4 respondents chose level 4-5 or 5. For all of them the "creativity and innovation" focus of those organisations was decisive for their choice. They further emphasized that they would enjoy the high flexibility and the work without hierarchies. Two respondents had a small tendency towards Work Environment 4 because of some remaining structures and the accompanying security aspects. Two also emphasized that work environment 5 was very desirable for them personally but that it would only work well with colleagues who would also be comfortable within this kind of setting.

4.5.4 Work Outcomes (WOC)

The questionnaire included questions regarding job satisfaction, organisational commitment, turnover intention and exploited potential. The respondents were asked quantitatively to rate their answers on a 7-point Likert scale. However, following each Likert question they were further asked to justify their rating. The author then used Magnitude Coding in order to rate the answers qualitatively in addition to the quantitative results. In most cases the qualitative evaluation was very similar to the quantitative assessment, however, in some cases the analysis of the open questions revealed either inconsistencies to their quantitative assessment or personal emphasis on specific outcomes or aspects which could thus be considered.

The results are as follows:

Low Medium High Outcome Outcome Outcome Score Score Score L М-Μ M+ Η Respondent 8 Respondent 12 Respondent 2 Respondent 4 Respondent 1 Respondent 14 Respondent 18 Respondent 3 Respondent 5 Respondent 20 Respondent 23 Respondent 6 Respondent 10 Respondent 21

TABLE 4-56: WORK OUTCOME (WOC) ASSESSMENT

		Respondent_7	Respondent_13	Respondent_25
		Respondent_9	Respondent_15	
		Respondent_11	Respondent_16	
		Respondent_17	Respondent_22	
		Respondent_19	Respondent_24	
3	2	8	8	4

Most respondents showed good overall outcomes. Only five could be evaluated as rather low or low while twelve had a tendency or clear direction towards very high outcome values.

In the course of the magnitude coding process it became evident, that the four outcome factors sometimes showed very distinct tendencies. Some respondents were satisfied with their job but showed low commitment to their organisation in general. Other were committed to their organisation but had higher tendencies to quit their jobs. The arguments and reasons were manifold.

For the factor "exploited potential" the respondents were further asked to describe what needed to be different or better in their jobs in order to rate their exploited potential as very high (if not rated as such right away). The responses show that in most of the cases they complain about organisational parameters, too much workload or the wish for fewer administrative tasks. Only four respondents reported that an increase of potential exploitation would require an entirely distinct job or more responsible tasks and only two said they personally required additional training. The topic of "fewer administrative or routine tasks" could be interpreted as a wish for more dynamic in the job. This will be taken into consideration for the evaluation of IDP assessment (please refer to *Table 4-39: IDP: high scores*). The response "less workload" is rather a sign of capacity overload.

	Sources
less workload	4
fewer administrative or routine tasks	3
change of organisational parameters	5
other job or more responsible tasks	4

TABLE 4-57: EXPLOITED POTENTIAL - CODING FOR EXPLANATORY STATEMENTS

TABLE 4-58: EXPLOITED POTENTIAL: CODES AND QUOTES

Codes	Quotes			
less workload	Q1 : Well "Good"! "Very good" is not entirely accurate because I would say			
	that due to too many confounding factors such as stress or overwork, the			
	performance is hampered. This happens if you always jump up and don't focus			
	on finishing the matter in nana / (Respondent_14)			
	02: These things where you, in our case, put too much work in the details and			
	where you cannot think enough strategically, where you have too little time for			
	communication with other areas and for such things that are actually extremely			
	important., These are then left undone due to daily business. (Respondent_19)			
fewer	${\it Q1}$: () I think certain administrative activities which are unfortunately			
administrative	somewhat necessary, but when I say that probably everyone could probably			
or routine tasks	clear the orders in the end or do something like this. (Respondent_11)			
	Ω . D. routing procedures () was I can say this quite casually if these could			
	Q2 : D : Fourine procedures, () yes, I can say mis quite casuany. If mese count he shunted out of the way yes? () Where with routine procedures, there are			
	some things within that are not again routine and when one does not have the			
	experience or knowledge, one does not see that errors occur. So, this is a very			
	difficult thing, right?			
	I: But there are actually those things that do harm your daily business?			
	B: Yes, phone calls, where one is not responsible, for example. Delivery			
	deadline questions, the devil knows what else. I could continue for ever with			
ahango of	01 : My organisation should be organized in a decentralized manner Right now			
change of	it is greatly centrally dictated, on a national basis and simply no account is			
organisational	taken of regional conditions. I am also aware that in many areas it is simply not			
parameters	possible, because you need a uniform system, but due to these central standards,			
	you are pretty limited. And if it was locally organized and you could make more			
	decisions on the spot, then we would surely have more opportunities.			
	(Respondent_9)			
	02: To work in a small multidisciplinary team, to address more about this			
	<i>"think-tank issue", to give stimuli, to design (Respondent_16)</i>			
	$\it Q3$: B: I think I've said it earlier: if we had a clear structure for project			
	development. So I would say, there are just a few per cent missing, which one			
	needs for a cleaner implementation of the project. And I would say, these just			
	simply look strategically afferent from the view of a project engineer. This is just as it is That is perfectly legitimate, that I basically think like this I believe			
	(Respondent 17)			
other job or	Q1: I think my area of tasks would just need to be different then, because I			
more	notice more and more that I would like to specialize in something and that is $-I$			
responsible	think – also a question of personality. I do not just want to be a generalist. I			
tasks	currently have to do everything in my area, from purchasing up to recruitment			
tusiks	and I must manage everything and have little time to specialise in specific things (Respondent 23)			
	inings. (Kesponden _25)			
	Q2 : B: It depends! Not so very good! This is now the end for me in terms of			
	further development. I cannot become anything else! Because I will have no			
	chance of getting anything with more responsibility. (Respondent_5)			

Codes	Quotes				
	<i>Q3</i> : More freedom of choice and self-determination. So still more $() / or$ more				
	freedom of movement to tackle projects which I think are important ().				
	(Respondent_7)				

4.5.5 Person-Environment-Fit (PE-Fit)

In order to evaluate the proposed PD-Fit in comparison to other Person-Environment-Fits, the author included a range of questions regarding PJ-Fit, PO-Fit, PG-Fit and PS-Fit. In the first place they were asked to rate their specific fit quantitatively on a 7-point Likert scale. However, they were further asked to describe the specific fit or to justify their choice. In the area of PJ-Fit the respondents were asked "*How well does your job fulfil your expectations from a job?*" Following this question the author asked the respondents what kind of expectations they had towards a job.

The answers reveal that people search for a job which they like to do (fun), which gives them freedom of action and scope of design. They want to be able to work independently in an interesting field of task and a good team. To some, creativity is also very important as well as opportunities for their further development.

TABLE 4-59: PJ-FIT: REQUIREMENTS BY RESPONDENTS

Codes	Sources
fun	9
freedom of action / scope of design	9
independent	5
interesting and diversified field of tasks	5
good team	4
creativity	4
options for further development	4
planability / structured framework	4
other (e.g. better use of competences, pay, good supervision, less workload))

Except for "*planability / structured framework*" all reported wished for a good job fit can be interpreted as rather high dynamic indicators. The distribution of these can be found across the whole sample. The "planability" code as an indicator for low dynamic preferences is also used for the IDP-classification (please refer to *Table 4-38: IDP: low scores*).

TABLE 4-60: PJ-FIT REQUIREMENTS: CODES AND QUOTES

Codes	Quotes			
fun	Q1 : I: Okay. And just how well does the job meet your personal expectations			
	about a job?			
	B: Quite well, because I'm doing just what I like to do. (laughs) So it has to be			
	pretty good.			
	<i>I:</i> (spoken simultaneously) Very self-directed, is that what you mean?			
	B: Yes.			
	<i>I: Okay, so part of your personal expectation is having that kind of job?</i>			
	B: Tes, absolutely, yes.			
	(Kespondent_20)			
	Q2: I: Okay. How well does the job meet your personal expectations about a job?			
	B: Completely I have to say seven because it's great fun			
	<i>I</i> : That's the main expectation you have of a job?			
	B: Pleasure, Getting pleasure from work. I try to convey that to the employees			
	as well, to create a pleasant atmosphere. So, it should be fun. Work is one			
	thing, but there should be some pleasure and fun involved, too. Sometimes you			
	look in on offices where everyone's running around looking so grouchy. That			
	just won't do.			
	(Respondent_10)			
	Q3: I: Okay, so how would you describe how well the job fits, with respect to			
	your own personal expectations about a job? In other words () how well			
	does the job match what you expect in a job?			
	B: Good, () because I can pretty much do what I like.			
	(Respondent_1)			
freedom of action	Q1: 1: Okay. And just now well does the job meet your personal expectations			
	B: Well that's the sort of question where you have to take everything into			
	consideration and when I look at the totality of the past 20 years and don't			
	pick out individual days, then I'd say it's very good.			
	<i>I</i> : Yes. What are the main expectations you have of a job? What do you take			
	into consideration? How/What should a job be like for it to meet your			
	personal expectations/			
	B: (spoken simultaneously) I need my independence and I have that here.			
	I: Okay.			
	B: I'm an independent type, because I came out of an agricultural			
	background, you might say, and I might've gone into that. And so what I love			
	about the job is, well, the sense of independence. I may get pressured and			
	pushed around, with emails and everything, phone calls, but I mable to			
	accide things on my own – after making minor arrangements, of course:			
	That's/			
	I: is the most important thing			
	B: (spoken simultaneously) I decide when I come in and when I leave. As long			
	as I get the job done.			
	(Respondent_21)			
	Q2: I: Mhm. What sort of expectations do you have about the job? What is			
	particularly important to you?			
	B: The chance to act independently, work independently, creativity – with,			

Codes	Quotes
	well, with respect to – how I go about deciding things, freedom of action,
	within a predefined framework, of course, like every organisation has, but – well those are the most important things as far as I'm concerned
	(<i>Respondent 23</i>)
independent	Q1 : That I'm able to work independently, that I have my own area of
	responsibility where I make my own decisions and no one is telling me what to
	do, where I can plan my own day so that I know what I have to do in the
	morning and generally what I need to do. I really like that.
	(<i>Respondent_5</i>)
	Q2: I: () What sort of expectations do you have? Or what is you're thinking
	about?
	B: Yes, well, what has always been important to me is being able to work
	independently, where I'm really able to make my own decisions about my area
	of responsibility and now to go about planning inings, planning out my day, and not sort of working on call
	(Respondent_7)
interesting and	Q1: And () that and that it's exciting, in a way, not always the same, so it
diversified field	doesn't get boring – which certainly isn't about to happen around here.
of tasks	There's always something going on here.
	(Kespondent_11)
	Q2 : It should be fun, the team should be good and there has to be a challenge
	involved. So, it can't be, a job isn't good when it's just, well, a dumb job or
	whatever. That's not for me, doing the same thing every day. A change of
1 4	pace, that's important too, yeah. (Respondent_12)
good team	what is involved?
	B: (spoken simultaneously) That I enjoy it, my co-workers, and having a good
	atmosphere at work, and so $()/$
	(Respondent_15)
	Ω^2 : Well what's important to me is being able to get along well with my co-
	workers. And I do – getting together outside of work and, well, just simply
	being able to enjoy coming into work. That's what I'd say.
	(Respondent_2)
creativity	<i>Q1</i> : An ideal job, one that's fun, that I enjoy doing, where I have a chance to
	grow, where I can decide things on my own and can be creative, where I can contribute ideas of my own and above all where I have a chance to
	implement them. And I'm definitely able to do that in my job, within certain
	limits of course.
	(Respondent_9)
	02 : I Okan And just how would you describe how good a fit the job is for
	you, as far as the personal expectations you have about a job are concerned?
	B: Very good. Because I can – except for part of it – I can just about do it on
	my own, or I could just about do it on my own.
	<i>I: Yes, okay. So the job pretty well matches what you expect of a job?</i>
	B: That's right. I could just about do my thing on my own and so that's why it suits me
	<i>I: Yes. What sort of things are they that you / what expectations do you have</i>
	that this job meets?

Codes	Quotes				
	B: I have a fantastic network of connections that let me work very creatively, doing both research and development in the traditional sense, which I learned to do, but also knowledge management. In other words, working intercultural between Canada, China, Thailand, Turkey, Germany; managing things, flying back and forth, taking care of organizing things. (Respondent_6)				
options for further development	 Q1: I: Yes. Just what sort of expectations do you have? B: Well, that has more to do with the human element; it's less about the substance. And so my expectation of a job is that the boss shows an interest in his employees, seeing to it that they grow, one who is able to land projects that let the department move forward, and that give all of us a chance for growth. Those are the expectations that I have. They're less substantive and rather more of an individual nature. (Respondent_18) Q2: Especially my personal further development – that I can learn something else and not doing the same thing for years. . (Respondent_25) 				
planability / structured framework	Q1 : Being able to work independently, having my own area of responsibility where I can make decisions for myself without someone else telling me what to do, so I can plan out my day and know where what I have to do in the morning and in general what I need to do! That's what I like about it. (Respondent_5)				

4.5.6 Qualitative assessment and analysis of Person-Dynamic-Fit (PD-Fit)

For the PD-Fit assessment the study draws on the qualitative findings regarding the respondents' IDP (*Section 3.5.1*) and their reported WED level (*Section 4.5.3*).

In both cases the respondents were classified into five groups ranging from low to high. In a simple assessment the author checked how close the IDP rating was to the environmental level (subtraction). The following table briefly gives an overview over the determined differences (Column 4 and 5). The table further includes the determined WOCs. In order to analyse the relation between the Fit and WOC column 7 further shows whether the case is supportive of the research idea that fit and WOC are related.

TABLE 4-61: QUALITATIVE PD-FIT ASSESSMENT	TABLE 4-61:	OUALIT	ATIVE P	D-FIT .	ASSESSMENT
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Respondent	Qual IDP rating	Qual WED rating	Fit difference qual	Fit diff qual absolute	Qual WOC score	Supportive of PD-Fit assumption? YES if good fit = 0 WOC =4 + 5 medium fit = 1 ; WOC = 2-4 low fit = 2 ; WOC = 1+2
1	2	2	0	0	5	Yes
2	3	3	0	0	3	No
3	3	2	1	1	3	Yes
4	3	3	0	0	4	Yes

Respondent	Qual IDP rating	Qual WED rating	Fit difference qual	Fit diff qual absolute	Qual WOC score	Supportive of PD-Fit assumption? YES if good fit = 0 WOC =4 + 5 medium fit = 1 ; WOC = 2-4 low fit = 2 ; WOC = 1+2
5	1	1	0	0	4	Yes
6	4	4	0	0	3	No
7	1	1	0	0	3	No
8	1	1	0	0	1	No
9	3	2	1	1	3	Yes
10	4	4	0	0	4	Yes
11	3	3	0	0	3	No
12	2	2	0	0	2	No
13	3	2	1	1	4	Yes
14	2	3	-1	1	1	No
15	2	1	1	1	4	Yes
16	3	4	-1	1	4	Yes
17	4	4	0	0	3	No
18	3	2	1	1	2	Yes
19	2	4	-2	2	3	No
20	3	3	0	0	5	Yes
21	3	3	0	0	5	Yes
22	3	3	0	0	4	Yes
23	2	2	0	0	1	No
24	1	2	-1	1	4	Yes
25	3	1	2	2	5	No
Ø						14xYes; 11xNo

As *Table 4-61: Qualitative PD-Fit* indicates a large amount of the cases does not support the research idea (44 %). A simple regression of these values also shows no significant relationship:

Dependent Variable: Work Outcomes (qual) Independent Variable: PD-Fit (qual) abs

TABLE 4-62: REGRESSION ANALYSIS OF WORK OUTCOMES AND ABSOLUTE PERSON-DYNAMIC-FIT (PD-FIT)

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Qual_Fit_neu_abs		Enter

			Model Summary		
				Std. Error of the	
Model	R	R Square	Adjusted R Square	Estimate	Durbin-Watson
1	,061 ^a	,004	-,040	1,23901	1,855

	ANOVA													
Model		Sum of Squares	df	Mean Square	F	Sig.								
1	Regression	,131	1	,131	,086	,772								
	Residual	35,309	23	1,535										
	Total	35,440	24											

		(Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	3,266	,310		10,543	,000
	Qual_Fit_neu_abs	,113	,387	,061	,293	,772

Residuals	Sta	tistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,2656	3,4922	3,3200	,07400	25
Residual	-2,37891	1,73438	,00000	1,21293	25
Std. Predicted Value	-,735	2,327	,000	1,000	25
Std. Residual	-1,920	1,400	,000	,979	25



FIGURE 4-10: RELATION BETWEEN PD-FIT AND WOC (QUAL)

A regression analysis between the real qualitative fit (not absolute) and the determined WOC did not yield any better results:

Dependent Variable: Work Outcomes (qual) Independent Variable: PD-Fit (qual)

TABLE 4-63: REGRESSION ANALYSIS OF WOC AND PD-FIT

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Qual_Fit		Enter

	widder Summary											
				Std. Error of the								
Model	R	R Square	Adjusted R Square	Estimate	Durbin-Watson							
1	,184	,034	-,008	1,22012	1,811							

Model Summary

			ANOVA				
Mode	əl	Sum of Square	es df	Mean So	uare	F	Sig.
1	Regression	1,2	200	1	1,200	,806	,379
	Residual	34,2	240 2	23	1,489		
	Total	35,4	140 2	24			
			Coefficien	ts			
				Standa	rdized		
		Unstandardiz	zed Coefficient	s Coeffic	Coefficients		
Mode	əl	В	Std. Error	Be	ta	t	Sig.
1	(Constant)	3,298	8,	245		13,447	,000
	Qual_Fit	,27	5,	307	,184	,898	,379
		F	Residuals Stat	tistics			
		Minimum	Maximum	Mean	Std.	Deviation	N
Predicted Value		2,7475	3,8485	3,3200	,22362		25
Resid	dual	-2,29798	1,70202	,00000		1,19443	25
Std. I	Predicted Value	-2,560	2,363	,000		1,000	25
Std. I	Residual	-1,883	1,395	,000		,979	25

4.6 Comparative Analysis of Qualitative and Quantitative assessment

4.6.1 Introduction

One of the key reasons for mixed method research approaches is the idea of triangulation, formerly described in *Section 3.3.3*. In this sense the qualitative and quantitative data of the key factors of IDP, WED, WOC and the determined PD-Fits are thus compared through correlation analyses in the following tables and figures.

4.6.2 Comparative Analysis: IDP-assessment

TABLE 4-64: CORRELATION OF QUALITATIVE AND QUANTITATIVE IDP-RESULTS

		Qual_IDP_Score	IDP_Quant_Mean
Qual_IDP_Score	Pearson Correlation	1	.529**
	Sig. (2-tailed)		.007
	Ν	25	25
IDP_Quant_Mean	Pearson Correlation	.529**	1
	Sig. (2-tailed)	.007	
	Ν	25	25

**. Correlation is significant at the 0.01 level (2-tailed).



FIGURE 4-11: CORRELATION BETWEEN QUALITATIVE AND QUANTITATIVE IDP RESULTS

The correlation of the quantitative and qualitative IDP results shows a significant relationship between the two variables. Although the correlation is significant there are noticeable differences in the scores: generally most respondents reached higher IDP scores in the quantitative assessment than in the qualitative assessment. Potential reasons are discussed in *Section 5.2*. A more in-depth analysis of the sub-concepts and items reveals some of the problematic issues about the quantitative assessment. The following five tables offer some examples of contradictory or deviating statements in the area of IDP between quantitative and qualitative results focusing on the five sub-factors (SEC, RS, LOC, RA, STF) which were included in the quantitative analysis after the Cronbach's Alpha checks.

All quantitative results are set along a 5-point Likert scale:

1 = I disagree 2= I rather disagree 3= I am undecided 4= I rather agree 5= I agree

The comparative analysis is commented subsequent to the five tables.

TABLE 4-65: IN-DEPTH ANALYSIS OF IDP ASSESSMENT COMPARING QUANTITATIVE AND QUALITATIVE RESULTS AND STATEMENTS: SEC-FACTOR

	S	Quanti ELF-EFF	tative asses ICACY FO	sment of R CHAN	GE	
Respondent	Item 4B.13: I adapt easily to changes in my job.	Item 4B.27: I adapt slowly to changes in my job. (reverse coded)	Item 4B.28: I am confident that I will be able to deal well with the challenges of change.	Item 4B.33: I believe I can deal with any change to which I set my mind.	Item 4B.34: I have the skills that are needed to make change work.	Qualitative Statement(s) / Quotes
7	4	4	4	4	4	 Q1: And how about dealing with changes at work, is that easy for you or rather difficult? B: It depends on what sort of change it is, doesn't it? But in principle, rather easy. () But it really depends on what it is, y'know? And whether or not it has a positive or negative effect on me. Q2: And just how would you judge your personal ability to deal with change? B: We're only talking about changes at work, right? I: Yes. B: () Rather good. I'm pretty flexible, I think, although I do have my own ideas about things, too. So it's sometimes hard for me to accept certain things, even something positive. But change always creates a certain degree of anxiety: will it improve things or make them worse, the overall situation, I mean.
8	2	5	5	5	5	Q1: I: And do you find dealing with change rather easy or rather difficult? B: Well, at the outset rather more difficult, because I might have a bit, as one says then here, worry and I fear what's coming, but actually I would take it even more easily then.

	S	Quanti ELF-EFF	tative asses FICACY FO	sment of R CHAN	GE	
Respondent	Item 4B.13: I adapt easily to changes in my job.	Item 4B.27: I adapt slowly to changes in my job. (reverse coded)	Item 4B.28: I am confident that I will be able to deal well with the challenges of change.	Item 4B.33: I believe I can deal with any change to which I set my mind.	Item 4B.34: I have the skills that are needed to make change work.	Qualitative Statement(s) / Quotes
9	4	5	4	5	4	 I: Okay. () How would/ No, is it easy for you to deal with changes in your job, or rather difficult? B: () I'd say, fairly easy, even if I sometimes don't like to do it. () I: But in principle, the abilities you've described, that you consider important, openness and so forth, how would you assess your own abilities in this respect? B: () Well, clearly there's the ability to work independently. That I can do, and I had to learn how to. That sort of thing doesn't just happen, just "sink or swim" without having any special background. I had to pick things up quickly on my own in order to be good at my job and be able to make everything turn out right. That's something that I think I was able to learn over the course of 7 years. I already had something of what it took, I guess, but I still had to learn how to do things and I also learned how to remain open to change. That clearly wasn't always the case, since I tend to be conservative, but it's all part of a learning process, I'd say. And when you see / In my case, when I can see that change is necessary, then I can accept it. I'm open to it. And when a change comes along that I have a problem with, then I'm not always so open to it. B: And in the past I was even less open to change. And so there was a certain learning process involved, where I realize I just can't / I can't change things, I just have to accept how it is. Then I feel better about it, if I accept it and am open to it. But, like I say, with those where I just can't see it, then it's a problem.
23	5	5	5	5	5	 Q1 1: And do you find dealing with change in your job rather easy or rather difficult? You have already answered some of this earlier, I guess (see Q2 below) B: It depends on the situation, and on the subject Q2: I: How would you describe your experiences with change, in general terms? More positive or more negative? B: (clears throat) ()

	S	Quanti ELF-EFF	tative asses FICACY FO	sment of R CHAN	GE	
Respondent	Item 4B.13: I adapt easily to changes in my job.	Item 4B.27: I adapt slowly to changes in my job. (reverse coded)	Item 4B.28: I am confident that I will be able to deal well with the challenges of change.	Item 4B.33: I believe I can deal with any change to which I set my mind.	Item 4B.34: I have the skills that are needed to make change work.	Qualitative Statement(s) / Quotes
						 Mhm. Well, basically I'm the kind of person who doesn't particularly like change. Even so, I'm constantly getting involved in it, trying out new things, moving things along and trying / seeing the positive side, seeing what comes of it. And so really I am the kind that likes trying out new things, and changing with it. So I see change () in principle as a positive thing, as an opportunity. I: Mhm. And how about the/ your experiences at work – were those more positive or more negative? B: (spoken simultaneously) Yes, more positive than negative, because change, if you're willing to accept it, can really open up opportunities for real breakthroughs. During the transition itself there were times now and then when I didn't feel too good about it, following through with changes. I have to think about my employees, which makes it very hard and difficult, requiring lots of strength, and sometimes plenty of perseverance, and a great deal of – well – persuasion. But in retrospect, when I see what came of it, I'd do the same thing again anytime. But change itself is often difficult (laughs).

TABLE 4-66: IN-DEPTH ANALYSIS OF IDP ASSESSMENT COMPARING QUANTITATIVE AND QUALITATIVE RESULTS AND STATEMENTS: RS-FACTOR

	Quantitative assessment of ROUTINE SEEKING			of	
Respondent	Item 4B.14: I like to do the same old things rather than try new and different ones. (reverse coded)	Item 4B.16: I'll take a routine day over a day full of unexpected events any time. (reverse coded)	Item 4B.25: I often anticipate problems related to change. (reverse coded)	Item 4B.29: I'd rather be bored than surprised. (reverse coded)	Qualitative Statement(s) / Quotes
3	4	4	4	4	If you had to choose between a day filled with routine and one full of surprises, which would you pick? () And why. B: () Well, I'd of course say surprises, is what I'd choose, because it's just / I'm already familiar with routine. So () it's just more interesting, right? Of course it can be both good and bad. I: Yes. What feelings do you associate with each? B: But it shouldn't be constant. It really shouldn't be like that all the time, y'know? ()
8	2	2	3	4	 I: Okay. If you had to choose between a day filled with routine and one full of surprises, which would you choose? B: For a day filled with routine, regardless. I: And what thoughts come to mind about the choice, that is, what, this is about your feelings, what goes through your mind when you hear, day of routine, day of surprises? B: All right, then. I have to make a choice. So, the best would be a little of both, okay, but still, as far as I'm concerned, I'd still prefer a routine, because then I know, in the morning, okay, this is what happens, next comes this, rather than having somebody always showing up wanting this or that or whatever, and then needing to hold a quick powwow. So to me it's just/ I: Predictable. B: Exactly, yes.

	Quantitative assessment of ROUTINE SEEKING				
Respondent	Item 4B.14: I like to do the same old things rather than try new and different ones. (reverse coded)	Item 4B.16: I'll take a routine day over a day full of unexpected events any time. (reverse coded)	Item 4B.25: I often anticipate problems related to change. (reverse coded)	Item 4B.29: I'd rather be bored than surprised. (reverse coded)	Qualitative Statement(s) / Quotes
19	2	4	2	5	 I: Okay. If you had to choose between a day filled with routine and one full with surprises, which would you pick? B: Oh, man, crap. (smiles) I: (laughs) Okay. B: () Just one day, if it were just one day. I: (laughs) Yes, that's another way of reading the question. B: If every day was just routine, it would be totally boring, then you would turn off, every day would be lost. But I'd take the day, a day of surprises. I: But just one (laughs). B: (laughs) Not every day, for real, two. I: Okay. If you () chose between, how can I put it differently, what would you rather have, more days of routine or more days filled with surprises, if you want to read the question that closely (laughs). B: Yeah, exactly. Well, I'd tend more toward surprises (laughs).
24	4	4	4	5	 I: Okay. If you had to choose between a day filled with routine and a day full with surprises, which would you pick? B: () Well () it depends a lot on how I'm () on what I feel like doing, what I'd / Which would I pick? Depends entirely on how I feel that day. Sometimes it's nice just being able to stretch your legs out under the table. I: That would be a day of routine? B: That'd be a day of / Yeah, totally. That'd be a day of routine. And a day of surprises? It's not clear if those would be positive or negative surprises. I: Yes, no, it can be both. B: Right now I'd take a day of routine, because I already have the other.

	Quan RC	titative asse)UTINE SEI	essment o EKING	of	
Respondent	Item 4B.14: I like to do the same old things rather than try new and different ones. (reverse coded)	Item 4B.16: I'll take a routine day over a day full of unexpected events any time. (reverse coded)	Item 4B.25: I often anticipate problems related to change. (reverse coded)	Item 4B.29: I'd rather be bored than surprised. (reverse coded)	Qualitative Statement(s) / Quotes
					 I: (Laughs). B: That's why at the moment I'd take the day of routine. I: Yes. What do you associate with a day of routine? You already said, stretching your legs out under the table. And how about the day of surprises? What sort of images come to mind in that case? B: A day of routine actually sounds boring. It sounds pretty boring (), but also calm, pleasant. And a day of surprises, that sounds like / Somehow that's just more my thing. I: (Laughs). B: Because I'm actually pretty restless and so I, when somebody shows up all of a sudden and this and that / Right now there are handymen at my place, who show up, and then somebody's parents and so then I think, man, look what you got done. A lot. You made ten people, three parents, happy. () No, I guess I'm more the type that likes surprises.

	Quantitative assessment of ROUTINE SEEKING				
Respondent	Item 4B.14: I like to do the same old things rather than try new and different ones. (reverse coded)	Item 4B.16: I'll take a routine day over a day full of unexpected events any time. (reverse coded)	Item 4B.25: I often anticipate problems related to change. (reverse coded)	Item 4B.29: I'd rather be bored than surprised. (reverse coded)	Qualitative Statement(s) / Quotes
25	5	4	5	5	 I: Yes. () And if you had to choose between a day filled with routine and a day full of surprises, which would you pick? B: It depends (smiles). I: (smiles) On what? B: Well, I have () and there are certain days where I know, ok, tomorrow or the day after there'll be a lot of new stuff and I'll have to see how everything works out, so I'm able to look forward to that. And then there are those days where I think, today will be fine, I'll do this and that – but nothing much works out. So I'm happy sometimes that that's how it is. I suppose it has to balance out in the end. And if you're constantly dealing with surprises, it can wear you down (smiles). I: Yes. What do you associate with a day of routine and what with a day of surprises? What come spontaneously to mind? B: A day of surprises is for me one when there are lectures, when I try something new, some sort of exercise with students, that would be a day of surprises, when I think, well, let's just see how it goes. () B: Uncertainty but also curiosity about what will happen next. Even so, it's still a bit stressful. And I can tell, I feel worn out after going through a day full of surprises. I: Yes. And the day of routine, what do you associate with that? B: Yes, I think about the office, about writing emails, answering emails, taking care of administrative things, dealing with forms and the like. I: Not really negative, but rather? B: No, it happens to me also, when I have such a day that I get some rest. So that allows me to get a bit of sorting out done, to sort out folders, clean up, put in order application processes or something like this. That is such a day routine. But it's also fun. I need both to be in balance.
TABLE 4-67: IN-DEPTH ANALYSIS OF IDP ASSESSMENT COMPARING QUANTITATIVE AND QUALITATIVE RESULTS AND STATEMENTS: LOC-FACTOR

		Quan LO	titative asso CUS OF CO	essment of NTROL		
Respondent	Item 4B.17: I often feel helpless in dealing with the problems of life. (reverse coded)	Item 4B.19: I can do just about anything I set my mind to.	Item 4B.22: What happens to me in the future mostly depends on me.	Item 4B 23: There is little I can do to change many of the important things in my life. (reverse coded)	Item 4B.24: I have little control over the things that happen to me. (reverse coded)	Qualitative Statement(s) / Quotes
10	4	4	4	4	2	 I: I: And do you tend to believe that you personally have the greatest degree of influence over what happens to you in the future, or that you have little influence in that regard? A little bit a philosophical question (laughs). B: Now again a very clear answer comes: impact. If I were in a company with 500 employees in total, then I would tell you meekly: Yes, I have an influence on it. But in these big corporations and in these hierarchical levels, in which we find ourselves, you have no control. And even at the highest level you have no control. These big companies you have never influence on it. Since there are so many factors, starting with the works council, with the board, and with Daniel S. and what else As a consequence, I can you can have a small impact on your future, but you never know what the future will be. I: And on the whole? How would you see this question considering life in general? B: I can, concerning myself As I I always think positively. If you think positively, the positive will happen. But if something is bad, this all has a reason in life. That's how it is. It must be so that you missed the flight because it crashed. So it is. It is as it is. I: So somehow a certain feeling of destiny, that one does not know everything B: I'm passionate about motorcycling and everyone always says, "oh, motorcycling, dangerous", and so on and all that. And then I say: No. You just have to have healthy respect for it and if it is your D- Day, then I can also walk in the street or stay out in a storm, as it thunders, then it is your day! This is how I see it by now.

		Quan LO	titative asso CUS OF CO	essment of NTROL		
Respondent	Item 4B.17: I often feel helpless in dealing with the problems of life. (reverse coded)	Item 4B.19: I can do just about anything I set my mind to.	Item 4B.22: What happens to me in the future mostly depends on me.	Item 4B 23: There is little I can do to change many of the important things in my life. (reverse coded)	Item 4B.24: I have little control over the things that happen to me. (reverse coded)	Qualitative Statement(s) / Quotes
12	4	3	3	5	4	 1: And do you tend to believe that you personally have the greatest degree of influence over what happens to you in the future, or that you have little influence in that regard? B: I do believe that you can influence what happens to you in the future. That's how it's been up to now. That you don't end up stuck in one job or/ I: It's a bit of a philosophical question, okay, in life when you / B: You mean in general or what? I: Yes. B: Oh, ok.() B: Actually, actually I think that in life, speaking in very general terms, I think that there's something predetermined in all of us. But, I think that one can still steer things a little. I: A little or have the greatest influence? What do you think, / B: No, I tend to think, just a little. I: Yes. at work, I think, depending on your effort, you can become something. There you may have more influence than in general life. I can't control whether or not a tree falls on me. I don't have any influence over something like that. And so/

		Quan LO	titative asse CUS OF CO	essment of NTROL		
Respondent	Item 4B.17: I often feel helpless in dealing with the problems of life. (reverse coded)	Item 4B.19: I can do just about anything I set my mind to.	Item 4B.22: What happens to me in the future mostly depends on me.	Item 4B 23: There is little I can do to change many of the important things in my life. (reverse coded)	Item 4B.24: I have little control over the things that happen to me. (reverse coded)	Qualitative Statement(s) / Quotes
17	5	4	4	4	2	 Q1: 1: And do you tend to believe that you have the greatest influence over what happens to you in the future? Or that you have little influence? This is more of a general, philosophical type question. B: Well, if I relate it to my own life, then I do think that one can exercise a certain degree of influence. But as far as my job is concerned, then I think that's less the case, seems to me. Direct comment towards Item 4B24: I: I have little control over what happens to me. B: () I: Some questions deal with the same issue three times. B: Yes, it's something that's always in the back of my mind I drive 80.000 kilometres a year what might happen to me while I'm driving. I: That's something you have little control over. B: You have little control. I: I drive nearly 50. So that's something I can fully understand. B: Yes, so. So if I can interpret that as having to do with something that comes at me from outside, then I would tend to agree. Yes, and I'm not looking at it from a work-perspective or anything like that. Something like that I do have influence over. What comes at me from outside, if I can write that here, then it's a matter of / I: fate-, B: Yes, and things like that. Yes, I'd tend to agree with that.

TABLE 4-68: IN-DEPTH ANALYSIS OF IDP ASSESSMENT COMPARING QUANTITATIVE AND QUALITATIVE RESULTS AND STATEMENTS: RA-FACTOR

	Quant R	itative assessn ISK AVERSIO	nent of N	
Respondent	Item 4B.20: When I am convinced of a change I am willing to take personal risks.	Item 4B.31: I am not willing to take risks when choosing a job or a company to work for. (reverse coded)	Item 4B.36: I view risk of a job as a situation to be avoided at all costs. (reverse coded)	Qualitative Statement(s) / Quotes
3	4	4	2	 I: What role does the topic of job security play for you and how much does job security affect decisions you make day to day at work? We have already talked about this a little bit earlier, right? B: Yes. That's already the case (), I must say that it has influenced me greatly. () And, that I have a permanent contract, which I got directly. That is for me to get out of the probationary period and that is already very good, I must say. Other don't have it like this. And that's also a little bit, what I always think about which is that I also need naturally to be careful, and that I can actually be happy with it, right? () And / I: So I'm hearing now that the issue of job security somehow does determine as you maybe behave in your workplace, and how you behave or make decisions () So, does this have a high priority for you? B: Yes, job security has a very high, a very high priority for me. I have investments, car and stuff. So (), yes, it is very important. I: Okay. B: At the end, that is always the most important issue – I would almost say – in all decisions. When it is always the case that it is playing in your head, then there is always the point to which I arrive, where I say, well (), I should be satisfied for a start.
10	5	2	2	<i>B:</i> Here is the example of the role of job security. As job security after a certain age becomes an issue, since the stupidity - I do not understand this world today – is that around the age of 50 one belongs to the scrap heap. This is the reason. And that's the real reason. Although I would now not see myself like this. But other issues: (). So it is only made a subject by the community. But that's the only reason. If that wasn't so, if the community was not like this, that you – as far as I know – in the early to mid-50s belong to the scrap heap, the subject of job security would be a matter of indifference to me
11	4	4	2	<i>I:</i> Okay. What role does a topic like job security play for you and how much does job security affect decisions you make day to day at work? <i>B:</i> Well, in general, I think, job security is the sort of thing where, although I don't have any children yet or anything like that, I still think it's important. So I would choose somewhat carefully if I planned on changing jobs, rather than say, let's see how it goes. I may be prepared to take risks in a lot of things but not really when it comes to job security. () As I say, I'd rather be able to decide for myself when and where I

	Quant R	itative assessn ISK AVERSIO	nent of N	
Respondent	Item 4B.20: When I am convinced of a change I am willing to take personal risks.	Item 4B.31: I am not willing to take risks when choosing a job or a company to work for. (reverse coded)	Item 4B.36: I view risk of a job as a situation to be avoided at all costs. (reverse coded)	Qualitative Statement(s) / Quotes
				go and when not. I: And does that affect decisions you make at work day to day? B: I don't really think so. () I suppose if somehow I made a decision that got me fired on the spot, that kind of decision maybe. But otherwise
				I would of course make decisions that are in the company's interest. But I think that's normal (laughs).
20	5	1	4	 I: Ok. What role does the topic of job security play for your and to what extent does the thought of securing your job influence decisions in your daily work? B: Yes, that's the problem. 20 years ago I would have said, it does not matter to me, but eventually it will be even difficult to find a new job, although I do not believe, that I would have a problem in our market. But with increasing age, you think about it or at least it comes to mind at bit more. Yes. I: And does that influence you in your day-to-day work? B: No, not really, because my approach is to go at everything full steam, y'know? In other words, if the question is, whether that's what motivates me to work, a fear of losing my job, then no, because, like I say, for me it's full steam all the way. Or let's say I have a bad day, does that mean I'm supposed to lose steam? No, not at all, job security doesn't influence what I do. I: But mightn't you decide a certain thing a bit differently, if you were concerned it might endanger your job security? B: No. No. But I've been with the company for a long time. I: Yes. (smiles)

TABLE 4-69: IN-DEPTH ANALYSIS OF IDP ASSESSMENT COMPARING QUANTITATIVE AND QUALITATIVE RESULTS AND STATEMENTS: STF-FACTOR

	Quantitative SHORT-TE	assessment of RM FOCUS	
Respondent	Item 4B.26: Often, I feel a bit uncomfortable even about changes that may potentially improve my life. (reverse coded)	Item 4B.30: I sometimes find myself avoiding changes that I know will be good for me. (reverse coded)	Qualitative Statement(s) / Quotes
24	4	2 Do you sometimes catch yourself avoiding or trying to stave off change, although you know that it would be positive for you p B: Yes, out of convenience. I: For instance? B: A change that I knew would be good but would take time. () Just because it's easier. Because the other wasn't altogether more or less.	
18	4	3	Do you sometimes catch yourself avoiding or trying to stave off change, although you know that it would be positive for you personally? B: Oh yeah, sure. And I expect you want to have an example. I: No, you don't have to. You can just say, yes, there are times, or no there aren't. B: Oh, but, well, I do think that I might still in that moment, what it might somehow mean that I need to do more or I must change myself so that it would be better overall, I still think, I'm sure I do that.

Remarks on Comparative analysis in the area of Individual Dynamic Preference (IDP):

- **SEC-Comparison:** The examples of the qualitative statements show that there are sometimes constraints towards change, which are not well reflected by the rather high SEC-scores in the quantitative data.
- **RS-Comparison:** The qualitative quotes show that the quantitative assessment does not always reflect the individual routine preferences sufficiently. Especially item 29 appears problematic, because people with routine preference do not equate this with the issue of boredom. This relation is only found among people with surprise preferences.
- LOC-Comparison: The three examples show that the respondents have trouble in differentiating between a job and private life, which can lead to inconsistencies between the quantitative answers and the qualitative statements. Example 1 further shows that although the qualitative statements show a rather low LOC-score, the quantitative score is relatively high.
- **RA-Comparison:** The examples in the area of risk aversion show that item 4B:20 is often interpreted as rather general in terms of risk taking, while the other two are directly related to the topic of job security and layoff. Depending on what topic the respondent has in mind at the time of the quantitative assessment this can lead to very diverse answers within the same factor assessment.
- **STF-Comparison:** Both examples show qualitative statements with very direct and clear tendency towards a low short-term focus. Item 26 ("Often, I feel a bit uncomfortable even about changes that may potentially improve my life.") however, loads the factor into the opposite direction. These examples show that the topic of "feeling uncomfortable" might be interpreted as a weakness or undesired emotion in this context.

4.6.3 Comparative Analysis: WED-assessment

The correlation between the quantitative and qualitative Work Environment Dynamic (WED) scores shows a significant relationship.

TABLE 4-70: CORRELATION OF QUANTITATIVE AND QUALITATIVE WED RESULTS

		WED_quan	WED_qual
WED_quan	Pearson Correlation	1	,758**
	Sig. (2-tailed)		,000
	Ν	25	25
WED_qual	Pearson Correlation	,758**	1
	Sig. (2-tailed)	,000	
	Ν	25	25

**. Correlation is significant at the 0.01 level (2-tailed).



FIGURE 4-12: CORRELATION BETWEEN QUANTITATIVE AND QUALITATIVE RESULTS FOR WED

4.6.4 Comparative Analysis: WOC-assessment

The correlation between the quantitative and qualitative Work Outcomes (WOC) scores shows a significant relationship.

TABLE 4-71: CORRELATION OF QUANTITATIVE AND QUALITATIVE WOC RESULTS

		WOC_qual	WOC_quan
WOC_qual	Pearson Correlation	1	.822**
	Sig. (2-tailed)		.000
	Ν	25	25
WOC_quan	Pearson Correlation	.822**	1
	Sig. (2-tailed)	.000	
	Ν	25	25

**. Correlation is significant at the 0.01 level (2-tailed).



FIGURE 4-13: CORRELATION BETWEEN QUANTITATIVE AND QUALITATIVE RESULTS FOR WOC

4.6.5 Comparative Analysis: PD-Fit Assessment

The correlation between the quantitative and qualitative PD-Fit scores shows a significant relationship.

TABLE 4-72: CORRELATION OF QUANTITATIVE AND QUALITATIVE PD-FIT RESULTS

		PD-Fit_quan	PD-Fit_qual
PD-Fit_quan	Pearson Correlation	1	,525**
	Sig. (2-tailed)		,007
	Ν	25	25
PD-Fit_qual	Pearson Correlation	,525**	1
	Sig. (2-tailed)	,007	
	Ν	25	25

**. Correlation is significant at the 0.01 level (2-tailed).



FIGURE 4-14: CORRELATION BETWEEN QUANTITATIVE AND QUALITATIVE RESULTS FOR PF-FIT

4.7 Chapter Summary

Chapter 4 covered the analysis of the quantitative and qualitative data gathered in the interviews. In line with methodological standards the different data was analysed separately. A subsequent comparative analysis shall, however, expand the results as intended by mixed method research in terms of triangulation. This is undertaken not in order to add to validity of the data but rather to add to the breadth and depth of the findings.

Summary of Quantitative Data Analysis:

The present study involved 25 semi-structured interviews covering a total of 100 questions. The conducted interviews were recorded as well as documented within a written questionnaire. The interviews took between 1.5 and 2.5 hours. The present chapter covers the quantitative aspects of these interviews. The author is aware of the limitations of these analyses due to the low number of interviews. In order to determine the relevant constructs of IDP, WED, WOC and PE-Fit it was not possible to use factor analysis tools due to the small sample size. The entire analysis thus had to rely on calculations with means. In addition several items and even two sub-factors had to be excluded from the analysis due to critical issues either discovered throughout the interview phase or as a result of a first evaluation of the collected data.

The proposed PD-Fit and its relation to work outcomes was tested with a regression analysis. The analysis shows no significant relationship between the two variables. The underlying assumption of a relationship could thus not be supported. Potential reasons are discussed in *Chapter 5*. But the results gave insights into the general measurement of dynamic preference and environmental dynamic assessments which is further discussed in *Section 5.2* as well. Besides the limitations due to the sample size other aspects are taken into investigation in *Chapter 5* "Interpretation" in order to identify further findings. The quantitative results of this study should not be used to either support or disprove underlying research assumptions.

The analysis of additional influencing factors such as PE-Fits on outcomes and demographics and work conditions on IDP, WED and PD-Fit show the complexity of the field of study and the high interconnectedness between many of these variables. It will be discussed in *Chapter 5* how this potentially hinders the process of investigation.

Summary of Qualitative Data Analysis:

The qualitative analysis chapter started off with an introduction into the analytical approach and the coding methodology underlying this research. In a step by step mode the data was used to cluster the respondents into groups of low, medium and high in the areas of Individual Dynamic Preference (IDP) and Work Environment Dynamic (WED). This was done for the Person-Dynamic-Fit (PD-Fit) assessment based on the defined codes and criteria. The same clustering has then been done with the data on Work Outcomes (WOC). In a next step the relationship of the PD-Fit to the determined WOCs has been analysed by quantizing the qualitative data (mixed method).

The analysis of other variables such as other PE-Fits or potentially influential topics such as demographics or work conditions was also included in the qualitative analysis section.

The results of the relationship analysis between PD-Fit and WOC show that many of the cases do not support the research idea and a significant relationship could not be detected. A discussion on a potential interpretation of these findings will be covered in the next chapter. In any case, however, the results of this qualitative analysis do add breadth and depth to the understanding in the research area and many of the findings will be of value for further research as well (please refer to *Section 6.4* for further implications). This accounts especially for research in the area of individual change response and environmental dynamic analysis.

Summary of Comparative Analyses:

The results of the comparative analyses show that all correlations are significant but that only the values for WED and WOC show strong support between the quantitative and the qualitative data. Regarding the problems in the area of quantitative IDP assessment, which could be exposed through the comparison to several qualitative statements of the respondent, the low correlation result in this area is unsurprising. The determined fits correlate reasonably but only when the real determined qualitative fit is referred to and not the absolute fit values. This is plausible due to the larger breadth of the values and has thus little implication. Generally the lower fit correlation can potentially be linked to the problems in the IDP-assessment area as well.

The sub section on comparative analysis further covered a case-by-case comparison of the results in the area of IDP, due to the fact that this field appears to be most critical in terms of inconsistencies. A direct comparison between quantitative and qualitative statements revealed conflicts and misinterpretations in several cases which should be further analysed in research. *Chapter 6* evaluates these findings for their consequences for the results of this present research and their implications for future studies.

4.8 Chapter Conclusion

The author is aware of her own subjective understanding of the data and reflexive on this throughout the analytical process and especially for the drawing of conclusions in the upcoming chapter which covers the data interpretations and the findings. In brief conclusion beforehand it can be stated, that the qualitative and quantitative results correlate significantly for all main factors (PD-Fit, WED, IDP, WOC) which supports the general assessment approaches chosen by the author.

These correlations are, however, weaker for the IDP factors. This, as well as the results in the quantitative as well as qualitative analyses on this factor give reason to assume potential difficulties attached to the assessment of this factor. Possible origins are discussed in detail in the upcoming chapter. Regarding the proposed new fit concept of Person-Dynamic-Fit (PD-Fit), neither the qualitative nor the quantitative analyses could find significant support. But especially the findings in the qualitative section regarding the handling of dynamic give reason for the likely significance of this concept and for further research on this topic.

Chapter 5 Data Interpretation and Findings

5.1 Introduction

It was the aim of the study to develop a Person-Dynamic-Fit (PD-Fit) concept and to analyse and explore its relevance for Work Outcomes (WOC). The concept was based on knowledge about Person-Environment-Fit (PE-Fit) and related Work Outcomes (WOC) but with a focus on the fit between Individual Dynamic Preferences (IDP) and the dynamic of the respondents' work environments (WED).

Relevant factors and items were identified in the literature review and then thoroughly examined for their applicability before the data collection and analysis stage. The previous chapter then gave a broad overview over the quantitative as well as qualitative analyses which were conducted in order to fulfil the research aim and to answers the 16 research questions. The relevant factors of IDP, WED, WOC and PE-Fit and other



FIGURE 5-1: RESEARCH PROCESS - STEP 9

potential influencing factors were analysed. The main analytical step was the assessment of the fit between Individual Dynamic Preference (IDP) and Work Environment Dynamic (WED) and its relation to Work Outcomes (WOC). For the interpretation of the findings of the quantitative as well as the qualitative analyses the author will proceed by answering the research questions one by one as formerly defined and described in *Section 1.3* and repeated in the following table.

TABLE 5-1: OVERVIEW RESEARCH QUESTIONS

- RQ 1. How can Individual Dynamic Preference (IDP) be determined?
- RQ 2. Which characteristics influence IDP?
- RQ 3. Is a generalized self-assessment of Individual Dynamic Preference (IDP) appropriate?
- RQ 4. Is the assessment of IDP with a general change reference feasible?
- RQ 5. How do change experiences differ between respondents who are low, medium or high in their Dynamic Preference (IDP)?
- RQ 6. What factors do best indicate the dynamic level of the work environment that an individual is placed in?
- RQ 7. Is a self-assessment of Work Environment Dynamic (WED) appropriate?
- RQ 8. What Person-Environment sub-concepts are relevant for this research?
- RQ 9. What Person-Environment-Fit is most important to the respondents?
- RQ 10.What Work Outcomes (WOC) are relevant in the context of this research?
- RQ 11.How can Person-Dynamic-Fit (PD-Fit) be determined?
- RQ 12.Can Person-Dynamic-Fit (PD-Fit) be related to Work Outcomes (WOC)?
- RQ 13.Can Person-Dynamic-Fit be directly related to other sub concepts of Person-Environment-Fit (PE-Fit)?
- RQ 14.Is Person-Dynamic-Fit (PD-Fit) distinctly different from other PE-Fit constructs?
- RQ 15. What are potential influencing factors on IDP, WED and PD-Fit?
- RQ 16.Does the mixed method approach suit this research well? Is the qualitative or the quantitative approach of IDP and WED assessment

5.2 Research Questions on Individual Dynamic Preference (IDP)

RQ 1 / RQ 2: How can Individual Dynamic Preference (IDP) be determined? What characteristics influence IDP?

The study used two approaches for the IDP assessment: In a first step 24 items drawn from acknowledged publications were used for a quantitative assessment of IDP. In a second step the underlying characteristics and factors were transferred into qualitative items (open questions) and then used for a more in-depth IDP assessment.

The analysis of the IDP findings shows that several items turned out to be problematic for the respondents to answer, particularly in the quantitative data collection part. In addition the rather small amount of respondents limited the analytical options for the quantitative analysis. Several items were excluded from the analysis to focus only on unambiguous items.

The study started off with the following seven potential influencing factors (resulting from the literature review):

- self-efficacy for change (SEC)
- cognitive rigidity (CR)
- locus of control (LOC)
- routine seeking (RS)
- emotional reaction (ER)
- short-term focus (STF)
- risk aversion (RA)

Cognitive rigidity and emotional reaction were later excluded from the quantitative analysis due to the above mentioned concerns.

For the qualitative IDP assessment several sub-factors and codes were identified which turned out to be best applicable for the IDP assessment. No elements were used from the areas of cognitive rigidity and risk aversion for qualitative IDP assessment, because the data did not give adequate differentiating information about the respondents.

This does not necessarily mean that they are generally not useful for the assessment but among this present sample these factors did not give clear indication for IDP differentiation. To answer the research questions "*which characteristics or items influence IDP*" the analysis shows that particularly the factors routine seeking, self-efficacy for change, locus of control and short-term focus seem to be the key topics. For the quantitative analysis a broader base of respondents would be necessary to give a more complete answer to this question. Generally the assessment of IDP turned out to be rather difficult due to a lacking broadness of answers especially in the quantitative part of the assessment. The collected data was leaning towards very high dynamic preferences for a majority of the items and among the majority of the respondents.

Some other issues could further harm the assessment as described in the following sections (RQ 3 + RQ 4) regarding the self-assessment, as well as the issue of referring to a non-specific change (generalisation).

The comparative analysis of the quantitative and qualitative results further displays that in the qualitative assessment of IDP many of the respondents reached lower IDP scores than in the quantitative estimation. The reason could be that the rating was not simply done by (self-assessed) Likert scales but is rather a result of interpreting the respondents' statements towards change. These qualitative analyses were much more in depth and many respondents revealed reservations or concerns towards the topic of change which they did not simply admit or refer to in the quantitative part. Tables 76-80 in Section 4.6.2 give insights into some of the inconsistencies between the quantitative and qualitative results. The detected discrepancies further question the objectivity of the measurement tools applied by previous studies. Research question 16 deals with these discrepancies from a methodological perspective. For further research this could mean that qualitative assessment tools should be considered more frequently for the assessment or at least as an additional tool to support or specify quantitative assessment tools. Another option could be to include more specific information in the quantitative items to leave less room for individual interpretations. Generally further research is required in order to analyse these potential weaknesses of quantitative assessment tools.

RQ 3 / RQ 4:Is a generalized self-assessment of Individual DynamicPreference (IDP) appropriate?

Is the assessment of IDP with a general change reference feasible?

Supported by the experience of many researchers who have assessed comparable constructs such as change readiness or resistance (such as for example Lau and Woodman 1995; Terry and Callan 1997; Judge et al. 1999; Wanberg and Banas 2000; Oreg 2003; Martin et al. 2005; Holt et al. 2007a)) the present study clearly aimed for a self-assessment of the IDP factor as well as of all other key factors in the study. A look at the quantitative results of the IDP scores makes this choice however somewhat questionable. For a large amount of items the distribution of results was very one-sided (towards high dynamic preferences scores). A clear differentiation among the respondents was thus very difficult for many of the factors and for the overall IDP as well. This accounted especially for the SEC factor. Self-efficacy for change is defined as peoples' beliefs about their own competences to deal with changes (Herold et al. 2007). High scores for this factor thus reflect that the respondents feel confident that they can handle change well (Terry and Callan 1997; Wanberg and Banas 2000; Martin et al. 2005; Holt et al. 2007a).

The following items scored for example only one-sided towards high dynamic preferences:

- 4.13. I adapt easily to changes in my job. (SEC)
- 4.28. My past experience makes me confident that I will be able to perform successfully after change is made. (SEC)
- 4.23. There is little I can do to change many of the important things in my life. (R) (LOC)
- 4.34. I have the skills that are needed to make change work. (SEC)

Attempting to interpret these results there are several potential reasons: Either the selected group of respondents was "due to chance" generally rather high on IDP or other factors led to the one-sided responses. One potential other reason could be a cultural influence. Germany is known for being a rather masculine culture (Hofstede 2001) where performance is highly valued. Since IDP can be strongly related to concepts of change readiness people might evaluate the whole topic of positive responses to change and high dynamic preferences as a positive characteristic desirable to have. In Germany

it is quite common for all kinds of job postings to list "flexibility" and "transformation ability" as key requirements. It might thus be difficult for the respondents to honestly assess their own IDP, as they might be influenced by these cultural characteristics.

Hofstede (2001) further valued Germany as a country with high Uncertainty Avoidance. This cultural dimension has to do with how the people in the country deal with the unknown future and to what extent they feel anxious about this future. As part of a high "avoiding" culture Germans tend to plan well and detailed for the future in order to limit those potential uncertainties. Germans might thus try to control the process of change as good as possible in order to keep uncertainties about future developments as low as possible. Germany is further rated as a truly Individualistic country (Cultural Dimension: Individualism vs. Collectivism) with a high value of self-actualisation. These cultural aspects could further influence the IDP-factor as an achievable and positive factor rather than a neutral one.

This study aimed to analyse IDP in general terms with no specific change in reference. Critical topics about this general approach such as for example the lack in consideration of situational characteristics as determined by Weiner et al.'s (2008) meta-analysis or Rafferty and Simons (2006) study results which infer that employees "*report different degrees of readiness for fine-tuning changes and corporate transformation changes*" (p. 342) were to be reduced by explicitly asking the respondents about their experiences and feelings regarding every-day changes as well as major change events in the qualitative part of the study. For the WED determination the author then focused on small-scale change responses for the classification.

This is also supported by the analysis of a completely distinct part of the study. In *AREA A: Individual Dynamic Preference (IDP)* (item 4.2) the respondents were asked how they would describe their experience with change in general (rather positive or rather negative) and which emotions they connected to changes. Very interestingly all 25 respondents reported a positive attitude towards change and overall positive experiences. This result is particularly interesting in relation to the actually reported examples of major changes of the respondents as described in *Table 4-50: Biggest change experience - overview*.

In this section only nine respondents spontaneously reported of a positive change event while 13 reported a change which they felt negative about and three gave examples of rather neutral changes. This controversy supports the above mentioned one-sided evaluation of change experience when asked in general terms due to cultural or societal background. The point of reference in terms of the magnitude of change also appears to be distinct when asked in specific or in general terms: it appears that bigger change events tend to be evaluated rather negative (most likely due to their stronger impact on the individuals) and that the respondents tend to refer to smaller and less disruptive change events when asked about changes in general terms.

The analysis of the data further reveals one other potential influencing factor regarding the question of self-assessment. Especially in the qualitative analysis it became evident that the respondents evaluate themselves in comparison to their specific and individual environment and the people within this specific environment. They lack a neutral and objective point of reference for topics such as Dynamic Preferences and change readiness. An employee of a public organisation with a rather low dynamic from an objective point of view compares himself or herself to his/her colleagues or friends in the direct environment and not to someone working for example in a highly turbulent environment or job in a completely distinct industry or setting. This makes the comparability of the results across distinct environments and settings – as intended by this study – at least debatable. All the items were formulated with a general change reference and as such the "potential change" described by the items are thus a matter of interpretation of the individual. The qualitative data and its analysis reveals that the references used were very different and in themselves very diverse in terms of the underlying dynamic. When asked "How well they could deal with changes" or "whether they could well deal with the challenges of changes" they create their own potential change which fits into their individual scope.

The results of the qualitative Work Environment Analysis (WED) on changes in private life add another topic into the discussion of the appropriateness of a general assessment: the differentiation between business and private life. The results give some interesting insights into the idea of assessing IDP in general terms. A majority of respondents tends to avoid changes in their private life even some of those individuals who showed high IDP scores for their working environment. This fact shows how critical the assessment of general IDP is, because the differentiation between business and personal environments needs to be very clear throughout the entire assessment process. Items which are formulated rather general (e.g. in the area of locus of control) or which somehow interact with the private setting (e.g. in the area of risk aversion) might be influenced by side-effects due to the respondent's status or their private situation, which are difficult to control. This shows that the approach of this study with a general change focus and a crossindustrial and cross-company application is, in some parts, not working in combination with a self-assessment approach for IDP and that this could limit the findings.

There were, however, several items which revealed sufficient differences to differentiate the respondents into groups of low, medium and high dynamic preferences (IDP). Especially in the qualitative assessment it was possible to decrease the influence of onesided answers and to focus on those elements which clearly differentiated the respondents.

At this point it should be emphasized, that the results also reveal that IDP is a very personal topic and it is questionable whether a third-party assessment would be possible or even appropriate. For future research the problematic issues about self-assessment and general change reference – as discovered in this study – could be reduced by providing a more objective point of reference, e.g. by describing potential changes or by focusing on more homogeneous environmental settings where the respondents can refer to a common change.

RQ 5: How do change experiences differ between respondents who are low, medium or high in their Dynamic Preference (IDP)?

An analysis of the reported experiences reveals no clear relation between the level of IDP and the respondents' former change experience. It is, however, visible that people with higher IDP scores have frequently experienced higher dynamic changes in their every-day lives than people who have lower IDP. This stresses one of the key difficulties of this investigation. It appears that the fit into the work environment in terms of dynamic, as constructed by this study, is something that the employees generally strive for when choosing a job. People with lower IDP preferences thus look for this kind of work setting and subjects with higher dynamic preferences search for higher dynamic environments. Some of the quotes in the qualitative assessment support this finding, e.g. in the area of risk aversion (*Table 4-33: Risk aversion (RA): codes and quotes; code: high in job decision phase but not for every-day decisions*).

The cross-company and cross-industrial character of this study intensified the impression that the fits are rather good because, particularly in the experience analysis, the data is analysed in comparison to the data of the full sample. These findings also

lead to a suggestion for further research to focus on samples within a more homogeneous environment and change history or in terms of similar experienced change events.

Another reason could be that respondents with better fits (and potentially better WOCs) are more likely to be willing to participate in a study with such a sensitive topic such as change response. Of course this study is based on clear and objective sampling criteria, the participation however, remained fully voluntarily and many of the people asked to participate also refused the author's inquiry. Since they were well informed about the topics and items covered by the interview, it is possible, that people with lower fits or WOCs scores would rather tend to turn down the request, being timid about the questions.

5.3 Research Questions on Work Environment Dynamic (WED)

RQ 6:What factors do best indicate the dynamic level of the work
environment (WED) that an individual is placed in?

This study used two distinct approaches to determine the WED of the respondents. For the quantitative part, the study relied on scales and factors developed by Ansoff and McDonnell (1990) for the organisational level and on self-developed scales applied to the more individual job level. In addition, their idea of complexity, predictability, speed and impact of change was also used for the dynamic assessment. A few factors of the Ansoff and McDonnell scales were eliminated before the analysis, because the results showed little or no use for the proposed dynamic assessment (items 6B: 8, 12,15, 16).

For the qualitative part the study relied on self-reported change experiences by the respondents: they were asked to describe typical every-day changes in their jobs as well as describe one of the biggest changes experienced in the past. These reported experiences were then analysed for indicators of low, medium or high dynamic environments.

Quantitative assessment: In particular the following topics seem to be best to determine environmental dynamic and to differentiate between the respondents in terms of WED. They are split between job level focus and organisational level focus.

Job Level:

flexibility within job (item 5.9)

changes of processes (item 5.10)

broadness of tasks (item 5.11)

Item Number	Item	Scale Description (English translation)
5.9	How would you describe the flexibility in the accomplishment of a task?	 Clearly structured processes Mainly structured processes Some flexibility within a given framework High flexibility in task accomplishment Creativity in task accomplishment
5.10	How do you experience changes of processes and workflows in your job?	 Stable routines and processes – workflows change very rarely Processes change in a planned manner Processes change continuously (but predictable) Processes change continuously and little predictably Processes change surprisingly and in an unpredictable manner
5.11	How broad is your area of activity/responsibility?	 Clear focus on few and similar tasks Clear focus on several similar tasks Focus of many similar tasks Focus on many different tasks Focus on many changing tasks

TABLE 5-2: WED ASSESSMENT JOB LEVEL: KEY ITEMS

Organisational Level:

attitude towards changes (item 6.6)

internal communication (item 6.10)

HR development (item 6.11)

organisational flexibility (item 6.17)

TABLE 5-3: WED ASSESSMENT ORG LEVEL: KEY ITEMS

Item Number	Item	Scale Description (English translation)
6.6	Which dominant attitude exists towards change?	 Reject and ignore change React to unavoidable change Adaptation of familiar change Search for unfamiliar change Create change

Item Number	Item	Scale Description (English translation)
6.10	How would you describe the internal communication and feedback culture in your organisation?	 Top Down; no feedback; little communication Top Down; occasional feedback possible Top Down and bottom Up, with existing hierarchical structures Interactive; two sided feedback; across hierarchical levels Open in all directions; network
6.11	What is the focus of the management and employee development in your organisation?	 Training only if needed task oriented training Career development; extended special subject training Personality development; job rotation Future oriented content; networking
6.17	How would you describe the flexibility in your organisation?	1 Rigid 2 Low flexibility 3 Moderate flexibility 4 Adaptive 5 Highly adaptive

Qualitative assessment: For the qualitative assessment the reported every-day changes turned out to be a better indicator for the WED level than the data about larger change experiences. Statements such as "day planning is possible / is not possible" or "changes are normal" were used to differentiate the respondents from each other. The large scale changes did not work well for dynamic assessment because even respondents who reported rather low levels of every-day changes and said that their days were predictable had sometimes experienced large scale changes in their past, either due to (one-time) strategic shifts of their organisation or due to other extraordinary events. In addition, many respondents reported very personal level changes when asked for a major change event, such as job changes or supervisor changes. These turned out to be difficult to compare and to refer to for the dynamic assessment.

The reported change experiences are the underlying facts for the qualitative WED assessment. They were used to classify the respondents' surroundings into low, medium and high work environments. It was, however, less the change content itself, such as whether it is a change of tasks, people, requirements or other, but rather how the respondents talked about these changes in terms of the changes' influence on their daily work.

For the scales on complexity, predictability, impact and speed of change in Area B, part 4, however, the assessment revealed some potentially problematic issues, due to the lack of a common point of reference to evaluate these change criteria. In addition, some of the terms such as "dynamic" or "complexity" turned out to be difficult to understand in the job context for some respondents. Due to the presence of the interviewer and the option for questions and explanations it was not overly problematic in this present study but could cause difficulties if applied in a purely quantitative assessment. For future research it might thus be helpful to complement the simple scales (low to high) with examples for the distinct levels and topics. Looking at the results more closely (Table 6-18: WED assessment dynamic Scales (7-point Likert scale)) the data reveals that the scores for the direct job environment were higher on average than for the work group and the overall organisation. This is mainly caused by a very high average score for the complexity of the changes in the job environment and a fairly high average score for the impact values. In both cases these results could be influenced by the fact that the job level is simply closer to the individual and changes taking place there appear to be more complex and stronger in terms of impact.

The high score for the dynamic of the changes in the external environment could, on the other hand, be caused by the higher abstraction, as only few employees reflect on changes outside the organisation frequently, except for people with jobs which have strong external foci such as sales or marketing professionals.

RQ 7: Is a self-assessment of Work Environment Dynamic (WED) appropriate?

From the experience with the undertaken analysis it is reasonable to say that selfassessment of WED is generally appropriate. The selected scales and factors offered objective dynamic scales and the respondents felt comfortable to rate their organisations on these scales. For most items the differentiation between the organisations worked well.

The scaled questions regarding complexity, predictability, impact and speed of change in *Area B, part 4*, however, turned out to be problematic in terms of self-assessment for a few single respondents when the questions regarded the broader areas of organisational or environmental level. Some respondents felt that they did not have the insights or competence to be able to answer these questions accurately at first. In these cases additional examples given by the interviewer were necessary to generate accurate results. For future research this should be considered, because an assessment of broader environmental areas might cause difficulties, for example in a purely quantitative questionnaire.

Self-assessment also appears to be appropriate for qualitative data collection in the area of WED. Reporting change experience and overall dynamic is a very personal and intimate topic and it is likely that only a self-assessment would reflect the individuals' true involvement appropriately.

The qualitative data analysis revealed that many answers were strongly influenced by very current change experiences or work settings, which might limit the findings and its reproducibility. The general idea that peoples' judgements and perceptions are subject to change is in line with the stance of critical realism.

5.4 Research Questions on Person-Environment-Fit (PE-Fit)

RQ 8 / RQ 9: What Person-Environment sub-concepts are relevant for this research? What Person-Environment-Fit is most important to the respondents?

The study integrated four distinct sub-concepts of PE-Fit into the investigation, namely person-organisation-fit (PO-Fit), person-job-fit (PJ-Fit), person-group-fit (PG-Fit) and person-supervisor-fit (PS-Fit). All of these have been identified in research as relevant for the different Work Outcomes (WOC) as defined in this research. The emphasis of the literature is, however, on PO-Fit and PJ-Fit. Within this present study only PJ-Fit had a significant impact on the overall WOC score, mainly due to its strong relation to the factors exploited potential and job satisfaction (please refer to *Table 4-18: Correlation of PJ-Fit and WOC*). PO-Fit only correlated significantly to the sub-outcome of organisational commitment and PG-Fit could only be related to job satisfaction. PS-Fit showed no significant relationship to any of the tested Work Outcome (WOC) factors. Please refer to the tables in *Section 4.4.8* for the detailed correlation analyses.

These findings can be linked to findings from former research by Kristof-Brown et al. (2005) as described earlier in *Section 2.4.5*. Their meta-analysis shows that perceived fit measures reached higher predictability of several job outcomes than objective fit assessments did and they detected that the different fit-concepts vary in their influential impact on the different work outcomes.

After the respondents were asked to rate their different PE-Fits they were requested to state which of these fits was most important to them personally. The results (*Table 6-23: Person-Environment-Fit: choice of most important sub-fit)* reveal the following order:

- 1. PJ-Fit
- 2. PG-Fit
- 3. PO-Fit
- 4. PS-Fit

This emphasizes the importance of PJ-Fit for work outcomes and is supported by the findings presented in *Section 4.4.8* that the PJ-Fit factor correlated the strongest with the tested WOC. It might also serve as an explanation for the lack of relationship between PS-Fit to the WOCs.

A potential reason for generally rather weak correlation results between the different sub-fits and WOCs could be the fairly low number of respondents for a quantitative assessment. Since this topic was only covered in a mono-method base (quantitative), the present study cannot give any further insights into potential reasons. A suggestion for future research is to focus on the differences of the distinct concepts in terms of their influence on WOCs. Another potential reason for low significant relationships in this area is that PE-Fit cannot be summed up within one factor as it is defined as a multidimensional concept. As such it is widely accepted in research and many scientists have emphasized the danger of isolating the fit-components and looking at them individually. According to them, only the assessment of several dimensions at the same time will give a realistic view of the overall PE-Fit (Carless 2005; Kristof-Brown et al. 2005; Jansen and Kristof-Brown 2006). A focus on separate sub-fits is thus also misleading as the results of the fit weighting vary among the respondents (Table 6-23: Person-Environment-Fit: choice of most important sub-fit). This preference or weighting should be considered for future research and with a larger sample. As Jansen and Kristof-Brown (2006) also emphasized, certain circumstances can influence the

impact of the different factors on the individual. Future research should thus always consider those potential factors.

For reasons which remain undetected, the respondents within this sample all score high or very high for their preferred fit area, which makes an analysis of the relationship to WOCs difficult as well.

The qualitative analysis further revealed that when PS-Fit was low this had a stronger impact on work outcomes while when it was rather high it had hardly any influence. It can thus be seen as a hygiene factor according to Herzberg's (1959) definition in his motivation-hygiene theory according to which there are factors in the workplace which cause job satisfaction (motivators) and others which cause dissatisfaction (hygiene factors). The latter cannot impact job satisfaction positively but their absence can cause dissatisfaction. For this research this would mean that a good person-supervisor-fit (PS-Fit) does not positively influence work outcomes but can have negative impacts if PS-Fit is low. This analysis is not based on the questionnaire area on PE-fit but rather a side-result from the WED-assessment. This potential explanation finds support in Kristof-Brown et al.'s (2005) statement that poor fits in one dimension can spill over to fit perceptions in other areas (*Section 2.4.5*). For a supportive regression analysis the case number is unfortunately too low. Eight respondents referred to supervisor changes when asked for the biggest change event in the past years (*Table 4-52: Major change Experience and Evaluation*).

In the item development phase there was also the open question of whether to focus on complementary fits or on supplementary fits. Whether people interpret a PE-Fit in one or the other term fully depends on the individual. Only perceived measurements can reveal their perspectives. The present study formulated the question in supplementary terms where necessary (e.g. "*How would you rate your PO-Fit in terms of collective values and goals*") as this is more accepted in research today. Each quantitative rating was however followed by the open question where the respondents were able to comment on their rating. In this section several respondents explained the specific demands or values they referred to, but none referred to the topic of complementarity as an important issue for their fit assessment. This can be interpreted as verification for this approach.

5.5 Research Question on Work Outcomes (WOC)

RQ 10: What Work Outcomes (WOC) are relevant in the context of this research?

For this study four distinct Work Outcomes (WOC) were identified as relevant:

- job satisfaction (JS)
- organisational commitment (OC)
- turnover intention (TI)
- and exploited potential (EP)

In the course of the study it became evident, however, that the factor of turnover intention (TI) was in many cases interpreted as a factor subject to outside influences rather than subject to the respondent's personal choice. This might be influenced by the economic crisis and the accompanying environmental uncertainty in terms of job security which occurred in the environment at the time when the study was conducted (2010). The factor of turnover intention (TI) was thus excluded from the analysis. It further turned out, that an overall outcome measure could be misleading. Depending on the focus of the environmental fit, as well as the importance placed on that fit by the individual respondent, a distinction between different outcomes measures is important.

An important issue within this present study is that most respondents showed good overall outcomes. Only five could be evaluated as low, or rather low, while twelve had a tendency or clear direction towards even very high outcome values (*Table 6-21: Quantitative assessment of work outcomes (WOC) based on means and Table 4-9: Work Outcome (WOC) distribution among sample*). A potential explanation could be that perhaps only people who feel comfortable in their jobs and work environments with higher levels of JS, OC, EP and lower TI might be willing to participate voluntarily in a study with a job focus such as the present one. It is possible that people with potentially lower outcome results rather turned down the interview request as they might feel less comfortable to talk about these issues.

Due to the fact that the determined PD-Fit could not be directly related to any of the evaluated WOCs, the research question "What Work Outcomes (WOC) are relevant in the context of this research?" remains partly open. Job satisfaction, organisation commitment and exploited potential displayed relevance for the other PE-Fit-constructs.

Further research would thus be well advised to adhere to these also for research on other potential person-environment-areas such as PD-Fit.

5.6 Research Questions on Person-Dynamic-Fit (PD-Fit)

RQ 11: How can Person-Dynamic-Fit (PD-Fit) be determined?

In the present study Person-Dynamic-Fit (PD-Fit) is calculated by determining the difference between the Individual Dynamic Preference (IDP) and the Work Environment Dynamic (WED) scores of the respondents. A low difference indicates a good fit while a larger difference points to a weaker PD-Fit.

In the quantitative PD-Fit assessment all fits turned out to be positive when the WED scores were subtracted from the IDP scores. This would, in consequence, mean that all respondents of this study prefer higher dynamics than what their current work environment is actually like. Another option to interpret these results is that people maybe do exaggerate their IDP scores. As stated above (*Section 5.2*) the latter could have cultural reasons.

However, this finding could also indicate an incompatibility of the two factor scales. For future research these scales should thus be carefully revised.

For the analysis of the collected data in this present study the latter issue is not seen as overly critical, as it would only move the entire scales further up or down but would not have an impact on the relationship assessment between PD-Fit and WOC. The problem of potential exaggerations of one's own IDP is however more critical, as the study did not give sufficient insights into the "who" and "when" as to counteract this potential issues. Future research should focus on potential exaggerations among different demographic groups or job fields. The personal presence of the author during the interviews might have further added to the exaggeration of assessments of personal attributes which were considered to be positive for personal performance. The accurate assessment of PD-Fit relies very much on the accuracy of the IDP and WED assessment. Any of the issues mentioned in these areas as described in *Section* 5.2 *and Section* 5.3 thus also influence the PD-Fit assessment. The overall idea of assessing PD-Fit by measuring the difference between IDP and the actual dynamic in the subjects' work environment however, still remains feasible.

This is also supported by the control PD-Fit assessment conducted in Part 3 of the interview. The comparison of the results revealed that the fit assessments were alike for most respondents as displayed in *Table 4-12: Comparison of main quantitative PD-Fit assessment and Part 3 PD-Fit assessment.*

As announced earlier, the five anomalous cases require further investigation. A closer look at these cases (Respondents 1, 3, 10, 20 and 22), exposes that in three cases the ideal work environment choice scored more than 2 or 2.5 above their real work environment choice. The qualitative analysis then revealed that this is mainly due to the fact that people gear their choice in this question partly based on only one or two of the mentioned characteristics, while the more sophisticated PD-Fit assessment in the analysis includes a very broad range of environmental characteristics. In two of these cases the difference could be clearly found in the area of WED-assessment, as the determined WED scores were clearly higher than their real work environment choice. In the other two noticeable cases the high differences root in a strong PD mis-fit measured in the main PD-Fit assessment, which were not supported by the control question. In both cases the low fits were rooted in considerably higher IDP scores than WED scores. These could be cases where some of the above mentioned cultural or exaggeration issues apply, or as in case 22, where the ideal work environment choice was based on only a single environmental characteristic.

Respondent	PD-Fit*	Control PD-Fit: ideal work environment - real work environment choice	Difference between ideal work environment choice - IDP**	Difference between WED - real work environment choice	Measured Comparison of Fits	Notes	
1	0.93	2	-0.6	0.47	1.07	ideal work environment choice 2 higher than real work environment choice	
4	1.09	0	0.23	-0.86	-1.09	determined IDP 1.09 higher than determined WED	
8	2.02	1	0.59	-0.42	-1.02	determined IDP 2.02 higher than determined WED	

TABLE 5-4: CASES WITH NOTICEABLE DIFFERENCES IN PD-FIT ASSESSMENT

Respondent	PD-Fit*	Control PD-Fit: ideal work environment – real work environment choice	Difference between ideal work environment choice - IDP**	Difference between WED - real work environment choice	Measured Comparison of Fits	Notes
10	0.49	2.5	-0.08	1.93	2.01	ideal work environment 2.5 higher than Real Work Environment * determined Work Environment 1.93 higher than real work environment choice
20	1.5	0.5	0.51	-0.49	-1	determined IDP 1.5 higher than determined WED
22	1.17	0	1.17	0.01	-1.17	determined IDP 1.17 higher than determined WED

*as determined by simple subtraction due to the same scale from 1 to 5

Highest Differences between factors (≥ 1)

After the experience with this study the author considers whether a direct question about PD-Fit would be feasible for future research as well. In the area of the other PE-sub-fits this kind of simplified approach has been used in this study. A potential item to determine PD-Fit directly could be:

How would you rate your fit into the dynamic level of your work environment in terms of your own dynamic preferences?

The applicability of such a simplified measurement could be an interesting topic for future research. Two concerns about such an item / question should be mentioned however:

- Terms such as "dynamic" are very abstract and difficult to conceive for many subjects in a direct question without further background information and details
- This study revealed that IDP is potentially exaggerated by several respondents, most likely due to cultural and societal reasons (as discussed in *Section* 5.2). A fit into a job's dynamic could also be seen as something desirable, or be interpreted as strength (except for cases where the subject evaluates their own

job as boring or not dynamic enough). This is comparable with the item 2.1 (How well do your competences match the requirements of your job?) on person-job-fit which focussed on the individual's KSAs (knowledge, skills, abilities). Out of 25 respondents, 9 evaluated this fit with the highest score (7) and none of the respondents rated this fit lower than five (on a 7-point Likert scale ranging from 1 = very weak to 7 = very strong). The average score being 6.16. The overall lower PJ-scores were only influenced by the scores if the second person-job item concerning the employees' own expectations of a job (item 2.2: *How well does your job fulfil your expectations of a job?)* with a lower average score of 5.72. Again, either these are the true results for this present sample, or societal pressures *to "be the right filling for the job"* might influence the scores.

RQ 12: Can Person-Dynamic-Fit (PD-Fit) be related to Work Outcomes (WOC)?

It was the key aim of this research to analyse the relationship of PD-Fit to the selected WOCs. The data of the present study did not reveal any significant relationship between PD-Fit and WOCs, neither to the overall WOC-score nor to any of the sub outcomes factors such as job satisfaction (JS), organisational commitment (OC), turnover intention (TI) or exploited potential (EP). In order to detect a potential relationship, regression analyses were used. This was also the case for the analysis of the qualitative results, where no relationship to WOC could be detected either.

In order to interpret this finding it is important to identify all potential reasons for this negative result and evaluate these one by one:

- 1. There really is no relationship between PD-Fit and WOC
- 2. Due to the low sample size a relationship could not be revealed (but is potentially there)
- Critical issue about IDP assessment could falsify PD-Fit results (please refer to Section 5.2)
- WOCs are influenced by other factors more strongly (e.g. only a mediating role of PD-Fit)

Any of these potential explanations could be accurate individually as well as a combination. For further research an analysis with a larger sample size would thus be

desirable. The critical issues about the assessment of IDP could be tackled as recommended above. Due to the mixed character of this research the potential impact of these issues has already been minimized within this study. Option 4 remains a potential uncertainty. Generally, PD-Fit could only have a mediating role, but due to no significant relationship being found between the determined PD-Fit (quant) to any of the other PE-Fit-concepts, there is no support for this idea. Future research should keep this option in mind and consider it in the research design and execution phase.

RQ 13 / RQ 14: Can Person-Dynamic-Fit be directly related to other sub concepts of Person-Environment-Fit (PE-Fit)?

Is Person-Dynamic-Fit (PD-Fit) distinctly different from other PE-Fit constructs?

In order to answer the research question, whether Person-Dynamic-Fit is related to any PE-sub fit, a correlation analyses was undertaken. This correlation analysis shows no relation between PD-Fit and any of the other sub concepts of PE-Fit as the table below visualizes:

		PD-Fit quan.	PD-Fit qual.	PG-Fit	PO-Fit	PS-Fit	PJ-Fit
PD-Fit	Pearson Correlation	1	.525**	.199	.072	235	131
quan.	Sig. (2-tailed)		.007	.352	.731	.400	.534
	Ν	25	25	24	25	15	25
PD-Fit	Pearson Correlation	.525**	1	.287	.016	255	.042
qual.	Sig. (2-tailed)	.007		.174	.939	.360	.841
	N	25	25	24	25	15	25
PG-Fit	Pearson Correlation	.199	.287	1	.643**	292	185
	Sig. (2-tailed)	.352	.174		.001	.311	.387
	N	24	24	24	24	14	24
PO-Fit	Pearson Correlation	.072	.016	.643**	1	.525*	.168
	Sig. (2-tailed)	.731	.939	.001		.044	.422
	N	25	25	24	25	15	25
PS-Fit	Pearson Correlation	235	255	292	.525*	1	.557*
	Sig. (2-tailed)	.400	.360	.311	.044		.031
	Ν	15	15	14	15	15	15

TABLE 5-5: CORRELATIONS BETWEEN PE-FIT-CONCEPTS

		PD-Fit quan.	PD-Fit qual.	PG-Fit	PO-Fit	PS-Fit	PJ-Fit
PJ-Fit	Pearson Correlation	131	.042	185	.168	.557*	1
	Sig. (2-tailed)	.534	.841	.387	.422	.031	
	Ν	25	25	24	25	15	25

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The missing correlation analysis between the different PE-Fits and PD-Fit could generally be interpreted as a sign for the distinctiveness of the concept. Due to the lacking relation of PD-Fit to WOCs, however, this distinction has little implication.

The correlation results among the other sub-fits show that the fits are interconnected to some extent. PO-fit and PG-fit are strongly related and also PS-fit and PJ-fit show some significant relationships.

5.7 Research Question on Influencing Factors

RQ 15: What are potential influencing factors on IDP, WED and PD-Fit?

For the present study, three distinct fields of influencing factors have been identified prior to the study, namely demographics, work conditions and Person-Environment-Fit. The role of PE-Fit has been explained in *Section 5.4 (RQ 8 + RQ 9)* above.

The role of demographics and work conditions has been analysed only for the quantitative fit assessment (*Section 4.4.9*). The results give the following insights:

• The average IDP score turned out to be higher among male than female respondents. (*Figure 4-4: Role of Gender on IDP*).

There are two potential interpretations for this finding:

a) True for sample

This interpretation is supported by data from the qualitative analysis and the WED assessment which indicate that the male respondents work in more dynamic environments and also strive for these kinds of circumstances.

b) Exaggeration issue

Male respondents might be influenced even more strongly by the described societal pressures and thus misjudge themselves in terms of their individual IDP scores. Although there is no clear evidence for this, the reports of female respondents about change response and experience in the qualitative research part appear to tackle concerns opposing emotions more openly than the male respondents do.

c) or a combination of a and b

• The role of age on IDP score requires very careful interpretation due to very low sample sizes within each age group. However, there appears to be a tendency towards higher IDP among older age groups.

A potential interpretation could be that older respondents also have more experience with change in general and thus potentially a higher confidence in their own ability to deal with this type of situation. This increased openness could be reflected in higher IDP scores.

• The gender of the respondents seems to be related to their WED scores. Male respondents showed a higher average score for their WED.

A potential explanation is that within this sample the male respondents really did work in higher dynamic environments. This is potentially influenced by a slightly uneven distribution of the hierarchy levels among the gender groups and should thus be interpreted with the corresponding care. The study included, for example, only four respondents on an assistant level, which were all female. The distribution on the higher levels was more balanced, but due to the rather small sample a potential side effect from this should be kept in mind. Although such an even distribution could also be the case in reality, as the amount of female manager's in higher positions is still lower than for men and the share of female assistants is often higher than the male share. Future studies should include a more balanced hierarchical distribution and a larger sample size if inferences are required to be made regarding gender differences for WED assessment.

• An analysis of the PD-Fit results (quant) and their relation to gender revealed only slight differences between the two groups. On average, PD-Fit appears to
be slightly better among male respondents and the deviation within the sample is much lower within the male group.

The number of cases is however too low to make valuable interpretations.

• work conditions are positively related to the IDP scores.

A closer look at the specific work conditions covered in this study allows for a very simple explanation of the positive relationship between IDP and work conditions:

Item Number	Item	Factor
5.1	How high would you rate the level of your personal decision-making power?	decision-making power
5.2	How much are you involved in superior decisions?	involvement
5.3	To what extend can you influence your personal duties and responsibilities?	personal influence
5.4	How high is your workload compared to the available time?	workload

 TABLE 5-6: WORK CONDITION ITEMS

All these items could be interpreted as enabling issues, increasing the individuals' competence as well as confidence to be able to deal with imposed changes. The factor of self-efficacy for change defined as *"peoples' beliefs about one self's competences to deal with changes and master such situations"* (Herold et al. 2007) has been identified as an important sub-factor of IDP. People who feel that they are able to deal confidently with change are thus more likely to prefer higher dynamic environments than those who feel less confident.

Conducting a future study within a single organisation or a more homogeneous work setting could give valuable insights regarding demographic differences in the IDP and WED assessment.

5.8 Research Question on Methodology

RQ 16: Does the mixed method approach suit this research well? Is the qualitative or the quantitative approach of IDP and WED assessment more appropriate for future research?

The collection of qualitative and quantitative data at the same time was done in order to generate deeper insights into the newly proposed concept of PD-Fit. It was further intended to allow for derivations for future research with potentially more quantitative emphasis.

Supporters of mixed method approaches argue that the results of different measures can be compared to see to what extent they are compatible and that results which are confirmed by two or more measurements can greatly reduce the uncertainty of these results (Bryman 2006).

The comparative analysis between the quantitative and the qualitative results mainly served this purpose of decreasing uncertainties in the area of data interpretation. It was, however, not the aim to actually validate one set of data with another.

The quantitative and qualitative results for the four factors of IDP, WED, WOC and PD-Fit were all tested in correlation analysis in *Section 4.6*. All results correlated significantly at the 0.01 level:

Factor	Pearson Correlation
IDP	.529
WED	.758
WOC	.822
PD-Fit	.525

TABLE 5-7: CORRELATION RESULTS OF COMPARATIVE ANALYSIS (SUMMARIZED)

The lowest correlation is detected in the area of Individual Dynamic Preference (IDP). A deep comparative analysis of the sub-factor results revealed potential problems about the accuracy of the quantitative IDP assessment, as it might not reflect the respondent's true attitudes sufficiently in all areas. Potential reasons were formerly discussed in RQ 1-4 (*Section 5.2*).

However, the significant correlations in all four relevant areas decrease the uncertainties and constraints about both potential assessment approaches (qual. and quant.). The mixed method approach thus served this research very well, as the qualitative results allowed for deeper insights into the underlying processes and attitudes of the respondents and allowed for findings which would have remained undetected within a purely quantitative approach.

Both approaches (quant. and qual.) should also be feasible as stand-alone approaches.

As emphasized earlier, a larger sample group would, however, be desirable in order to analyse and explore the proposed PD-Fit concept more deeply. This would be more feasible with a stronger quantitative emphasis. In the areas of WED as well as WOCs a quantitative approach would be appropriate. The quantitative assessment of influencing factors such as PE-Fits, demographics or work conditions also worked well in the present study. Future research should thus focus strongly on the testing of accurate quantitative IDP items, as these involved the most concerns in the present study. It might be necessary to cover this topic in a separate research prior to a roll-out of this present study among a large sample group.

5.9 Chapter Summary

This chapter tackled the 16 research questions one by one in order to interpret the quantitative and qualitative results as generated in the data analysis stage accurately. All research questions were answered elaborately and the findings of all sections were presented. The aim of the study and the intended objectives were all met. Especially the mixed method approach generated new insights into the research field. The resulting contribution of these findings to theory and practice as well as the implications of these findings for future research will be discussed in the following chapter.

Chapter 6 Conclusion

6.1 Introduction

In conclusion to this research it is necessary to reflect on the aims and objectives of the present research and to evaluate the obtained results. As indicated earlier the author of this thesis has a scientific as well as professional background in marketing as well as strategic management. Her main scientific interest and focus, however, is currently in the area of change management and individual change behaviour. As such it was her aim, not only to contribute to theory in this field of interest, but to also gain understanding and knowledge which can be of additional value for professionals in the field. The contribution of this current study to theory as well as practice is thus set out in *Section* 6.3.

The analysis of the direct contributions further leads to the identification of future research fields, as the present study could only cover a narrow area of





research. Several fields of potentially interesting findings, which require further attention and more explicit and focused investigation, were identified. *Section 6.4* will thus summarize these fields of interest for future and further research.

As a critical realist the author is well aware of her own position within this research and her potential influence on the outline as well as the execution and findings. She thus reflects on these issues and critically assesses potential issues in *Section 6.6*.

These different subparts lead to the concluding section covering potential limitations of the present research. The author has already emphasized such potential limitations throughout this thesis in areas such as methodology, data collection, data analysis as well as the interpretation. Further conclusions which arose in the areas of reflexivity and evaluation also require mentioning in this sub section.

6.2 Achievement of Aim and Objectives

Recalling the research aim and the research objectives as defined in *Chapter 1* and summarized in the following table, it can be stated, that the aim and the objectives of this research project are fully accomplished in this study and thesis.

RESEARCH AIM	RESEARCH OBJECTIVES
It is the aim of this study to develop a Person-Dynamic-Fit (PD-Fit) concept and to analyse its relevance for Work Outcomes (WOC). The concept will be based on knowledge about Person-Environment-Fit (PE-Fit) and related Work Outcomes (WOC) but with a focus on the	Identify or develop the relevant factors and items to determine the four different concepts of: 1. Individual Dynamic Preference (IDP) 2. Work Environment Dynamic (WED) 3. Person-Environment-Fit (PE-Fit) 4. Work Outcomes (WOC) Determine a fit between factor 1 (IDP) and factor 2 (WED) and relate this Person-Dynamic-Fit (PD-Fit) to relevant Work Outcomes (WOC).
Preferences (IDP) and the	Identify potential influencing factors on these relevant factors.
Dynamic of the respondents' Work Environments (WED).	Use a distinct mixed method approach for the data collection and analysis in order to add breadth and depth to the study and to the theory in the research field in general.

TABLE 6-1: SUMMARY OF RESEARCH AIM AND RESEARCH OBJECTIVES

The first research objective was met through the identification and development of key factors for the defined concepts by thoroughly reviewing the literature in the distinct research fields and by comparing and analysing former research. These factors were modified to suit the present study and adjusted to fit the mixed method approach of this research. They were then used for the data collection and the gathered data was then used to determine the proposed PD-Fit of each individual respondent.

In order to explore the proposed new fit concept the determined PD-Fits were then analysed for their relevance for WOCs (the latter were also determined in the study). However, a clear relation between these factors could not be detected for the data of the present study. Despite this, several potential influencing factors were further determined and analysed for their relevance for the proposed fit concept as well as the underlying sub-factors of IDP and WED. Especially the conceptual development of the new fit can be evaluated as a key contribution by this research as it is a result of a thorough and intensive literature analysis. The concept is summarized in .

A key contribution to theory has been made especially through the last objective of using a mixed method research approach in this study. This objective was met by collecting the data through qualitative as well as quantitative questionnaire elements and analysis tools. Findings from comparing the results in the quantitative and the qualitative data allowed for new insights into the assessment of the determined factors.

Answers to all 16 research questions, which were defined based on the research objectives, were provided in detail in *Chapter 5*.

The research achieved the objective to develop a PD construct as well as the accumulating factors of IDP and WED. The RQs on how to determine these factors could thus be answered. Even though some elements in the IDP assessment remain uncertain, several contributing factors and items have been identified and critical ones were discussed. Several individual characteristics which influence IDP have been identified. The same accounts for the assessment of the WED factor and its contributing elements.

The study further analysed other PE-Fits as potential influencing factors and identified potentially important work outcomes for this study. It is determined that these also require further attention in future research as the emphasis which someone places on these outcomes and fits appears to influence their effect strongly.

With the construct and factor developments the objective to determine and analyse the new PD-Fit could be met. Especially the mixed method approach generated important insights to answer the RQs on the assessment opportunities (self-assessment / change generalisation).

6.3 Contribution of Findings to Theory and Practice

6.3.1 Contribution to Theory

The present study can be located within an interdisciplinary research field which tackled several distinct research areas. Contributions to theory can thus be located within several distinct areas.

The general construct development and the conceptual framework can be regarded as a substantive input into the research field. It is especially the construct elements of PD-fit and its sub-factors of IDP and WED which add new knowledge to the field. The conceptual framework summarises all relevant research fields and even though the direct relation to the defined WOCs could not be detected, the two factors of IDP and WED and their influence on the proposed construct of PD-Fit remain considerably important. Each factor has been accurately developed and the concepts remain significant and meaningful for further research.



FIGURE 6-2: PD-FIT CONSTRUCT - CONCEPTUAL FRAMEWORK

(excerpt from Figure 2-2: Research Framework)

Even though some of the accumulating factors were stronger than others and a few did not show a strong impact on the developed concept, they remain important elements of the proposed concept and require further investigation as they have been identified as relevant elements for related constructs (e.g. change readiness, resistance or environmental dynamic factors)

The study newly introduced the concept of Individual Dynamic Preference (IDP). Conceptually this is strongly linked to already acknowledged concepts such as change resistance and change readiness. The conducted comparative analysis among already existing assessment approaches in the context of the literature review, however, provides additional knowledge and insights into this field of research. Please refer to *Table 6-3: Publications on Change Response Measurement Approaches* for the detailed analysis. This analysis was used to determine what factors appeared to be most appropriate to determine IDP. The results of the study now add knowledge to this field, as not all formerly identified factors turned out to work sufficiently for the assessment of IDP. Several critical issues were identified and require investigation in further research. A key contribution to theory can be seen in the identification of such critical issues, as they have not been mentioned in former publications in the areas of individual change response. These issues are for example the one-sided answers for some items in the quantitative IDP assessment, potentially caused by societal or cultural pressures as described in *Section* 5.2.

A second issue is that of potential misjudgements of oneself and ones competence to deal with change due to a lack of objectivity or common point of reference. The qualitative analysis revealed that the references and examples used were frequently individual, and specific to the respondents' personal setting. The participants lacked objectivity and often referred to a very narrow field of reference, such as for examples comparing to colleagues or other departments within the same organisation. This finding in particular, renders cross-sectional measurement approaches such as used by this study questionable and emphasizes the need for further research in this area.

The findings further indicate that people might actually aim for a good fit in terms of dynamic in their job decision phase (consciously or unconsciously). This is also a very interesting finding, as dynamic and change intensity are not common entries in the context of job search or postings today.

The second area of theory which is tackled by this research is the field of environmental dynamic or sometimes referred to as environmental turbulence. In this area (in this study described with the factor of WED), a key contribution can be extracted from the further testing of dynamic measurement items. For a large part these items were drawn from acknowledged publication (e.g. Ansoff and McDOnnell (1990)) and have been used in former studies, but the findings of this study give further insights into which items worked best in terms of a differentiation between different organisations in terms of their dynamic. For the present study several job level items used to assess the dynamic of the specific job were also developed and worked very well for this research. This is again a contribution to theory in the field. An additional topic which contributes to theory in this field is the finding in the qualitative part of the study of WED that statements about smaller and every-day changes give richer information about job dynamic than the reports about major change events or experiences of past years do.

A third theoretical area touched by this research is the whole field of PE-Fit. An extensive amount of research has been conducted in this field with a variety of fit foci. However, the newly proposed Dynamic-Fit adds a new dimension to PE-Fit and although a direct relation to the tested work outcomes could not be detected within this study, there is still substantial evidence which supports the idea that a fit into a specific level of dynamic is of increasing importance in today's work environments and settings. Caldwell et al. (2004) had called for a stronger focus of future research on the effects of organisational change on PE-Fit. The test analyses on the relationships between the different sub-fits and several work outcomes also add knowledge to this field, as this topic has been tested in several studies before, and the variety of results (to which the present study further contributes) indicated the importance of further research in this field. A rather new approach used within this study in order to determine the importance which the individual respondent puts on the specific sub fits by asking them for their "most important fit area" can be seen as a specifically interesting contribution, as it appears likely that this emphasis will strongly influence potential relationships of tested fits to work outcomes. Unfortunately the present research could not give this direct evidence, as the work outcome scores for the preferred fits were all good or very good and the sample thus lacked the necessary breadth and variation for further analyses.

With reference to several publications in the field of PE-Fit the present study was very cautious about the use of supplementary fit components only and included open questions which would have allowed for opposing fit-interpretations by the respondents.

In their meta-analytic review Piasentin and Chapman (2006) called for further research to determine why some individuals consider supplementary aspects (good fit of characteristics of individual and organisation) as determinant of PO-Fit while others rather focus on complementary issues (individual is able to provide something, that is missing in the organisation) (please refer to *Section 2.4* for further details). As none of the respondents, however, mentioned issues which would indicate a complementary understanding of PE-fits (especially in the area of PO- or PG-Fit) this study further supports the majority of research that the supplementary fit concept is predominant among research subjects.

The fourth and last area of theory directly affected by the present research is the field of Work Outcomes (WOC). Although this has not been in the focus of this research, several outcome factors served as dependent variables in this study. Three very common and accepted outcome factors were included, namely job satisfaction, organisational commitment and turnover intention. An interesting finding within this study was that turnover intention did not work very well for this research. As indicated earlier, it appeared that the respondents did not evaluate the three chosen items as subject to only their own individual choice (e.g. Item 3.3: "Do you think you will work for this organisation five years from now?"). They often interrupted the assessment with comments indicating that this was rather a matter of company decision or market development. Potentially this was especially influenced by the prevailing economic crisis at the time of the research (year 2010), but it could also be a general issue. This appears to be a new finding in this field of theory and could be of interest for further research. Additionally a fourth outcome factor was newly developed for this study, referred to as exploited potential (please refer to Section 2.5 for further details). The aim was to develop an item which increases the insights into the individual's job performance without having to be too specific about real measures. The results gave very good insights into the performance ability and further revealed potential working points for improvements in the qualitative section of this assessment. Due to the low sample size this newly developed item should be subject to further research but already adds to the knowledge in the field. The offer of performance assessment items measured within self-assessed studies and based on individual respondent's perceptions, is rather limited at this point.

As mentioned in *Section 3.4.1* a thorough sampling of the respondents was conducted in order to also gain insights into what could be relevant quota variables in subsequent and

more quantitative focused studies. *Section 5.7* on potential influencing factors allows for some derivations e.g. in the area of gender, age or work conditions. The small sample group of the present study however, limits the explanatory power of these findings.

In terms of methodology, especially the mixed method approach added to the contributions and gave new insights into the different scientific areas. The qualitative data particularly contributed to the findings, as qualitative approaches are still underrepresented.

It was the aim to develop a thorough conceptual framework for a new PE-sub-fit, namely PD-Fit to inform further research in the scientific field. Although strong evidence for this new construct remains unsettled, the findings do however support the general idea of measuring a fit between IDP and WED. There is no contradictory finding in this study and the proposed construct and approach thus remain feasible. The present research thus does represents a small yet valuable addition to existing knowledge in diverse fields of theory. Especially the multidisciplinary of the topic and approach adds to the understanding in the different scientific fields and can lead to a more complete and deeper understanding of the included concepts.

The use of qualitative method provided further insights to applicability and comprehension of measurement instruments and items in all areas of investigation which were previously suggested by research. The detected discrepancies between answers given by respondents with regard to personal dynamic preference in the quantitative part to the results of the qualitative assessment further question the objectivity of the measurement tools applied by previous studies.

6.3.2 Contribution to Practice

The contribution of this study directly to practice must be seen as rather limited, due to the lacking relationship of the PD-Fit data to the tested work outcomes. The general support for the newly proposed concepts and the large amount of findings especially in the qualitative part of the study should, however, not be underestimated. The results give greatest insights into change experiences of respondents and their evaluation of these. They can thus be used to gain a better understanding of individual responses to change initiatives and can lead decisions about appropriate measures to initiate and implement changes in organisation. The present study enlarges knowledge in the field of micro change management and can thus guide change managers as well as HR professionals in their decision making. The study supports the standpoint, that the individual employee level is of great importance in times of change and that organisations are well advised to consider and respect issues on individual employee level. This is an important addition to the vast body of change literature dealing with "global" change approaches for organisational transformations. Change is an individual topic and not all "global" or "macro" interventions work with every individual. The fact that all respondents within this present study show rather high scores in terms of dynamic preference and thus openness for change might allow for the interpretation that most people are generally open for change – it only depends on the specific event and situation.

The findings also show the rising importance of dynamic for individuals, most likely even in a job decision phase. Further research in this field could generate important contribution to knowledge as well as practice in this field.

6.4 Limitations

Potential limitations of this present research in areas such as methodology, data collection, data analysis as well as the interpretation, have been identified and specified throughout this thesis. These will be discussed and supplemented in the following section.

This research can be criticised especially for its lacking generalizability. A sample size of only 25 limits the references made for the whole population. The inclusion of a variety of very distinct factors further complicated the analysis. While this was done intentionally and with the aim of completeness, this can be seen as strength as well as a weakness of this study. Evaluating it critically it could be seen as an insufficient focus as it was necessary to cut back with regard to the depth on subordinate levels of the research. Especially the reduction of items of acknowledged measurement approaches such as for example in the area of IDP (items from Oreg 2003) or in the area of work outcome assessment, limits potential inferences to former research results.

The choice of themes was however not random, they were purposely selected on the basis of their central importance in each of the four relevant theoretical fields and of their high relevance to the proposed PD-Fit. Only an analysis of a larger sample group could be able to sufficiently differentiate between the impacts of the different variables.

As the focus was rather on the exploration of the new fit concept, the sample size of 25 is evaluated as sufficient.

Another topic which can provoke criticism is the heterogeneity of the sample. While this was again done with the intention of gaining cross-sectional results which are not limited to only one organisation or industry setting, it caused some difficulties in the data collection phase. These were mainly caused by a lack of common references. Some subjects reported very personal change topics, such as job or supervisor changes and a classification of the reported changes was thus difficult for some cases. They did not have a common change history, experience or joint understanding of changes. Even without a specific change content as part of the study it appears that the respondents always have a change experience in their mind, which is difficult to control for the researcher and could have effects on the research outcomes. This critical aspects also finds support in a very recent study by Michel, By and Burnes (2013) which further casts doubt about change response (in this case resistance) to be defined as a disposition and stable across different contexts, These critical issues about the non-specific change context were formerly discussed in Chapter 5. Due to the depth of the interviews and the presence of the interviewer, it was possible that these issues were tackled directly by a provision of further information or examples if required.

Several factors revealed problematic sub-items within this study and a few items had to be taken out of the study before the analysis. This limits some of the conclusions, especially in those cases where formerly acknowledged items and factors were used, such as in the area of IDP assessment. The use of means for the calculation could be one potential factor for the weak results as it could be questioned whether the used sub factors can all be grouped under one umbrella. The use of factor analysis is thus recommended for further research but could not be used among this small sample group.

Another central theme in terms of limitations could be seen in the use and mixture of assessment approaches, which in parts were only tested insufficiently or superficially in former research. Regarding this criticism it is important to underline that the research fields touched upon were investigated in parts not explored very intensely in the past (e.g. change readiness) and commonly accepted definitions and approaches are still limited. A profound literature analysis and comparative investigations were undertaken in order to choose the best applicable measurements approaches and factors for the present study.

The study was undertaken in the cultural setting of a single country, namely Germany. This specific and unique setting limits the findings to this environment. Specific areas where cultural issues might have caused differing results were identified in *Section 5.2*. Besides these, there were no indications for further cultural limitations.

One result of the qualitative data analysis is that several of the respondents' answers are strongly influenced by very current change experiences or work settings. This might limit the findings and its reproducibility. As stated above, a study with two dispersed data collection phases or even a more longitudinal focus could add insights into this field.

One last aspect is worth mentioning in this section: the results of the WOCs were above-average. This strongly influenced the weak quantitative correlation results in the area of measuring the relationship between the proposed PD-Fit and the defined WOCs. The variation of the outcome results was very low within the sample. As stated earlier, one reason could be that potentially only rather satisfied people were willing to participate in this voluntary study, as it is a relatively personal and sensitive topic. Unfortunately this cannot be verified at this stage and could thus be evaluated as an additional limitation to this research.

As a critical realist the author is aware of these limitations and also open and welcoming of contrary perspectives or critics. The choice of using a mixed method approach irrefutably reflects subjective values and interests. However, it also reflects a preference for depth over broad-based and surface-level studies.

6.5 Implications for Further Research

As mentioned at several points throughout this thesis it would be advisable to further focus on the present research idea and the proposed PD-Fit in future research. A core aim should be to find support for the research idea among a larger sample group. This could decrease some of the existing uncertainties and limitations which remain attached to the present study. As the present findings were only able to add knowledge to the field but could not find direct support for a relationship between the proposed PD-Fit and the chosen outcomes further research could aim at generating evidence for the existence of this concept. The present research, however, did not show any contradictory findings. The experience with the present study reveals that further research should potentially focus more strongly on qualitative elements and data collection techniques, as the results gave great insights into the underlying conceptual areas. This could further decrease some of the concerns about the quantitative measurements and could be especially applicable for studies which focus only on specific sub-areas of this research. Additional insights gained in such sub-studies could then lead to a development of even more accurate quantitative items which would then in turn allow for a roll-out among a larger sample group to find support for the proposed PD-Fit.

Several findings indicate that a more homogeneous sample could be more appropriate in further research especially in terms of a common change history to provide a more objective point of reference. It could further decrease uncertainties about context factors which exist when a study is undertaken cross-sectional. If a common change history is not available among a sample, another approach could be to integrate more specific change descriptions and typologies in the study. This can reduce the room for individual interpretation and avoid the difficulties, especially that studies with a purely quantitative approach might run into, regarding the point of references of the different respondents.

From all integrated sub-concepts the factor of IDP requires further research most urgently. In the area of the quantitative assessment several factors were excluded from analysis due to problematic issues. These sub-factors require further investigation. It might be helpful for future research to focus on these contributing sub-factors in a prestudy prior to focusing on the proposed PD-Fit again. A thorough measurement, preferably with a quantitative approach in order to allow for a subsequent roll out among a larger sample group, would be important and a key contribution to further research. The present study found several areas for potentially cultural influence on IDP measurement. Future research in this field would be of great interest, especially as Oreg, Vakola, Armenakis, Bozionelos, González, Hrebickova, Kordacova, Mlacic, Feric, Kotrla Topic, Oystein Saksvik, Baxazit, Arciniega, Fujimoto, Han, Jimmieson, Mitsuhashi, Ohly, Hetland, Saksvik and van Dam (2008) tested several of the used items across 17 nations and more than 4000 participants without finding any strong discrepancies between them.

For future research it could also be advisable to use the Social Desirability Scale to rule out the bias due to the wish of people to answer in a manner that they are seen in positive ways by others.(Crowne and Marlowe 1960) Besides that, the findings indicate a potential exaggeration of IDP scores by the respondents in the self-assessment. This study supplied several potential reasons which do however require further scientific support. Interesting for investigation would be for example the question of "who exaggerates" (e.g. in terms of demographics) or "when do people exaggerate" in terms of specific context conditions.

It would further be interesting to undertake a comparable study on IDP in a longitudinal setting or at least with two points of time for the data collection, as the answers appear to be led by very current experiences and perceptions in the work settings of the respondents.

In the research field of environmental dynamic a broader based study to analyse the critical items as identified in this research could be of great interest for research and practice. The scale measurements in Area B / Part 4 should further be tested within a more homogeneous sample in order to analyse its reliability. Additional examples or points of references could be helpful in this area to decrease misunderstandings among the respondents.

A further starting-point for additional research could be the contradictory findings about change experience. When asked for their general experience with change, all respondents stated *"rather positive or positive"* experiences. When asked to give examples of a major change event in their life, however, more than half of the respondents spontaneously reported a negative change event.

In case of a direct focus on PD-Fit of future research it would be interesting to also look at the question of why people generally search for such a good fit (consciously or unconsciously) when they chose their jobs.

The study further revealed other potential areas of interest for future research, such as for example in the field of PE-Fit. The integrated item asking for the respondents' *"most important fit"* revealed a potentially very important aspect in relation to Work Outcomes. Due to the low sample size and a lacking broadness of results in the present study strong support for the impact of this "choice" is still in question. A test of the favourite PE-Fits and their relation to Work Outcomes could be of interest for research.

The findings also indicate that PS-Fit could be only a hygiene factor as defined by Herzberg's (1959) definition in his motivation-hygiene theory. A separate study with

this focus could add knowledge to this field which is still an area with limited research publications.

Additionally finding on the WOC item turnover intention, which appeared to be "*out of the own control area*" for several respondents could be interesting for further research foci as well. A potential reason for this finding was the economic crisis existing at the time of the data collection. It could be of interest to analyse whether this is truly only a situational influence or whether people generally relate turnover intention to outside control factors.

In the area of work outcomes the good results for the newly developed item on "exploited potential" could also be of interest for future research. It would be interesting to see this new factor in relation to "real" performance indices such as sales, profitability or other. Performance measurement remains a very difficult area, especially when only self-assessed information can be gathered. If EP can be related to hard-fact performance factors it could greatly contribute to the field of outcome and performance measurement.

One of the potential limitations in this research is the fact that potentially rather satisfied people participated in the study. Further research on a less voluntary base could be helpful to decrease this side effect, for example within a single organisation and among all employees in this company.

The direct influence of other variables on the identified WOCs could also be of interest for future research, such as some of the IDP sub factors such as locus of control or selfefficacy for change or routine seeking.

6.6 Reflexivity

"Reflexivity involves both an openness and honesty about our own position, and serious reflection on our responsibility as researchers."

(Cassell and Symon 2004, p. 381).

This section thus gives an opportunity to critically reflect on the research process as well as lessons learnt. As a critical realist the author is well aware of her own potential impact on this present research. As a researcher you are inevitably positioned, and take an active role, within the research process (Cassell and Symon 2004). With this in mind

the author is aware of her own ethical responsibility and impact on the findings. The author's theoretical background, her own experience with changes in her former jobs as well as her experience as a consultant might certainly have an effect on the data interpretation. Therefore the qualitative coding process was thus conducted especially carefully, and with a clear focus on reliability.

Besides the researcher's background and experience, other topics such as language, context or power also require notice and subsequent reflection (Cassell and Symon 2004). Aware of these potentially limiting fields, each has been consciously considered throughout the data collection phase. Language issues were to be reduced by using a semi-structured interview format and items / questions which have been used in former research projects successfully. All interviews were further undertaken by the same interviewer to keep variations in language and explanations limited. In terms of context the interviews were conducted at a place of the respondents' choice. This was done to make them feel comfortable in the interview situation. Further context limitations, however, remain due to the cross-sectional nature of the study as mentioned above. In terms of power issues there are no concerns within this research. There were no business relations between the subjects and the interviewer, nor is the interviewer occupying a position of power in her professional or private environment which could have influenced the answers of the respondents.

Although all these above mentioned issues were to be reduced in terms of their potential influence on the interpretation and findings, as Collier (1994) has put it, every explanation always remains open to re-interpretation, refutation and revision.

6.7 Chapter Summary

This concluding chapter recalled the formerly stated research aims and objective which were all met by the present study. The overall research idea of a fit between IDP and WED derived from acknowledged fit concepts in other areas of organisational life such as the strategic fit concept or the different PE-Fit constructs. The alignment between internal and external features has been shown to be of relevance in very diverse areas. In the present study it was the aim to develop a PD-Fit concept and to analyse and explore its relevance for key WOCs. In this case the internal characteristics of an individual's dynamic preference and the external characteristics of the person's work environment were analysed on a fit scale and explored for its relation to several outcome variables. Although the relationship between PD-Fit and WOCs could not be shown in this study, there are still substantial contributions to theory and practice. These resulting contributions were highlighted in this chapter and especially the contributions to the theory in the research fields of change response, environmental dynamic assessment and to some part in the area of PE-Fit have been emphasized. The conceptual development of the PD-Fit is substantial and opens up new fields for future research.

In some areas the detected findings do however require critical reflection and a consideration of potential limitations. The latter were discussed and evaluated in *Section 6.4*. Resulting from these contributions as well as from the detected limitation the author further identified several potentially interesting fields for future research.

Appendix A Respondent Details

TABLE 6-2: RESPONDENT DETAILS - OVERVIEW (ANONYM)

Interview	Gen- der	Age- Range	Org. Type	Industry	Size	Hierarchy level
Respondent_1	М	35-39	private	mechanical engineering	50-200	Management with personnel resp. (< 10)
Respondent_2	F	< 30	private	household goods industry	< 50	Assistant
Respondent_3	М	< 30	private	agricultural engines industry	1.000- 10.000	Management w/o personnel resp.
Respondent_4	М	30-34	private	mechanical engineering	< 50	Management w/o personnel resp.
Respondent_5	F	< 30	private	supplying industry	201-1.000	Management w/o personnel resp.
Respondent_6	М	40-44	private	mounting industry	1.000- 10.000	Management with personnel resp. (> 10)
Respondent_7	F	30-34	private	supplying industry	201-1.000	Management w/o personnel resp.
Respondent_8	F	30-34	private	food industry	201-1.000	Assistant
Respondent_9	М	30-34	public	labour administration	> 10.000	Management w/o personnel resp.
Respondent_10	М	40-44	private	supplying industry	> 10.000	Management with personnel resp. (< 10)
Respondent_11	М	30-34	private	supplying industry	> 10.000	Management w/o personnel resp.
Respondent_12	F	30-34	private	market research	50-200	Management w/o personnel resp.
Respondent_13	F	35-39	private	automotive industry	1.000 - 10.000	Management w/o personnel resp.
Respondent_14	М	35-39	private	supplying industry	> 10.000	Management w/o personnel resp.
Respondent_15	F	< 30	public	public laboratory	< 50	Assistant

Interview	Gen- der	Age- Range	Org. Type	Industry	Size	Hierarchy level
Respondent 16	F	> 44	private	pharmaceutical	> 10.000	Management
- -			-	industry		with personnel
						resp. (< 10)
Respondent_17	Μ	30-34	private	energy industry	50-200	Management
						w/o personnel
						resp.
Respondent_18	F	30-34	public	transportation	> 10.000	Management
				industry		w/o personnel
				- · ·		resp.
Respondent_19	М	40-44	private	electronic	> 10.000	Management
				industry		w/o personnel
D			•			resp.
Respondent_20	Μ	>44	private	supplying	201-1.000	Management
				industry		w/o personnel
D 1 . 01			•			resp.
Respondent_21	Μ	> 44	private	supplying	201-1.000	Management
				industry		w/o personnel
D 1 00		25.20	•			resp.
Respondent_22	Μ	35-39	private	supplying	201-1.000	Management
				industry		with personnel
D 1 00		20.24				resp. (< 10)
Respondent_23	F	30-34	public	education	201-1.000	Management
						with personnel
D 1 . 04		25.20	•			resp. (> 10)
Respondent_24	F	35-39	private	education	201-1.000	Management
						with personnel
D 1		20.24	1.1.	1	001 1 000	resp. (< 10)
Respondent_25	F	30-34	public	education	201-1.000	Assistant

Appendix B Comparative Analysis of Change Response Measurement Approaches

TABLE 6-3: PUBLICATIONS ON CHANGE RESPONSE MEASUREMENT APPROACHES

source	article type	construct name	conceptual definition	construct level	individual factors	context factors
(Armenakis and Harris 2001)	conceptual	readiness for change	preparation for and support of the change by organisation's members	organisational	principal support; discrepancy; appropriateness; personal valence; efficacy;	
(Armenakis et al. 1993)	conceptual	readiness for change	People's beliefs, attitudes, and intentions regarding the extent to which changes are needed and organisation's capacity to make those changes.	organisational	principal support; discrepancy; appropriateness; personal valence; efficacy;	communication, participation, information
(Barrett, Haslam, Lee and Ellis 2005)	empirical	stages of change (readiness) adapted from Prochaska and DiClemente	perceived need for change and organisation's ability to implement change successfully	individual	5 stages: Precontemplation > Contemplation > Preparation > Action > Maintenance stage determines receptiveness to change of individuals	
(By 2007)	empirical	aims to provide a critical evaluation of Armenakis et al.'s (1993); Armenakis and Harris, 2001) change readiness framework.	The cognitive precursors to the behaviours of either resistance to or support for change effort. Also, the extent to which employees hold positive views about the need for organisational change and believe that such changes are likely to have positive implications for themselves and the wider organisation.			

source	article type	construct name	conceptual definition	construct level	individual factors	context factors
(Chonko et al. 2002)	conceptual	readiness for change	The cognitive precursors to the behaviours of either resistance to or support for change effort. Individual sales representative's beliefs, attitudes, and intentions regarding the extent to which changes are needed and perceptions of the organisation's ability to deal with change.	organisational		organisational culture, climate and policies
(Coetsee 1999)	conceptual	Acceptance (commitment) to change	Commitment=Knowledge x Information x Empowerment x Rewards and Recognition x Shared Vision (goals and values)	individual		
(Cunningham et al. 2002)	empirical	Readiness for organisational change	a demonstrable need for change, a sense of one's ability to successfully accomplish change and an opportunity to participate in the change process	organisational and individual	ability to cope with change; ability to problem-solving; self-efficacy	risk of change; social support
(Cunningham 2006)	empirical	Coping with change		individual	coping with change; commitment to change	
(Eby et al. 2000)	empirical	organisational readiness for change	the cognitive precursor to the behaviours of either resistance to, or support for, a change effort	individual	Individual attitudes and preferences (self-efficacy for change, perceived organisational support, preference for working in teams); work group and job attitudes (trust in peers, skill variety, perceived participation); contextual variables (flexibility in policies and procedures, logistics and system support, trust in division leadership)	
(Fedor et al. 2006)	empirical	commitment to change	a behavioural intention to work toward the success of the change rather than just reflecting a favourable disposition	organisational and individual		
(Gagne, Koestner and Zuckerman 2000)	empirical	acceptance of change		individual	giving a rationale for doing a task; offering some choice about how to do the task; and acknowledging feelings about the task	
(Hanpachern, Morgan and Girego 1998)	conceptual	readiness for change		Individual	Margin in Life (MIL) Scale; personal power; position; tenure to organisation	
(Herold et al. 2007)	empirical	Commitment to change		individual	self-efficacy	context: turbulence

source	article type	construct name	conceptual definition	construct level	individual factors	context factors
(Herscovitch and Meyer 2002)	empirical	commitment to change	a force (mind-set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative	individual	affective commitment; continuance commitment; normative commitment	
(Holt et al. 2007a)	empirical	Readiness for organisational change	A comprehensive attitude that is influenced by content, process, context, and individuals; reflects the extent to which individual/s are cognitively and emotionally inclined to accept. Embrace, and adopt a particular plan to purposefully alter the status quo	individual	locus of control; discrepancy; efficacy; organisational valence; management support; personal valence; general attitude toward change	communications climate; perceived management ability
(Iverson 1996)	empirical	acceptance of organisational change		individual	Personal variables: positive affectivity; negative affectivity; age; tenure; Education; occupation; gender; union membership; organisational commitment	Job-related variables: Autonomy; job security; promotional opportunity; distributive justice; role ambiguity; role overload; supervisory support; co-worker support; Job Satisfaction; job motivation Environmental variables: industrial relations climate; environmental opportunity; kinship responsibility
(Jansen 2000)	conceptual	readiness for change	not defined	organisational	personal attitudes	organisation's ability to make the change
(Jansen 2004)	empirical	change-related commitment	not defined	individual	stages: inertia > stasis-based momentum; change-based momentum	
(Jones et al. 2005)	empirical	readiness for change	the extent to which employees hold positive views about the need for change, as well as the extent to which employees believe that such changes are likely to have positive implications for themselves and the wider organisation	individual	human relations values; reshaping capabilities	organisational culture; reshaping capabilities of firm

source	article type	construct name	conceptual definition	construct level	individual factors	context factors
(Joshi and Lauer 1999)	empirical	employee's reactions to change	acceptance or resistance based on employee evaluation of the system as being favourable or unfavourable in terms of its impact on their equity assessment	individual	equity implementation model	
(Judge et al. 1999)	empirical	managerial response to organisational change			locus of control; generalized self-efficacy; self-esteem; Positive affectivity; Openness to experience; Tolerance for ambiguity; risk aversion; self-concept and risk tolerance	
(Lau and Woodman 1995)	empirical	change schema		individual	locus of control; organisational commitment	
(Madsen, Miller and John 2005)	empirical	Individual change Readiness	an individual is ready for change when he or she understands, believes, and intends to change because of a perceived need		organisational commitment; social relationships in the workplace; demographics	
(Martin et al. 2005)	empirical			individual	psychological climate (employees perception of the organisation and environment in which they are working)	
(Maurer 2001)	conceptual	change readiness		organisational	History of change; Direction; Cooperation and trust; culture; resilience; rewards; respect; control and saving face; impact on status quo; skill at managing change	
(Meyer, Srinivas, Lal and Topolnytsky 2007)	empirical	commitment to organisational change	a mind-set that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative	individual	affective commitment; continuance commitment; normative commitment	

source	article type	construct name	conceptual definition	construct level	individual factors	context factors
(Miller et al. 2004)	empirical	Employee readiness for change	Readiness for change means that employees are prepared mentally and / or physically for immediate action that will improve, alter, vary or modify something	organisational		management/leader relationship; job knowledge and skills; job demands
(Neiva et al. 2005)	empirical	attitudes towards organisational change		individual	attitude of acceptance; fear of change; attitude of cynicism	
(Oreg 2003)	empirical	Individual Resistance to change Scale	generalized disposition to resist change	individual	routine seeking; cognitive rigidity; emotional reaction; short-term focus	trust in management; social influence; information about the change
(Rafferty and Simons 2006)	empirical	readiness for change	individual's beliefs, attitudes, intentions regarding the extent to which changes are needed and the organisation's capability to successfully undertake those changes	individual	trust in peers; logistics and system support; trust in senior leaders; self-efficacy	trust in senior leadership; trust in peers; perceived organisational support; flexible policies and procedures
(Rangarajan, Chonko, Jones and Roberts 2004)	conceptual	organisation readiness for change	The extent to which the individual employees perceive that the organisation has the capacity to enhance successful change		Culture; Climate; Turbulence; competitive intensity	
(Rowden 2001)	conceptual	readiness for change	not defined	organisational		awareness; supportive climate; skills
(Terry and Callan 1997)	empirical			individual	personal resources (locus of control; self-esteem)	knowledge of event characteristics; situational appraisal; coping strategies
(Tiong 2005)	conceptual			individual	Active coping methods; Tolerance for ambiguity; Self-efficacy; flexibility	Organisational climate; Social support; Working relationships; Information about the change; Empowerment / employee participation in change
(Vakola, Tsaousis and Nikolaou 2004)	empirical	attitude towards organisational change		individual	emotional intelligence; big five (FFM)	

source	article type	construct name	conceptual definition	construct level	individual factors	context factors
(Walinga 2008)	empirical	Readiness for change	"change readiness is defined as the state in which one is best prepared to change internally because one is best prepared for changes in the environment"	individual	Appraisal, Focus and Perceived Control	
(Wanberg and Banas 2000)	empirical	openness to changes	willingness to support the change and a positive affect about the potential consequences of the change	individual	self-esteem; perceived control; optimism	Information received about the changes; Self- efficacy for coping with the changes; Participation in the change decision process
(Weber and Weber 2001)	empirical	Organisational change			trust in management; perceptions of supervisor support; perception of organisational readiness for change	feedback; autonomy; employee participation; goal clarity
(Weeks, Roberts, Chonko and Jones 2004)	empirical	Organisational readiness for change	Individual sales manager's beliefs, attitudes, and intentions regarding the extent to which change is needed; and perceptions of the organisation's ability to deal with change under dynamic business conditions	individual		

Appendix C Item Coding

Item Number	Influence on IDP	CODING
4.13	+	Coding ok
4.14	-	Reverse Coding
4.15	+	Coding ok
4.16	-	Reverse Coding
4.17	-	Reverse Coding
4.18	-	Reverse Coding
4.19	+	Coding ok
4.20	+	Coding ok
4.21	-	Reverse Coding
4.22	+	Coding ok
4.23	-	Reverse Coding
4.24	-	Reverse Coding
4.25	-	Reverse Coding
4.26	-	Reverse Coding
4.27	-	Reverse Coding
4.28	+	Coding ok
4.29	-	Reverse Coding
4.30	-	Reverse Coding
4.31	-	Reverse Coding
4.32	-	Reverse Coding
4.33	+	Coding ok
4.34	+	Coding ok
4.35	-	Reverse Coding
4.36	-	Reverse Coding

TABLE 6-4: IDP ITEM CODING - OVERVIEW

Appendix D Item Development

TABLE 6-5: IDP ITEMS (QUANTITATIVE)

Item Number	Item	Factor	Origin
4.13	I adapt easily to changes in my job.	self-efficacy of change	(Schwoerer and Rosen 1992; Eby et al. 2000; Rafferty and Simons 2006)
4.14	I like to do the same old things rather than try new and different ones.	routine seeking	(Oreg 2003; Oreg et al. 2008)
4.15	I often change my mind.	cognitive rigidity	(Oreg 2003)
4.16	I'll take a routine day over a day full of unexpected events any time.	routine seeking	(Oreg 2003; Oreg et al. 2008)
4.17	I often feel helpless in dealing with the problems of life.	locus of control	(Pearlin, Lieberman, Menaghan and Mullan 1981; Holt et al. 2007a)
4.18	If I were to be informed that there's going to be a significant change regarding the way things are done at work, I would probably feel stressed.	emotional reaction	(Oreg 2003; Oreg et al. 2008)
4.19	I can do just about anything I set my mind to.	locus of control	(Pearlin et al. 1981; Holt et al. 2007a)
4.20	When I am convinced of a change I am willing to take personal risks.	risk aversion	(Cable and Judge 1994) in (Judge et al. 1999)
4.21	When things don't go according to plans, it stresses me out.	emotional reaction	(Oreg 2003)
4.22	What happens to me in the future mostly depends on me.	locus of control	(Levenson 1981; Pearlin et al. 1981; Judge et al. 1999; Holt et al. 2007a)

Item Number	Item	Factor	Origin
4.23	There is little I can do to change many of the important things in my life.	locus of control	(Pearlin et al. 1981; Holt et al. 2007a)
4.24	I have little control over the things that happen to me.	locus of control	(Pearlin et al. 1981; Holt et al. 2007a)
4.25	I often anticipate problems related to change.	routine seeking	(Oreg 2003)
4.26	Often, I feel a bit uncomfortable even about changes that may potentially improve my life.	short-term focus	(Oreg 2003)
4.27	I adapt slowly to changes in my job.	self-efficacy for change	(Schwoerer and Rosen 1992; Rafferty and Simons 2006)
4.28	I am confident that I will be able to deal well with the challenges of change.	change self- efficacy	Adapted from (Chen 2001; Herold et al. 2007)
4.29	I'd rather be bored than surprised.	routine seeking	(Oreg 2003)
4.30	I sometimes find myself avoiding changes that I know will be good for me.	short-term focus	(Oreg 2003)
4.31	I am not willing to take risks when choosing a job or a company to work for.	risk aversion	(Cable and Judge 1994) in (Judge et al. 1999)
4.32	I don't change my mind easily.	cognitive rigidity	(Oreg 2003)
4.33	I believe I can deal with any change to which I set my mind.	change self- efficacy	(Chen 2001; Herold et al. 2007)
4.34	I have the skills that are needed to make change work.	change efficacy	(Holt et al. 2007a)
4.35	Once I have come to a conclusion, I'm not likely to change my mind.	cognitive rigidity	(Oreg 2003)
4.36	I view risk of a job as a situation to be avoided at all costs.	risk aversion	(Cable and Judge 1994) in (Judge et al. 1999)

TABLE 6-6: IDP ITEMS (QUALITATIVE)

Item Number	Item	Factor to be analysed
4.2	How would you describe your experience with change in general (rather positive or rather negative)? Which feelings to you connect to changes ?	IDP
4.4	Is dealing with changes for you rather easy or rather difficult? Please explain your decision?	self-efficacy for change
4.5	Which abilities do you consider to be important to deal well with changes? How would you judge your personal abilities to deal with changes?	self-efficacy for change
4.6	If you would have to decide between a day full of routine and a day full of surprises , how would you decide? Which thoughts to you associate with the two alternatives?	routine seeking
4.7	How do you usually react of plans are being changed or if things don't go according to plans?	emotional reaction
4.8	Do you sometimes find yourself avoiding changes , although you know that they will be beneficial for you in the future? Please explain your decision.	short-term focus
4.9	Do you change your mind rather quickly or rather not so easy? Please explain.	
4.10	Do you think that you have the main influence on what happens to you in the future or that you have rather little influence on this? Please explain.	locus of control
4.11	Which role does job security play for you? How strongly does the assurance of your job determine your decisions in your work?	risk aversion
4.12	Think of your private life . How do you deal with changes in your private environment?	

Item Number	Item	Factor to be analysed
4.1	When you think of your daily work: which kind of small changes occur there and what do these changes mean to you? How do you feel about them?	WED IDP
4.3	Think of one of the strongest changes, which you have experienced in the last three years and which personally affected you. How did you feel back then and how do you think about it today?	WED IDP

TABLE 6-7: WED ITEMS ON JOB DYNAMIC

Item	Item	Scale description
Number		(English translation)
5.7	Where does the focus	1 Concrete task description
	of your job description	2 Concrete assignment description
	lie on?	3 Provides specific targets
		4 Provides target corridors
		5 Provides framework
5.8	Which of the	1 Stability; continuity
	following criteria is a	2 Efficiency
	critical factor for the	3 Response to environmental needs
	success in your job?	4 Strategic positioning; flexibility
		5 Creativity and innovation
5.9	How would you	1 Clearly structured processes
	describe the flexibility	2 Mainly structured processes
	in the accomplishment	3 Some flexibility within a given framework
	of a task?	4 High flexibility in task accomplishment
		5 Creativity in task accomplishment
5.10	How do you	1 Stable routines and processes – workflows
	experience changes of	change very rarely
	processes and	2 Processes change in a planned manner
	workflows in your	3 Processes change continuously (but
	job?	predictable)
		4 Processes change continuously and little
		predictably
		5 Processes change surprisingly and in an
		unpredictable manner
5.11	How broad is your	1 Clear focus on few and similar tasks
	area of	2 Clear focus on several similar tasks
	activity/responsibility?	3 Focus of many similar tasks
		4 Focus on many different tasks
		5 Focus on many changing tasks
5.12	How broad is the	1 Clearly defined and non-changing skills
	spectrum of required	required (limited spectrum)
	skills and abilities?	2 Clearly defined and little changing skills
		required (limited spectrum)
		3 Broad spectrum of little changing skills
		required
		4 Broad spectrum of continuously changing
		skills required
		5 Broad spectrum of very often changing skills
		required

TABLE 6-8: WED: REAL / IDEAL WORK ENVIRONMENT CHOICE ITEMS

6.1 Which of the following working environments best describes your	CHOICE
ideal working environment? Please choose one only.	
ENVIRONMENT 1: In this environment processes and tasks are clearly defined and can be fulfilled in a routine and experienced manner by the employees. Each employee has a clear and manageable field of activities within a functional area. De required skills and abilities are clear to the employee and only need to be supplemented in rare cases of need through trainings. The priorities in the organisation are defined by single persons or departments, which are accepted as the organisational drivers within the internal power structure. The prevailing leadership style is patriarchal. The supervisors take their responsibilities and make the necessary decisions for their area of responsibility. Die participation of subordinated entities is only necessary in unusual cases. The supervisors give clear targets for the employees. Stability and continuity are the key factors for organisational success and risks are consciously avoided.	
ENVIRONMENT 2: In this environment processes and workflows are mostly defined and all employees have clear assignment descriptions. The required skills of the employees are apparent and can be supplemented by task-oriented trainings. The clear focus in this environment is on the efficient design of all processes and workflows. Step by step are all company goals being achieved and company plans fulfilled. Risks are being avoided as much as possible but unavoidable risks are accepted. Well-established departments such as purchasing, sales and production are the drivers in the organisation. The internal communication is carried out through the subordinated levels, which also define the targets and goals. Occasionally feedback is possible.	
ENVIRONMENT 3: In this environment exist clear growth targets for the organisation and each employee has clear target goals. Processes and workflows are well known, but are continuously changed for the purpose of optimisation. Changes in the tasks spectrum of the individual employee lead to regular trainings, because additional skills are required. The regular trainings are supposed to enlarge the skills and to support the individual career planning. In order to react continuously to market needs knows risks are taken for the purpose of growth. The areas sales and marketing are the company drivers. The employees have some flexibility in how they fulfil their job, but the framework is clear. Between employees and subordinates exists a regular dialogue, but there are clear hierarchical structures, which are being accepted for the internal communication.	
ENVIRONMENT 4: In this environment the company focus is clearly	

6.1 Which of the following working environments best describes your CHOICE			
ideal working environment? Please choose one only.			
on flexibility. The organisational goals and plans are driven by the strategic management department and the active search for alternatives and changes is the centre part of the work. New future business fields are actively being searched for and risks are being accepted and taken in order to fulfil the organisational mission. Basic hierarchical structures are rare and the internal communication is interactive. The own responsibility of each employee is appreciated and supported. Processes and workflows of the individual employees change continuously and sometimes even in unpredictable ways. This requires high flexibility and change willingness of each employee. The employees are being support continuously for the personality development and for their skill enlargement.			
ENVIRONMENT 5: In this environment the clear drivers in the organisation are innovation and creativity. The clear target of the organisation is to create the future actively and develop true innovations and ideas for future business fields. Risks are being taken and changes are continuously initiated. Internally the organisation is characterized by flexible structures (network) and open communication. The research and development department is the strongest organisational driver. The employees don't get detailed task descriptions but rather surrounding conditions and creativity is being desired and required. This required high flexibility of the individual employees. The processes and tasks often change in a surprising manner and each employee has a broad spectrum of tasks to do. The work in this environment has few structures and planablility but is on the other hand highly flexible to generate true innovations. In order to gain the necessary skills and knowledge employees use their internal and external networks			
6.2 Please explain your decision. Which were the most important criteria choice?	for your		
6.3 Which of these environment best describes your current working environment	ironment?		

Item Number	Item	Scale Description (English translation)
6.4	Which statement best describes the overall values and attitudes in your organisation?	 "Don't rock the boat" "Step by step" "We want to grow!" "We develop alternatives" "We create the future!"
6.5	How would you describe the risk propensity in your organisation?	 Reaction of risk taking: Punishment Avoidance of risk; Acceptance of familiar risks only in exceptional cases Tolerance of risk; active engagement in familiar risks Support of risk taking; active engagement in new risks Encouraging of risk taking; risk gamble with innovations
6.6	Which dominant attitude exists towards change?	 Reject and ignore change React to unavoidable change Adaptation of familiar change Search for unfamiliar change Create change
6.7	How would you describe the typical problem solving behaviour in your organisation?	 Standardized approach Diagnostic; case by case Continuous optimisation Search for alternatives Creative further development of basic innovations
6.8	Which factors does the organisation view as critical for success?	 Stability; continuity Efficiency Response to market needs Strategic positioning; flexibility Creativity and innovation
6.9	How can the dominant leadership style in your organisation be described?	 Political; patriarchal Disciplinary; controllership Dialogue / commitment to goals Inspiring; common mission Visionary; giving of means
6.10	How would you describe the internal communication and feedback culture in your organisation?	 Top Down; no feedback; little communication Top Down; occasional feedback possible Top Down and bottom Up, with existing hierarchical structures Interactive; two sided feedback; across hierarchical levels Open in all directions; network
6.11	What is the focus of the management and	1 Training only if needed 2 task oriented training

TABLE 6-9: WED-ITEMS ON ORGANISATIONAL DYNAMIC

Item Number	Item	Scale Description (English translation)
	employee development in your organisation?	 3 Career development; extended special subject training 4 Personality development; job rotation 5 Future oriented content; networking
6.12	What are the main criteria for the incentive system?	 length of service past performance (budget fulfilment) Performance development; contribution to future growth Entrepreneurship; contribution to diversification in familiar future growth segments Creativity; contribution to development of future options
6.13	What is the strategic planning horizon of your organisation?	 Short term; (ad hoc, corrective) Short-term to medium term (max 1 year Medium term (2-3 years) Medium to long term; (emphasis on medium term) Long term (focus of 5 years or longer)
6.14	What determines the priorities in your organisation?	 Internal power clusters Fulfilment of plans Growth targets New opportunities Creativity, new business fields
6.15	What are the internal drivers of the organisation?	 Lobbyism (bureaucracy) Production / purchasing / sales 3Marketing & Sales 4 Strategic management 5 Research & Development
6.16	How would you describe the organisational structure?	 Strongly hierarchical; many levels; strong department orientation Hierarchical; functional responsibilities Hierarchical basic structures with self- responsibility; process orientation Some hierarchical basic structures with high degree of self-responsibility Self organisation; minimal hierarchical structures; networks
6.17	How would you describe the flexibility in your organisation?	 Rigid Low flexibility Moderate flexibility Adaptive Highly adaptive
Item Number	Item	scale description
----------------	--	--------------------------
		(English translation)
	How high is the complexity in your organisation	1 very low
7.1	(O), your workgroup (G), your job (J) and the	to
	external environment of the organisation (E)?	7 very high
	How high is the predictability of changes in your	1 very low
7.2	organisation (O), your workgroup (G), your job (J) and the external environment of the organisation	to
	(E)?	7 very high
	How high is the speed of changes in your	1 very low
7.3	organisation (O), your workgroup (G), your job (J) and the external environment of the organisation	to
	(E)?	7 very high
	How high is the extent of change in your	1 very low
7.4	organisation (O), your workgroup (G), your job (J) and the external environment of the organisation	to
	(E)?	7 very high

TABLE 6-10: DYNAMIC SCALE ITEMS - OVERVIEW

TABLE 6-11: QUALITATIVE WORK ENVIRONMENT ASSESSMENT

Item Number	Item	Factor to be analysed
4.1	When you think of your daily work: which kind of small changes occur there and what do these changes mean to you? How do you feel about them?	WED IDP
4.3	Think of one of the strongest changes , which you have experienced in the last three years and which personally affected you. How did you feel back then and how do you think about it today?	WED IDP

TABLE 6-12: WO	C ITEMS OVERVIEW
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Item Number	Item	7-point Likert scales (Extreme Values)	Factor	Source and References
3.1	How satisfied are you with your job?	1 = very dissatisfied 7 = very satisfied	JS	(Caplan, Cobb, J.R.P., van Harrison and Pinneau 1975; Cammann et al. 1983; Martin et al. 2005; Amiot et al. 2006)
3.2	How do you like working for this organisation?	1 = don't like it at all 7 = like it very much	OC	(Mowday, Steers and Porter 1979; Cook and Wall 1980; Paglis and Green 2002; Valentine et al. 2002; Silverthorne 2004; Cole, Harris and Bernerth 2006; Cennamo and Gardner 2008)
3.3	Do you think you will work for this organisation five years from now?	1 = very unlikely 7= very likely	TI	(Cammann et al. 1983; Holt et al. 2007a)
3.4	How important is this organisation for you personally?	1 = very unimportant 7 = very important	OC	(Allen and Meyer 1990; Holt et al. 2007a)
3.5	To what extend to you feel part of this organisation?	1 = very little 7 = very strong	OC	(Cook and Wall 1980)
3.6	How do you talk about your organisation to your friends?	1 = very negative 7 = very positive	OC	(Mowday et al. 1979; Cook and Wall 1980; Paglis and Green 2002; Valentine et al. 2002; Silverthorne 2004; Cole et al. 2006; Cennamo and Gardner 2008)

Item Number	Item	7-point Likert scales (Extreme Values)	Factor	Source and References
3.7	How likely is it that you will look for a new job within the next year?	1 = very unlikely 7= very likely	TI	(Cammann et al. 1983; Allen and Meyer 1990; Fried and Tiegs 1995; Martin et al. 2005; Cole et al. 2006)
3.8	How well are you able to unfold your potential performance in your job?	1 = very weak 7 = very good	EP	Self developed but related to (Mowday et al. 1979; Valentine et al. 2002)
3.9	What would need to be different in order to increase the exploitation of your individual potential?	Open question	EP	

TABLE 6-13: DEMOGRAPHIC ITEMS - OVERVIEW

Item Number	Item	Answers
1.1	How old are you?	Open question
1.2	Gender	□ male□ female
1.3	Marital Status	 single married / steady relationship
1.4	Do you have children?	Yes, Number of children:No
1.5	What kind of organisation are you working for?	Private sector. Please specifyPublic sector. Please specify
1.6	How many employees work for your organisation?	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
1.7	In which occupational area (e.g. Marketing; HR; etc.) do you work?	Open question
1.8	Please describe your position / work.	Open question
1.9	On which hierarchy Level can your job be allocated?	 assistance Mngt. without personnel responsibility Mngt. with personnel responsibility (<10) Mngt. with personnel responsibility (> 10)
1.10	Do you have a temporary or perpetual contract?	temporaryperpetual
1.11	Since how many years do you work in this position?	Open question
1.12	Since how many years do you work for this organisation?	Open question
1.13	How many years of working experience do you have?	Open question
1.14	Which training qualification or academic degree do you have?	 school: apprenticeship apprenticeship with further education bachelor degree master or diploma degree other, please specify:

Item Number	Item	Factor	Scale Description (English translation)
5.1	How high would you rate the level of your personal decision-making power?	decision-making power	1 = very low 7 = very high
5.2	How much are you involved in superior decisions?	involvement	1 = very low 7 = very high
5.3	To what extend can you influence your personal duties and responsibilities?	personal influence	1 = very little 7 = very much
5.4	How high is your workload compared to the available time?	workload	1 = very low 7 = very high
5.5	How high do you rate the security of your job?	job security	1 = very low 7 = very high
5.6	How important is the security of your job to you?	importance of job security	1 = not important at all 7 = very important

TABLE 6-14: WORK CONDITIONS ITEM OVERVIEW

TABLE 6-15: PE-FIT ITEM OVERVIEW

Item Number	Item	Factor	Origin / Source
2.1	How well do your competences match the requirements of your job?	PJ-Fit (demands-ability fit)	(Saks and Ashforth 1997; Lauver and Kristof-Brown 2001; Cable and DeRue 2002; Carless 2005; Erdogan and Bauer 2005)
2.2	How well does your job fulfil your expectations of a job?	PJ-Fit (needs-supply- fit)	Adapted from (Piasentin and Chapman 2007)
2.3	How well do you fit to your work group / colleagues / department in terms of common goals and values?	person-group-fit	(Judge and Cabe 1997; Carless 2005)
2.4	How well do you fit to your organisation in terms of common goals and values?	person- organisation-fit	(Netemeyer, Boles, McKee and McMurrian 1997; Cable and DeRue 2002; Valentine et al. 2002; Erdogan and Bauer 2005)
2.5	How well do you fit to your direct supervisor in terms of common goals	person- supervisor-fit	

Item Number	Item	Factor	Origin / Source
	and values?		
2.6	What is most important to you personally: your fit to your job, to your workgroup, to your organisation or to your supervisor? Please specify your decision.	Open question	

TABLE 6-16: ITEMS ON INTERVIEW CRITICS

Item Number	Item
8.1	Were all questions clear to you? If not, please specify which questions were unclear.
8.2	Is there anything that would have made answering these questions easier for you?
8.3	Is there anything, that has not been asked, but what you consider to be important in the research on Person-Dynamic-Fit?
8.4	Are you interested in the results of the study and do you wish a copy of the results?

Appendix E Description of Study (for research participants)

Development and Exploration of Person-Dynamic-Fit

Within the frame of the international research cooperation between the University of Applied Sciences Giessen-Friedberg and the Edinburgh Napier University Business School

Author: Ines von Weichs, M.A.

Research Team:

- Ines von Weichs, Diplom-Betriebswirtin (BA), Master of Arts in International Marketing (FH), PhD candidate
- Prof. Dr. Jan Freidank, University of Applied Sciences Giessen-Friedberg, Deutschland
- Prof. Dr. Sandra Watson, Edinburgh Napier University, Scotland
- Dr. Lois Farquharson, Edinburgh Napier University, Scotland

Problem Statement:

In a time of continuous change the change readiness of employees is increasingly being postulated and the task descriptions of jobs are subject to continuous revision. Despite of this increased level of change many jobs still vary strongly in terms of their complexity, change intensity and the speed of changes taking place. At the same time employees also differ in terms of their personal change readiness and their individual attitude towards changes. Decisive for the decision of an employee to support or resist a change is of course the change content itself. Beyond that, however, there are a lot of indicators, that there remain independent differences between individual attitudes towards changes among employees.

This study aims to analyse the individual differences in terms of attitudes or preferences towards change as well as the individual dynamic level of the different work environments of the respondents.

Core Questions:

- 1. How can the Individual Dynamic Preference of an individual be determined?
- 2. How can the Work Environment Dynamic of the individual respondent be determined?

3. 4.	Can the Fit between Individual Dynamic Preference and the Work Environment Dynamic of an Individual be related to Work Outcomes such as job satisfaction or organisational commitment? Can the proposed concept of Person-Dynamic-Fit be clearly distinguished from other Person-Environment-Fit Concepts?
Research aim:	It is the aim of this research to develop a Fit Concept based on the two parameters of Individual Dynamic Preference and Work Environment Dynamic and to analyse the impact of the potential fits or misfits on Work Outcomes.
	The study shall thus make a substantial contribution to a well- directed personnel selection and development.
Research subject:	Employees of companies from the industry or service sector or working in the public sector (> 20 employees), who have worked for this employer for at least one year. A balanced mix in terms of age, gender, hierarchy level, departments, industry sector and organisational size is aspired.
Theoretical frame:	The theoretical frame constituted of different concepts and variables from the research fields of "Change Response", Person-Environment-Fit" and "Environmental Dynamic".
Methodology:	The study uses primary statistical procedures for the data collection which are executed in a mixed method approach.
	1. Personal Interviews with selected employees of German
	organisations use both quantitative as well as qualitative
	elements. The interviews will take approx. 1.5-2 hours.
	2. The interviews as well as the analysis is being undertaken by
	the author herself, being professionally supported by the
	above mentioned research team.

Notes for participants:

- All data will be treated absolutely confidentially
- The interviews will be executed by the author Ines von Weichs. Neither the questionnaires nor the audio tapes will be related to the names or companies of the respondents. The author affirms full anonymity and confidentiality. The

names of the participants or companies will not appear on any of the documents or publications.

- Quotes of the participants will be issued anonymised
- All participants receive a summary of the research results on request

Period of analysis: March – July 2010

Appendix F Original Interview Outline / Questionnaire (German)







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Problemstellung

In einer Zeit des stetigen Wandels wird die Veränderungsbereitschaft von Mitarbeitern zunehmend vorausgesetzt und auch die Arbeits- und Tätigkeitsbeschreibungen unterliegen dem kontinuierlichen Wandel. Trotz dieses erhöhten Veränderungsniveaus unterscheiden sich viele Jobs weiterhin sehr stark in Bezug auf Veränderungsintensität, -geschwindigkeit und –komplexität. Gleichzeitig unterscheiden sich aber auch die Mitarbeiter in Bezug auf Ihre persönliche Veränderungsbereitschaft und ihre individuellen Einstellungen gegenüber Veränderungen. Maßgeblich für die Entscheidung eines Mitarbeiters, eine Veränderung zu begrüßen oder abzulehnen, ist natürlich die Veränderung selbst. Darüber hinaus deutet jedoch viel darauf hin, dass es auch davon unabhängige Unterschiede zwischen den individuellen Einstellungen der Mitarbeiter gegenüber Veränderungen gibt. In dieser Studie will der Autor sowohl diese individuellen Einstellungsunterschiede in Bezug auf Veränderungen untersuchen, als auch die jeweiligen Dynamikniveaus der unterschiedlichen Arbeitsstellen analysieren.

Die Kernfragen der Arbeit

- 1. Wie kann die individuelle Dynamikpräferenz eines Mitarbeiters bestimmt werden?
- 2. Wie kann das individuelle Dynamikniveau der Arbeitsumgebung eines einzelnen Mitarbeiters bestimmt werden?
- 3. Hat der Fit zwischen der individuellen Dynamikpräferenz eines Mitarbeiters und dem Dynamikniveau der individuellen Arbeitsumgebung Einfluss auf Arbeitsresultate wie Zufriedenheit oder Unternehmensverbundenheit?
- 4. Lässt sich das neu definierte Person-Dynamik Konzept klar von anderen Person-Umwelt-Fit Variablen differenzieren?



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Untersuchungsziel

Ziel der Arbeit ist es aus beiden Parametern (individuelle Dynamikpräferenz und Dynamik der Arbeitsumwelt) ein Fit-Konzept zu entwickeln und die Auswirkungen des Fits oder Misfits auf Variablen wie Arbeitszufriedenheit und Unternehmensverbundenheit zu untersuchen. Die Arbeit soll hierdurch einen substanziellen Beitrag zu einer gezielteren Personalauswahl und --entwicklung leisten.

.Untersuchungsgegenstand

Mitarbeiter aus Industrieunternehmen, Dienstleistungsunternehmen oder im öffentlichen Dienst in Deutschland (> 20 Mitarbeiter), die seit mindestens einem Jahr für dieses Unternehmen tätig sind. Ein ausgewogener Mix in Bezug auf Alter, Geschlecht, Hierarchieebene, Abteilung, Branchen und Unternehmensgröße wird angestrebt.

Theoretischer Rahmen

Den theoretischen Rahmen bilden unterschiedliche Konzepte und Ansätze aus den Forschungsfeldern "Change Readiness", "Person-Environment-Fit" und "Unweltdynamik".

Methode der Datenerhebung

Zur Erhebung der Daten werden primärstatistische Verfahren verwendet und in Form eines Methoden-Mixes durchgeführt:



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1.	Angaben zur Person			
1.1.	Alter			
1.2.	Geschlecht		männlich weiblich	
1.3.	Familienstand		ledig verheiratet / feste Partnerschaft	
1.4.	Haben Sie Kinder?		Ja, Anzahl: Nein	
1.5.	Für welche Art von Organisation/Unternehmen arbeiten Sie?		Privater Sektor. Bitte beschreiben Sie Öffentlicher Sektor. Bitte beschreiben Sie	
1.6.	Wie viele Mitarbeiter hat Ihre Organisation?		< 50 50-200 201-1000 > 1000	
1.7.	In welchem Berufsgebiet / Tätigkeitsfeld sind Sie tätig (z.B. Marketing; Personal; etc.)?			
1.8.	Bitte beschreiben Sie Ihre Position / Ihr Tätigkeitsfeld.			
1.9.	Auf welcher Hierarchieebene lässt sich Ihr Job einordnen?		Assistenz Management ohne Personalverantwortung / Fachverantwortung Management mit Personalverantwortung (<10) Management mit Personalverantwortung (>10)	
				6



iternationale Forschungskooperation Fachhochschule Gießen-Friedber	g / Edinburgh Napier Ur	niversity		Eainburg			RIEDBERG
. Person-Umwelt-Fit (Begründung bei Bedarf)	1	2	3	4	5	6	7
 Wie gut passen Ihre Kompetenzen zu den Anforderungen Ihres Jobs? 	sehr schlecht	schlecht	eher schlecht	mittel	eher gut	gut	sehr gut
Bitte begründen Sie.							
 Wie gut erfüllt ihr Job Ihre persönlichen Erwartungen an einen Job? 	sehr schlecht	schlecht	eher schlecht	mittel	eher gut	gut	sehr gut
Bitte begründen Sie.							
 Wie gut passen Sie mit Ihrer Arbeitsgruppe (Abteilung / Kollegen) zusammen, in Bezug auf gemeinsame Wertvorstellungen und Ziele? 	sehr schlecht	schlecht	eher schlecht	mittel	eher gut	gut	sehr gut
Bitte begründen Sie.							
 Wie gut passen Sie in Ihre Organisation in Bezug auf gemeinsame Wertvorstellungen und Ziele? 	sehr schlecht	schlecht	eher schlecht	mittel	eher gut	gut	sehr gut □
Bitte begründen Sie.							
5. Wie gut passen Sie mit Ihrem direkten Vorgesetzten zusammen, in Bezug auf gemeinsame Wertvorstellungen und Ziele?	sehr schlecht	schlecht	eher schlecht	mittel	eher gut	gut	sehr gut
Bitte begründen Sie.							

nteri	nationale Forschungskooperation Fachhochschule Gießen-Fi	iedberg / Edinburgh Nap	ier University		Edinbu	rgh Napier	UNIVE	GIESSEN FRIEDBERG
3.	Job-Bewertung (Begründung nur bei Bedarf)	1	2	3	4	5	6	7
3.1.	Wie zufrieden sind Sie in Ihrem Job?	sehr unzufrieden	unzufrieden	eher unzufrieden	mittel	eher zufrieden	zufrieden	sehr zufrieden
	Bitte begründen Sie.							
3.2.	Wie gefällt es Ihnen für diese Organisation zu arbeiten?	gefällt mir gar nicht	gefällt mir nicht □	gefällt mir eher nicht gut	mittel	gefällt mir eher gut	gefällt mir gut	gefällt mir sehr gut
	Bitte begründen Sie.							
3.3.	Glauben Sie, dass Sie in fünf Jahren noch für diese Organisation arbeiten werden?	sehr unwahr- scheinlich	unwahr- scheinlich	eher unwahr- scheinlich	bin unentschlossen	eher wahr- scheinlich	wahr- scheinlich	sehr wahr- scheinlich
	Bitte begründen Sie.							
3.4.	Wie persönlich wichtig ist Ihnen diese Organisation?	sehr unwichtig	unwichtig	eher unwichtig □	weder noch	eher wichtig	wichtig	sehr wichtig
	Bitte begründen Sie.							
3.5.	Wie sehr fühlen Sie sich als ein Teil dieser Organisation?	sehr wenig	wenig	eher wenig	mittel	eher stark	stark	sehr stark
	Bitte begründen Sie.							

3.	Job-Bewertung (Begründung nur hei Bedarf)	1	2	3	4	5	6	7
.6.	Wie sprechen Sie bei Ihren Freunden über Ihre Organisation?	sehr negativ	negativ	eher negativ	weder noch / sowohl als auch	eher positiv	positiv	sehr positiv
	Bitte begründen Sie.							
1.7.	Wie wahrscheinlich ist es, dass Sie sich innerhalb des nächsten Jahres nach einem alternativen Job umsehen werden?	sehr unwahr- scheinlich	unwahr- scheinlich	eher unwahr- scheinlich	bin u nentschlossen	eher wahr- scheinlich	wahr- scheinlich	sehr wahr- scheinlich
	Bitte begründen Sie.							
.8.	Wie gut, glauben Sie, können Sie Ihre potentielle Leistung in Ihrem Job entfalten?	sehr schlecht	schlecht	eher schlecht	mittel	eher gut	gut	sehr gut
	Bitte begründen Sie. Was müsste ggf. anders sein?							

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4. TEII	L A: Persönliche Dynamikpräferenz
4.1.	Wenn Sie an Ihre tägliche Arbeit denken, welche Arten von kleineren Veränderungen treten dort auf? Was bedeuten diese Veränderungen für Sie? Können Sie diese bitte beschreiben?
4.2.	Wie würden Sie Ihre Erfahrungen mit Veränderungen im Allgemeinen beschreiben (eher positiv oder eher negativ)? Bitte begründen Sie.
4.3.	Denken Sie an eine der stärksten Veränderungen , die Sie in den letzten Jahren erlebt haben und von der Sie direkt betroffen waren. Bitte beschreiben Sie diese. Wie haben Sie sich damals g efühlt? Wie denken Sie heute darüber?
4.4.	Fällt Ihnen der Umgang mit Veränderungen in Ihrem Job eher leicht oder eher schwer? Bitte begründen Sie!
4.5.	Welche Fähigkeiten halten Sie für wichtig, um gut mit Veränderungen umgehen zu können? Wie würden Sie Ihre persönlichen Fähigkeiten im Umgang mit Veränderungen beurteilen?
4.6.	Wenn Sie sich zwischen einem Tag voller Routine und einem Tag voller Überraschungen entscheiden müssten, wie würden Sie sich entscheiden? Bitte begründen Sie. Welche Gedanken verbinden Sie mit den Varianten?
4.7.	Wie reagieren Sie i.d.R. darauf, wenn sich Pläne verändern oder wenn Dinge nicht nach Plan verlaufen?
4.8.	Erwischen Sie sich manchmal dabei, dass sie Veränderungen meiden / hinauszögern, obwohl sie wissen, dass diese Veränderungen positiv für sie sein werden? Bitte begründen Sie Ihre Antwort.
4.9.	Ändern Sie eher schnell ihre Meinung oder eher nicht so leicht? Bitte begründe Sie.
4.10.	Glauben Sie eher, dass Sie selbst den größten Einfluss darauf haben, was in der Zukunft mit Ihnen passiert, oder dass Sie eher wenig Einfluss darauf haben? Bitte begründen Sie Ihre Entscheidung.
4.11.	Welche Rolle spielt das Thema Jobsicherheit für Sie? Wie stark bestimmen Gedanken an die Sicherung Ihres Arbeitsplatzes auch Ihre Entscheidungen im Arbeitsalltag?
4.12.	. Wenn Sie an ihr Privatleben denken: Wie gehen Sie mit Veränderungen in Ihrem privaten Umfeld um im Vergleich zu beruflichen Veränderungen?

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EIL B: Persönliche Dynamikpräferenz	1	2	3	4	5
13. Der Umgang mit Veränderungen fällt mir sehr leicht.	stimme	stimme eher	bin	stimme	stimme
	nicht zu	nicht zu	unentschlossen	eher zu	zu
14. Ich tue lieber die gleichen bereits bekannten Dinge als	stimme	stimme eher	bin	stimme	stimme
neue und andere Dinge auszuprobieren.	nicht zu	nicht zu	unentschlossen	eher zu	zu
15. Ich ändere schnell meine Meinung.	stimme	stimme eher	bin	stimme	stimme
27	nicht zu	nicht zu	unentschlossen	eher zu	zu
16. Ich würde einen Tag voller Routine einem Tag voller	stimme	stimme eher	bin	stimme	stimme
Überraschungen vorziehen.	nicht zu	nicht zu	unentschlossen	eher zu	zu
7. Ich fühle mich häufig hilflos im Umgang mit	stimme	stimme eher	bin	stimme	stimme
Schwierigkeiten in meinem Leben.	nicht zu	nicht zu	unentschlossen	eher zu	zu
8. Wenn ich von einer Veränderung erfahren würde, die	stimme	stimme eher	bin	stimme	stimme
die Art und Weise meiner Arbeit betrifft, würde ich	nicht zu	nicht zu	unentschlossen	eher zu	zu
mich vermutlich gestresst fühlen.					
9. Ich kann so ziemlich alles machen, was ich mir	stimme	stimme eher	bin	stimme	stimme
vornehme.	nicht zu	nicht zu	unentschlossen	eher zu	zu
). Wenn ich von einer Veränderung überzeugt bin, bin	stimme	stimme eher	bin	stimme	stimme
ich auch bereit persönliche Risiken in Kauf zu nehmen.	nicht zu	nicht zu	unentschlossen	eher zu	zu
	<u>U</u>				
1. Wenn Dinge nicht nach Plan verlaufen, stresst mich	stimme	stimme eher	bin	stimme	stimme
cas.	nicht zu	nicht zu	unentschlossen	ener zu	zu
2. Was to be 7. In the last international bound of the first field of					
. was in der zukunπ mit mir passiert, nangt malsgeblich	stimme	stimme ener	DIN	stimme	stimme
vun mir selust ab.		nicht zu	unentschlossen	ener zu	zu
2 Es aibt wonig was ich tun kann um die wichtigen					
A ESPIRIT WEITE WAS TO THE KADD. UNTITLE WITHTEPD	Summe	summe ener	bin	summe	summe
Dingo in moinem Lohen zu öndern	nicht zu	nicht zu	upoptschlosson	abor 31	71

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TEIL B: Persönliche Dynamikpräferenz	1	2	3	4	5
.24. Ich habe wenig Kontrolle darüber, was mit mir passiert.	stimme nicht zu	stimme eher nicht zu □	bin unentschlossen	stimme eher zu	stimme zu □
4.25. Veränderungen verbinde ich meistens mit zu erwartenden Schwierigkeiten.	stimme nícht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu	stimme zu
4.26. Häufig fühle ich mich unwohl mit Veränderungen, auch wenn diese mein Leben voraussichtlich verbessern werden.	stimme nicht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu □	stimme zu □
4.27. An Veränderungen in meinem Job kann ich mich nur langsam gewöhnen.	stimme nicht zu □	stimme eher nicht zu	bin unentschlossen □	stimme eher zu	stimme zu □
4.28. Ich bin in der Lage die Herausforderungen, die mit Veränderungen verbunden sind, erfolgreich zu meistern.	stimme nicht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu	stimme zu □
4.29. Ich bin lieber gelangweilt als überrascht.	stimme nicht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu □	stimme zu □
4.30. Manchmal erwische ich mich dabei, dass ich Veränderungen vermeide, obwohl ich weiß, dass diese gut für mich sind.	stimme nicht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu	stimme zu □
4.31. Wenn ich mich für einen Job oder ein Unternehmen entscheide, bin ich nicht bereit Risiken eizugehen	stimme nicht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu	stimme zu □
4.32. Ich ändere meine Meinung nicht so leicht.	stimme nicht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu	stimme zu □
.33. Ich glaube daran, dass ich mit den meisten Veränderungen gut umgehen kann, wenn ich mich darauf konzentriere	stimme nicht zu	stimme eher nicht zu	bin unentschlossen	stimme eher zu	stimme zu

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TEIL B: Persönliche Dynamikpräferenz	1		2	3	4		5
4.34. Ich verfüge über die persönlichen F\u00e4higkeiten, die ben\u00f6tigt werden, um Ver\u00e4nderungen erfolgreich zu meistern.	stimme nicht zu	stin n	nme eher icht zu	bin unentschlossen	stimme eher zu		stimme zu
4.35. Sobald ich einen Entschluss gefasst habe, ist die Wahrscheinlichkeit, dass ich diesen revidiere, gering.	stimme nicht zu □	stin n	nme eher icht zu	bin unentschlossen	stimme eher zu □		stimme zu
4.36. Ich betrachte das Risiko eines Jobverlusts als etwas was ich unter allen Umständen vermeiden will.	stimme nicht zu	stin n	ime eher icht zu	bin unentschlossen	stimme eher zu		stimme zu
TEIL A: JOB-Dynamik (Rahmenbedingungen) 5.1. Wie hoch beurteilen Sie das Niveau Ihrer persönlichen	1	2 niedrig	3 eher niedrig	4 mittel	5 eher hoch	6 hoch	7 sehr hoch
TEIL A: JOB-Dynamik (Rahmenbedingungen) 5.1. Wie hoch beurteilen Sie das Niveau Ihrer persönlichen Entscheidungsbefugnis in Ihrem Job? 5.2. Wie stark ist Ihre Einbindung in übergeordnete	1 sehr niedrig sehr niedrig	2 niedrig niedrig	B B B B B B B B B B B B B B B B B B B	4 mittel mittel	5 eher hoch eher hoch	6 hoch	7 sehr hoch
TEIL A: JOB-Dynamik (Rahmenbedingungen) 5.1. Wie hoch beurteilen Sie das Niveau Ihrer persönlichen Entscheidungsbefugnis in Ihrem Job? 5.2. Wie stark ist Ihre Einbindung in übergeordnete Entscheidungen? 5.3. Inwieweit können Sie selbst Einfluss auf Ihre Aufgaben nehmen?	L sehr niedrig sehr niedrig sehr niedrig sehr niedrig	2 niedrig niedrig niedrig	Beher niedrig	4 mittel mittel mittel	eher hoch eher hoch eher hoch eher hoch	6 hoch hoch hoch	7 sehr hoch sehr hoch sehr hoch
TEIL A: JOB-Dynamik (Rahmenbedingungen) 5.1. Wie hoch beurteilen Sie das Niveau Ihrer persönlichen Entscheidungsbefugnis in Ihrem Job? 5.2. Wie stark ist Ihre Einbindung in übergeordnete Entscheidungen? 5.3. Inwieweit können Sie selbst Einfluss auf Ihre Aufgaben nehmen? 5.4. Wie hoch ist die Arbeitsbelastung im Verhältnis zur zur Verfügung stehende Zeit?	L sehr niedrig sehr niedrig sehr niedrig sehr niedrig	2 niedrig niedrig niedrig niedrig niedrig	B eher niedrig eher niedrig eher niedrig eher niedrig	4 mittel mittel mittel mittel ange- messen	5 eher hoch eher hoch eher hoch eher hoch	6 hoch hoch hoch	7 sehr hoch sehr hoch sehr hoch
TEIL A: JOB-Dynamik (Rahmenbedingungen) 5.1. Wie hoch beurteilen Sie das Niveau Ihrer persönlichen Entscheidungsbefugnis in Ihrem Job? 5.2. Wie stark ist Ihre Einbindung in übergeordnete Entscheidungen? 5.3. Inwieweit können Sie selbst Einfluss auf Ihre Aufgaben nehmen? 5.4. Wie hoch ist die Arbeitsbelastung im Verhältnis zur zur Verfügung stehende Zeit? 5.5. Wie hoch beurteilen Sie die Sicherheit Ihres Arbeitsplatzes?	L sehr niedrig sehr niedrig sehr niedrig sehr niedrig sehr niedrig sehr niedrig	2 niedrig niedrig niedrig niedrig niedrig	A eher niedrig eher niedrig eher niedrig eher niedrig eher niedrig eher niedrig	4 mittel mittel mittel ange- messen mittel nittel		6 hoch hoch hoch hoch	7 sehr hoch sehr hoch sehr hoch sehr hoch sehr hoch

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Teil B: Job-Dynamik	А	В	С	D	Е
5.7. Wo liegt der Fokus Ihrer Jobbeschreibung / Stellenbeschreibung?	Konkrete Tätigkeits- beschreibung	Konkrete Aufgaben- beschreibung	Vorgabe definierter Ziele	Vorgabe von Zielkorridoren	Vorgabe von Rahmen- bedingungen
5.8. Welche der folgenden Kriterien sind in Ihrem Job die wichtigsten Erfolgsfaktoren?	Stabilität / Kontinuität	Effizienz	Reaktion auf Umfeldbedürfnisse	Flexibilität	Kreativität / Innovation
5.9. Wie würden Sie die Flexibilität bei der Aufgabenerfüllung beschreiben?	Klar definierte Arbeitsabläufe	Weitestgehend definierte Arbeitsabläufe	Gewisse Flexibilität innerhalb klarer Rahmenbedinungen	Hohe Flexibilität in der Aufgabenerfüllung	Kreativität in der Aufgabenerfüllung erwünscht
5.10. Wie erleben Sie in Ihrem Job die Veränderung von Prozessen und Arbeitsabläufen?	Stabile Routinen und Abläufe – Prozesse verändern sich selten	Abläufe und Prozesse verändern sich in geplanter Weise	Abläufe und Prozesse verändern sich kontinuierlich (aber vorhersehbar)	Abläufe und Prozesse verändern sich kontinuierlich (wenig vorhersehbar)	Abläufe und Prozesse verändern sich in überraschender und unvorhersehbarer Weise
5.11. Wie breit ist ihr Aufgabengebiet ?	Klarer Fokus auf wenige und sehr ähnliche Aufgaben	Klarer Fokus auf einige und ähnliche Aufgaben	Fokus auf viele aber ähnliche Aufgaben	Fokus auf viele und verschiedene Aufgaben	Fokus auf viele verschiedene und sich verändernde Aufgaben
5.12. Wie breit ist das Spektrum der geforderten Fähigkeiten ?	Klar definierter sich nicht verändernde Fähigkeiten gefordert (begrenztes Spektrum)	Klar definierte sich wenig verändernde Fähigkeiten gefordert (begrenztes Spektrum)	Breites Spektrum sich wenig verändernde Fähigkeiten gefordert	Breites Spektrum sich kontinuierlich verändernder Fähigkeiten gefordert	Breites Spektrum sich häufig verändernder Fähigkeiten gefordert





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Teil B: Umwelt-Dynamik	А	В	С	D	E
5.4. Welche Aussage beschreibt am ehesten die allgemeinen Werte und Einstellungen in Ihrer Organisation?	"keiner bewegt sich"	"Schritt für Schritt"	"Wir wollen wachsen!"	"Wir entwickeln Alternativen"	"Wir gestalten die Zukunft!"
5.5. Wie würden Sie die Risikobereitschaft in Ihrer Organisation beschreiben?	Risikobestrafung; Ablehnung	Risikovermeidung; Akzeptanz bekannter Risiken in Ausnahmen	Risikoduldung; aktives Eingehen bekannter Risiken	Risikoförderung; aktives Eingehen neuer Risiken □	Risikoforderung; Risiko-Spiel
5.6. Welche dominante Einstellung gegenüber Veränderungen herrscht in Ihrer Organisation vor?	Zurückweisung; Ablehnung; Ignoranz	Inkaufnahme unvermeidbarer Veränderungen	Adaption gewohnter Veränderungen	Suche nach ungewohnten Veränderungen	Kreation von Veränderung
5.7. Wie würden Sie das typische Problemlösungsverhalten in Ihrer Organisation beschreiben?	Standardisiertes Vorgehen	diagnostisch / fallweise	kontinuierliche Optimierung	Suche nach Alternativen	Kreative Weiterentwicklung von Innovationen
5.8. Welches sind nach der Auffassung Ihrer Organisation die wichtigsten Faktoren für den weiteren Unternehmenserfolg?	Stabilität und Kontinuität	Effizienz	Reaktionen auf Marktbedürfnisse	Strategische Positionierung und Flexibilität	Kreativität und Innovation
5.9. Wie würden Sie den vorherrschenden Führungsstil in Ihrer Organisation beschreiben?	politisch; patriarchisch	disziplinarisch; kontrollierend □	Dialog; Zielvereinbarungen	inspirierend; gemeinsame Mission	visionär
5.10. Wie würden Sie die interne Kommunikation und die Feedbackkultur in Ihrer Organisation beschreiben?	Top Down; kein Feedback; geringe Kommunikation	Top Down; gelegentliches Feedback möglich	Top Down + Bottom Up bei Einhaltung der Hierarchieebene	Interaktiv; beidseitiges Feedback; Überspringen der Hierarchieebenen	nach allen Seiten offen; Netzwerk

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6.11. Wo liegt der Fokus der Management- und Mitarbeiterentwicklung in Ihrer Organisation?	Schulung maximal im Bedarfsfall	Aufgabenorientierte Schulungen	Karriereplanung; erweiterte Schulungen	Persönlichkeits- entwicklung; Job Rotation	Zukunftsgerichtete Inhalte; Vermittlung neuen Wissens
6.12. Nach welchen Kriterien werden die Anreizsysteme (Boni, Gehaltserhöhungen, etc.) in Ihrer Organisation gemessen?	Länge der Zugehörigkeit	Zurückliegende Leistungen (Budgeteinhaltung, Plan-Ist-Abweichung)	Ergebnisentwicklung; Beitrag zum zukünftigen Wachstum	Unternehmertum; Beitrag zur Diversifizierung in verwandte Zukunftsfelder	Kreativität; Beiträge zur Entwicklung von Zukunftsoptionen
6.13. Welchen strategischen Planungshorizont gibt es in Ihrer Organisation? Wie weit wird in die Zukunft geplant?	Kurzfristig; ad hoc; korrektiv	Kurz- bis mittelfristig; max 1 Jahr	mittelfristig; 2-3 Jahre	mittel- bis langfristig; Schwerpunkt mittelfristig	Langfristig; Fokus bei 5 Jahren und länger
6.14. Woran orientieren sich die Prioritäten in Ihrer Organisation?	Internes Kräftegefüge	Planerfüllung	Wachstumsziele	Neue Angebote; Möglichkeiten	Kreativität; neue Geschäftsfelder und – ideen ロ
6.15. Welche Unternehmensbereiche sind die Unternehmenstreiber ? Wer bestimmt die Prioritäten?	Lobby (Bürokratie)	Produktion; Einkauf; Verkauf	Marketing; Vertrieb	Strategisches Management	Forschung & Entwicklung
6.16. Wie würden Sie die Organisationsstruktur in Ihrer Organisation beschreiben?	Stark hierarchisch gegliedert; viele Hierarchieebenen; stark ressortorientiert	hierarchisch gegliedert; funktionale Zuständigkeiten	Hierarchische Grundstrukturen mit Selbstverantwortung; prozessorientiert	Geringe hierarchische Grundstrukturen mit hohem Grad an Selbst- verantwortung	Selbstorganisiert; minimale hierarchische Grundstrukturen; flexible Strukturen; Netzwerk
6.17. Wie würden Sie die Flexibilität Ihrer Organisation beschreiben?	Rigide / starr	geringe Flexibilität	moderate Flexibilität	anpassungsfähig	hochgradig anpassungsfähig □





8. Interviewkritik		
8.1. Waren alle Fragen für Sie klar verständlich? Wenn NEIN, welche Fragen waren unklar?	AL 🗆	NEIN
8.2. Gibt es etwas, was Ihnen die Beantwortung dieses Fragebogens / dieses Interviews erleichtert hätte?		
8.3. Gibt es etwas, dass nicht gefragt wurde, aber das Sie in Bezug auf Ihren Umgang mit Veränderungen und auf Ihren Job als wichtig erachten?	în Bezug	
8.4. Haben Sie Interesse an den Studienergebnissen?	AL 🗆	NEIN

Appendix G Quantitative Assessments

Respondent	routine seeking (reduced Mean)	self efficacy for change (reduced Mean)	locus of control (Mean)	short term focus (Mean)	risk aversion (reduced Mean)	IDP (Mean) Individual Dynamic Preference
1	4.67	4.75	4.60	3.50	4.50	4.40
2	4.33	4.00	3.40	4.50	4.00	4.05
3	4.00	4.50	4.40	5.00	4.00	4.38
4	4.00	4.25	4.40	4.50	4.00	4.23
5	2.33	4.25	4.80	3.00	2.50	3.38
6	5.00	5.00	5.00	5.00	3.00	4.60
7	2.00	4.00	4.40	4.00	4.00	3.68
8	2.67	5.00	3.80	2.00	4.50	3.59
9	4.67	4.50	4.20	2.00	4.00	3.87
10	5.00	5.00	3.60	5.00	3.50	4.42
11	4.67	4.00	3.80	3.00	4.00	3.89
12	4.67	4.75	3.80	3.50	4.50	4.24
13	5.00	4.75	4.00	4.50	4.00	4.45
14	3.00	4.75	4.00	3.50	3.00	3.65
15	3.33	4.75	4.40	4.50	3.50	4.10
16	5.00	4.75	4.80	3.50	3.00	4.21
17	4.67	4.00	3.80	4.00	4.50	4.19
18	4.33	4.00	4.80	3.50	4.50	4.23
19	3.67	4.75	4.40	2.00	3.50	3.66
20	5.00	4.75	4.80	5.00	3.00	4.51
21	5.00	5.00	4.80	3.50	4.50	4.56
22	4.67	4.00	4.20	4.00	4.00	4.17
23	2.00	5.00	4.80	2.50	4.50	3.76
24	4.33	4.25	3.80	3.00	3.50	3.78
25	4.67	5.00	4.80	4.50	4.50	4.69
Ø	4.11	4.55	4.30	3.72	3.86	4.11

* Several factors are classified as "reduced" because one or more of the underlying items adding up to these factors are excluded before the mean calculation (please refer to *Table 4-2: Critical Items of Study* and *Section 4.4.1* for details).

TABLE 6-18: WED ASSESSMENT DYNAMIC SCALES (7-POINT LIKERT SCALE)

		comp	lexity		p	redic	tabilit	у		imp	oact			spe	eed	
Respondent	qof	Group	Organisation	External Env.	qof	Group	Organisation	External Env.	qof	Group	Organisation	External Env.	qof	Group	Organisation	External Env.
1	5	4	6	7	3	2	4	5	6	5	4	4	5	4	5	7
2	6		6	6	5		3	3	5		4	6	3		4	4
3	6	6	5	6	3	3	2	4	5	5	3	5	6	6	5	6
4	5	5	5	5	3	3	3	4	4	4	4	4	5	5	4	4
5	4	4	5	5	3	3	4	5	2	2	2	5	3	3	3	5
6	7	5	4	6	4	3	7	2	4	4	6	6	5	5	6	6
7	4	4	5	7	2	3	4	5	3	4	4	5	3	3	5	5
8	1	5	3	4	1	3	3	5	1	3	2	2	1	2	2	3
9	5	4	3	7	3	4	5	7	4	4	4	6	4	4	4	7
10	6	6	7	7	4	4	6	5	6	6	6	7	5	5	6	7
11	7	6	6	7	5	3	3	4	7	6	4	4	3	6	4	6
12	4	3	4	6	4	4	4	5	2	2	3	4	5	3	5	6
13	5	4	4	4	3	3	6	5	5	5	3	5	4	4	3	2
14	4	4	3	3	3	5	3	2	6	6	7	7	5	5	6	6
15	6	6	6	6	3	3	4	2	4	4	4	4	5	5	5	3
16	5		5	7	4		3	5	6		4	5	4		6	6
17	6	6	5	5	4	4	5	5	4	4	6	6	5	5	7	7
18	5	5	6	2	5	5	2	2	6	6	2	3	3	3	6	6
19	4	4	6	5	2	2	4	3	6	5	4	5	5	5	4	6
20	4	4	4	4	6	4	5	6	5	3	3	4	4	2	2	4
21	4	4	5	5	2	2	3	4	5	4	4	4	4	4	5	3
22	4	3	5	6	4	4	5	6	4	4	2	3	4	4	5	4
23	7	7	3	6	4	4	1	6	7	5	4	2	7	2	1	4
24	5	3	3	3	2	3	3	2	5	5	4	3	6	6	6	6
25	5	5	5	5	3	5	3	3	6	6	2	4	4	4	4	4

Appendix G

TABLE 6-19: WED SCALE MEANS

	Means								
Respondent	qof Ø	Ø Group	Ø Organisation	Ø Ext. Env.	Ø GOE	Ø complexity	Ø predictability	Ø impact	Ø speed
1	4,75	3,75	4,75	5,75	4,75	5,50	3,50	4,75	5,25
2	4,75	0,00	4,25	4,75	4,50	4,50	2,75	3,75	2,75
3	5	5,00	3,75	5,25	4,67	5,75	3,00	4,50	5,75
4	4,25	4,25	4,00	4,25	4,17	5,00	3,25	4,00	4,50
5	3	3,00	3,50	5,00	3,83	4,50	3,75	2,75	3,50
6	5	4,25	5,75	5,00	5,00	5,50	4,00	5,00	5,50
7	3	3,50	4,50	5,50	4,50	5,00	3,50	4,00	4,00
8	1	3,25	2,50	3,50	3,08	3,25	3,00	2,00	2,00
9	4	4,00	4,00	6,75	4,92	4,75	4,75	4,50	4,75
10	5,25	5,25	6,25	6,50	6,00	6,50	4,75	6,25	5,75
11	5,50	5,25	4,25	5,25	4,92	6,50	3,75	5,25	4,75
12	3,75	3,00	4,00	5,25	4,08	4,25	4,25	2,75	4,75
13	4,25	4,00	4,00	4,00	4,00	4,25	4,25	4,50	3,25
14	4,50	5,00	4,75	4,50	4,75	3,50	3,25	6,50	5,50
15	4,50	4,50	4,75	3,75	4,33	6,00	3,00	4,00	4,50
16	4,75	0,00	4,50	5,75	5,13	4,25	3,00	3,75	4,00
17	4,75	4,75	5,75	5,75	5,42	5,50	4,50	5,00	6,00
18	4,75	4,75	4,00	3,25	4,00	4,50	3,50	4,25	4,50
19	4,25	4,00	4,50	4,75	4,42	4,75	2,75	5,00	5,00
20	4,75	3,25	3,50	4,50	3,75	4,00	5,25	3,75	3,00
21	3,75	3,50	4,25	4,00	3,92	4,50	2,75	4,25	4,00
22	4,00	3,75	4,25	4,75	4,25	4,50	4,75	3,25	4,25
23	6,25	4,50	2,25	4,50	3,75	5,75	3,75	4,50	3,50
24	4,50	4,25	4,00	3,50	3,92	3,50	2,50	4,25	6,00
25	4,50	5,00	3,50	4,00	4,17	5,00	3,50	4,50	4,00
MEANS	4,35	3,83	4,22	4,79	4,41	4,84	3,64	4,28	4,43

TABLE 6-20: QUANTITATIVE WED ASSESSMENT (BASED ON MEANS (PARTIALLYREDUCED))

Respondent	Job Dynamic*	Organisational Dynamic**	Job Dynamic Scaling***	Environmental Dynamic Scaling (OGE)****	WED Work Environment Dynamic
1	3.50	3.60	3.39	3.39	3.47
2	3.83	3.30	3.39	3.22	3.44
3	3.67	2.70	3.57	3.33	3.32
4	3.67	2.90	3.04	2.98	3.14
5	2.17	1.90	2.14	2.74	2.24
6	4.67	3.20	3.57	3.57	3.75
7	2.33	2.50	2.14	3.21	2.55
8	1.00	2.40	0.71	2.20	1.58
9	3.00	2.60	2.86	3.51	2.99
10	4.17	3.50	3.75	4.29	3.93
11	3.83	3.20	3.93	3.51	3.62
12	3.00	2.60	2.68	2.92	2.80
13	3.50	3.30	3.03	2.86	3.17
14	3.33	3.50	3.22	3.39	3.36
15	3.00	2.40	3.22	3.10	2.93
16	3.83	3.10	3.39	3.66	3.50
17	3.67	2.90	3.40	3.87	3.46
18	2.67	2.10	3.39	2.86	2.75
19	3.17	3.40	3.04	3.16	3.19
20	3.67	2.30	3.40	2.68	3.01
21	2.83	3.00	2.68	2.80	2.83
22	3.33	2.80	2.86	3.04	3.01
23	2.33	3.00	4.47	2.68	3.12
24	3.17	2.90	3.22	2.8	3.02
25	3.17	2.10	3.22	2.98	2.86
Ø	3.22	2.85	3.11	3.15	3.08

* Items Area B Part 1 (Table 6-7: WED Items on job dynamic in Appendix D)

** Items with Job Focus Area B Part 2 (Table 6-9: WED-items on organisational dynamic in Appendix D)

*** Items with OGE-Focus Area B Part 3 (Table 6-10: Dynamic scale items - overview in Appendix D)

TABLE 6-21: QUANTITATIVE ASSESSMENT OF WORK OUTCOMES (WOC) BASED ON MEANS

Respondent	Job Satisfaction (JS)	Org. Commitment(OC)*	Exploited Potential (EP)	Work Outcomes Sum (WOC)**
1	7.00	6.25	6.00	5.69
2	5.00	5.50	5.00	4.88
3	5.00	4.75	6.00	5.06
4	6.00	5.75	5.00	5.31
5	6.00	4.50	4.00	4.88
6	5.00	3.75	7.00	5.56
7	6.00	4.25	5.00	4.81
8	3.00	6.25	2.00	4.31
9	6.00	5.25	6.00	5.56
10	6.00	6.00	7.00	5.88
11	6.00	6.00	6.00	5.75
12	5.00	4.75	4.00	4.06
13	5.00	5.50	5.00	5.00
14	3.00	5.75	6.00	5.31
15	6.00	4.75	6.00	5.19
16	5.00	6.00	5.00	4.75
17	6.00	5.25	6.00	5.19
18	3.00	5.00	4.00	4.63
19	6.00	5.75	5.00	5.06
20	7.00	6.75	7.00	6.19
21	7.00	6.75	5.00	5.69
22	5.00	6.25	6.00	5.19
23	4.00	4.75	4.00	3.81
24	7.00	4.25	6.00	4.81
25	7.00	6.75	7.00	6.19
Ø	5.48	5.46	5.40	5.15

* means ** means

means of overall sum
Interview	Ideal Work Environment	Real Work Environment	Difference
1	5.00	3.00	2.00
2	3.50	3.50	0.00
3	4.00	2.00	2.00
4	4.00	4.00	0.00
5	3.00	2.50	0.50
6	5.00	N.A.	N.A.
7	3.00	2.00	1.00
8	3.00	2.00	1.00
9	3.00	3.00	0.00
10	4.50	2.00	2.50
11	3.00	3.00	0.00
12	3.00	2.00	1.00
13	3.00	2.50	0.50
14	3.50	3.00	0.50
15	3.00	2.00	1.00
16	4.50	3.00	1.50
17	3.00	3.50	-0.50
18	4.00	2.00	2.00
19	3.50	3.00	0.50
20	4.00	3.50	0.50
21	4.00	3.00	1.00
22	3.00	3.00	0.00
23	3.00	1.50	1.50
24	3.00	2.00	1.00
25	4.00	3.00	1.00

TABLE 6-22: IDEAL / REAL WORK ENVIRONMENT CHOICE (PART 3 OF INTERVIEW)

TABLE 6-23: PERSON-ENVIRONMENT-FIT: CHOICE OF MOST IMPORTANT SUB-FIT

Respondent	PJ-Fit	PO-Fit	PG-Fit	PS-Fit
1	X (5.5)			
2		X (6)		
3	X (5.5)			
4			X (5)	
5	X (6)		X (5)	
6	X (7)			
7	X (7)			
8			X (7)	
9	X (7)			
10	X (7)			
11			X (5)	
12			X (5)	
13			X (5)	
14			X (7)	
15			X (7)	
16		X (4)		
17	X (6)			
18			X (7)	(X(1))
19	X (5.5)		X (5)	
20	X (6.5)			(X (2))
21	X (7)			
22	X (6)			
23		X (7)		
24	X (7)			
25	(X(7))		X (7)	
SUM	13 (1)	3	11	(2)

Appendix H Details Quantitative Analyses



FIGURE 6-3: NORMAL DISTRIBUTION INDIVIDUAL DYNAMIC PREFERENCE (IDP) (QUANT. ASSESSMENT)



FIGURE 6-4: INDIVIDUAL DYNAMIC PREFERENCE (IDP) DISTRIBUTION - VISUALLY BINNED

(cut points at mean and selected standard deviation +/- 1)



FIGURE 6-5: NORMAL DISTRIBUTION WORK ENVIRONMENT DYNAMIC (WED) (QUANT. ASSESSMENT)



FIGURE 6-6: WORK ENVIRONMENT DYNAMIC (WED) DISTRIBUTION - VISUALLY BINNED

(cut points at mean and selected standard deviation +/- 1)



FIGURE 6-7: NORMAL DISTRIBUTION WORK OUTCOMES (WOC)* (QUANT. ASSESSMENT) * turnover intention excluded



FIGURE 6-8: WORK OUTCOMES (WOC) DISTRIBUTION - VISUALLY BINNED (cut points at mean and selected standard deviation +/- 1)



FIGURE 6-9: NORMAL DISTRIBUTION OF PERSON-DYNAMIC-FIT (PDF) (QUANT. ASSESSMENT)



FIGURE 6-10: FIT DISTRIBUTION - VISUALLY BINNED (cut points at mean and selected standard deviation +/- 1)

Appendix I Regression Analysis PD-Fit (2)

TABLE 6-24: REGRESSION ANALYSIS: PD-FIT (BASED ON WORK ENVIRONMENT
CHOICE) / WOC

Variables Entered/Removed						
Model	Variables Entered	Variables Removed	Method			
1	Diff_Ideal_Real		Enter			

	Model Summary							
				Std. Error of the				
Model	R	R Square	Adjusted R Square	Estimate	Durbin-Watson			
1	,105ª	,011	-,034	,83661	1,550			

ANOVA									
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	,171	1	,171	,244	,626			
	Residual	15,398	22	,700					
	Total	15,569	23						

Coefficients								
		Unstandardized Coefficients		Standardized Coefficients				
Model		В	Std. Error	Beta	t	Sig.		
1	(Constant)	5,550	,258		21,550	,000		
	Diff_Ideal_Real	-,112	,226	-,105	-,494	,626		

Residuals Statistics							
	Minimum	Maximum	Mean	Std. Deviation	N		
Predicted Value	5,2712	5,6060	5,4549	,08624	24		
Residual	-1,68859	1,47808	,00000	,81822	24		
Std. Predicted Value	-2,129	1,752	,000	1,000	24		
Std. Residual	-2,018	1,767	,000	,978	24		

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