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Organizational and Social Factors of Entrepreneurial Creativity

A Female Perspective

Bachelor Thesis in Business Administration

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Abstract

Previous research has shown that several factors of the work environment have the ability to positively influence the creativity of employees. However, these research findings are generalized and do not consider the needs of female employees. Concentrating on the organizational and social factors of a creative work environment, the purpose of this study is to investigate if the factors proposed by research apply to female employees and to identify additional elements that are of special importance to women.

Based on existing literature the authors created a working model including five organizational and four social factors, namely autonomy, resources, structure and systems, pressure, organizational and supervisory encouragement as the organizational factors and diversity, conflicts, communication and work group encouragement as social factors.

In order to meet the purpose of this study a qualitative research method was applied to test the effect of our working model on female creativity. The authors conducted ten semi-structured interviews with female employees in start-ups in Berlin, Germany.

The results revealed that the presented organizational and social factors do have the ability to enhance the creativity of women. Furthermore, four new elements appeared that are essential for the female creativity: atmosphere, team spirit, communication and soft formal structures.

These findings provide a good starting point not only for executives in creating a creative work environment for female employees but also for future research in this field.

Keywords: Creativity; Entrepreneurial Creativity; Female; Work Environment; Organizational Environment; Social Environment; Start-Up;

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1 Introduction

To stay competitive in today's world companies have to continuously improve and launch new products or services (Hill, Travaglini, Brandeau & Stecker, 2010) as the demands of customers as well as the competition from other firms increase. The old idea of competitive advantages is eroding quickly since "the pace of change has never been greater than [sic] in the current business environment" (By, 2005, p.370). In other words, no company can rest on its laurels. The Harvard professors Amabile and Khaire state correctly that "[...] competition turns into a game of who can generate the best and greatest number of ideas" (Amabile & Khaire, 2008, p.102).

For enterprises, innovation therefore is a means to survive and grow (Im & Workmann, 2004). No company can afford to ignore innovativeness. Corporations thus strive for a stronger focus on innovation and try to achieve a new 'sustainable' competitive advantage.

The main pillar of innovativeness thereby is creativity which is seen as the prerequisite to innovation. Since creativity in the organizational context is necessary to compete in the 21st century (Çekmecelioglu & Günsel, 2011), companies should focus on fostering it (Kwasniewska & Necka, 2004). This focus on entrepreneurship and creativity can help companies for instance to open new markets (W. C. Kim & Mauborgne, 2004).

In both the academic and the semi-academic world, models and implications have been developed to guide employees and managers towards higher creativity. For instance, when searching through Amazon, one of the biggest online book retailers, almost 5,000 books about creativity in businesses exist (Amazon, 2013). Many seminars and courses are offered to enhance creativity at work; for example, Amabile and Khaire hold a seminar with 100 industrial representatives to teach them about the state of science regarding creativity research (Amabile & Khaire, 2008). Especially the greater importance of creativity methods illustrates how organizations strive to make their employees more creative and hence innovative. Companies thereby make use of classic methods such as mind-mapping, but also more complex approaches such as lateral thinking (De Bono, 1995). Just as the creativity focus in the business world increases, the academic research about it accumulates as well. This field of research is very broad and some researchers focus on the process how creativity develops (Sawyer, 2006) while some study the elements of which it consists (Ko & Butler, 2007). Others in turn research the personality of creative persons (Feist, 1998) or commit to the seemingly simple search for a definition (Runco & Jaeger, 2012).

In addition to these areas of research, the factors of the work environment that foster creativity demand attention since the support of the working environment determines the level of new idea generation from employees (Amabile, Conti, Coon, Lazenby & Herron, 1996; Woodman, Sawyer & Griffin, 1993). This is in line with the argumentation of some researchers that creativity develops not shielded but through the interaction between individuals and their context (Whitelock, Faulkner & Miell, 2008). Companies like Google have proven how much the environment can influence the daily work, creative output and even the attractiveness of a company. A Google spokesperson stated in a recent article that the company's philosophy is "to create the happiest, most productive workplace in the world" (Stewart, 2013). Their aim to "push the boundaries of the workplace" seems to meet the zeitgeist of our age since Google was rated in 2013 for the fifth time in a row to be the best company to work for by the Fortune magazine (Fortune, 2013). Teresa Amabile, probably one of the most influential creativity researchers, commented on the working conditions at Google by stating "Isn't it fantastic?" (Stewart, 2013). It is evident

that Google aims at triggering the creative side of its employees through shaping the working environment to positively influence creativity, and sure enough they have succeeded. By 2012 they had become the 3rd most innovative company in the world (Fast Company, 2012). Thus, the working environment is essential since employees spend the whole day in their offices and are supposed to come up with creative ideas at their desks. Accordingly, their environment should be shaped and developed in a manner that stimulates creativity.

1.1 Problem

Still, creating a creative environment is not as simple as it might appear. Companies want to foster creativity in order to become more innovative, but are not sure what measures to take and how to actually get there. The only certain thing is the insight that companies have to foster their employees' creativity. "[W]hat used to be an intellectual interest for some thoughtful executives has now become an urgent concern for many." (Amabile & Khaire, 2008, p. 101). The research on creativity thereby is a basis for companies to build their efforts on. In this aspect, Amabile and Khaire (2008) stress the need for research and management practices to collaborate and guide each other. Hence, when managers see the need to enhance the creativity of their employees, research should set the agenda for them. However, studies about organizational creativity distribute their results rather with a watering-can; their findings are not specific but rather generally formulated. Many articles examine the conditions that foster creativity but fail to explicitly state whose creativity is to be enhanced. Sometimes the focus is on "individuals and teams" (Amabile et al., 1996, p. 1155), on "employees" or "workers" (Dul & Ceylan 2011, p.13) or even on "organisation's members" (Andriopoulos, 2001, p. 835).

Whereas scientific literature has treated the workforce homogeneously, in reality most companies have quite heterogeneous employees. Research fails so far to demonstrate which factors of organizational creativity apply to subgroups of the workforce.

We argue that a special focus should be put on the female workers. In the United States the workforce consists of 43.28% female employees and taking into account the rise of the participation since the 1950, it can be argued without doubt that the work force is gradually becoming equalized (Toossi, 2002). Hence, the increased diversity at work has to be considered in the academic research in order to represent a reliable picture of the reality. However, the literature about the creative work environment generalizes its findings as stated above. Therefore, the results should be questioned to what extent they apply for women as well. We argue that gender might affect the needed prerequisites for being creative (Kwasniewska & Necka, 2004).

1.2 Purpose

The purpose of our thesis is to find out how far the general advisements for creative working environment are applicable for women and which other factors foster female creativity.

We hope to contribute with the findings of this study in two ways. First of all, the creative work environment and the creation of innovation in corporate settings is of increasing importance as explained before. This study will provide executives with starting points how the work environment should be formed in order to enhance the creativity of their female employees. Furthermore, the current state of science fails to explain the organizational and social factors by particularly focusing on women's needs. We will contribute to research by addressing this specific gap.

Derived from the purpose of this study, two research questions are proposed and will be explored throughout this study.

1. Are the organizational and social factors proposed by literature valid for fostering female creativity?
2. Which further social and organizational factors are especially important for female employees regarding their creativity?

1.3 Delimitations

Researching in the field of entrepreneurial creativity, it becomes evident that the purpose of this study has to be narrowed down in order to be more specific. Therefore, we will present several delimitations that affect the study's outcome.

First of all, we are aware that this research covers only a small part of entrepreneurial creativity. The emphasis is on organizational and social factors which influence the creativity of female employees. Taking other factors such as the effect of the physical environment into account could however result in more complete research results.

Further, the fact that this study is conducted with the goal of identifying the female perspective on creativity factors limits the range of results. For instance, it could be also beneficial to include a male perspective or to compare perceptions of both male and female employees.

Basing the empirical part on employees who are working in start-ups in Berlin, Germany, narrows this research in respect of cultural and geographical influences.

However, taking these shortcomings into account this study will provide a basis for further research. Suggestions how to overcome these delimitations can be found in the section about further research.

2 Theoretical Point of Departure

In order to embrace the topic of a creative working environment, it has to be seen in the full context of its origin in research. Creativity in the context of new ventures or start-ups is thereby often referred to as ‘entrepreneurial creativity’ or ‘organizational creativity’. Hence, before building a theoretical framework about factors that positively influence creativity, entrepreneurial creativity and the main research field, entrepreneurship, have to be discussed.

2.1 Entrepreneurship

“Entrepreneurship makes a difference, or else it isn’t entrepreneurship.” – Davidsson, 2004, p.6

Following this quote of Per Davidsson, one of the most acclaimed researchers in entrepreneurship, a short overview about entrepreneurship is given in this section with the goal of demonstrating the importance and the opportunities deriving from it.

Although scholars argue that entrepreneurship has always existed, it has become a generally researched area since the 1980s (Johannisson, 2010). However, some researchers such as the Austrian Schumpeter focused their research on it already in the 1930s, however without naming it entrepreneurship. Schumpeter proposed for instance the concept of “creative destruction” which means that entrepreneurship produces new combinations and hence replaces existing products and services (Schumpeter, 1934, cited in Amabile, 1997a). Since then the research area has covered several aspects from the individual characteristics to a fostering context (Steyaert & Landström, 2011). This broad range of research can be split into a micro and a macro perspective. In the micro concept, the individual entrepreneur is the focus of research. Questions such as whether entrepreneurs are born or made, i.e. the required skills can be learnt, and what characteristics distinguish entrepreneurs from employees, are tried to be answered. Furthermore, entrepreneurship is often related to masculinity (Bruni, Gherardi & Poggio, 2004; Buttner & Rosen, 1988). However, more and more business schools offer courses about entrepreneurship (Bagheri & Pihie, 2011) which supports today’s assumption that it can be taught.

Although, nowadays a vast range of studies exist, Davidsson (2004) argues that a common definition of entrepreneurship is still missing. During his research he studied many understandings of entrepreneurship and found that many are overlapping while others are contradicting. Nevertheless, Davidsson himself (2004) states that most definitions have two common features: first, entrepreneurship is about independently owned companies and their owners; and second, they have to be equipped with the capability to provide something new to the market.

Entrepreneurship in the micro view can also have an impact on the macro perspective, namely on economics and society (Davidsson, 2004) and consequentially motivate the importance of entrepreneurship as a research field. A recent study among 34 countries indicates that on average 9.3% of the population between the age of 18 and 64 is engaged in entrepreneurial activities (Acs, Arenius, Hay & Minniti, 2004). Additionally, entrepreneurship leads to job creation, increased prosperity and gross domestic product (GDP), higher productivity and economic growth (Reynolds, 2007).

2.2 Entrepreneurial Creativity

After elaborating the field of entrepreneurship and its significance for society, the following section will provide insights on entrepreneurial creativity, a prerequisite for any entrepreneurial activity.

Barringer and Ireland (2010) state that the creation of something novel is the core of entrepreneurship. Therefore, creativity and innovation, which are starting points to create something new, are important aspects for any business. It hence is generally accepted that creativity and entrepreneurship are inseparable concepts (Baldacchino, 2009; Ko & Butler, 2007).

We will adopt the definition of Amabile regarding entrepreneurial creativity. She intertwines the concepts of entrepreneurship and creativity and comes up with the definition that entrepreneurial creativity is “[t]he generation and implementation of novel, appropriate ideas to establish a new venture (a new business or new program to deliver products and services)” (Amabile, 1997a, p. 20). It is evident that entrepreneurial creativity can only be fully understood with the knowledge of both, creativity and entrepreneurship. Based on this definition, we will build the background for testing our research questions on creativity and entrepreneurship in a new venture.

A recent conceptual model proposed by Dul and Ceylan (2011) shows how entrepreneurial creativity can evolve. Their argumentation is based on the assumption that creativity evolves during a process and that this process is fueled by the creative personality, the physical working environment and the social-organizational work environment.

In our eyes, it is appropriate to shortly mention this model as it focuses on the higher-level concept of entrepreneurial creativity. Our research benefits from this framework as it presents a combination of contextual and personality factors of creativity. Therefore, we can classify our research to be in line with the research of Dul and Ceylan (2011) since we focus on the social and organizational elements. Furthermore, their model depicts well that no single element is sufficient for fostering creativity but the interaction of several factors is necessary for creativity. Thus, Dul’s and Ceylan’s model is appropriate for offering a holistic view about the concept of organizational creativity. Even though our study investigates only the social and organizational factors of creativity, the reader should bear in mind that additional factors exist which influence the creative outcome.

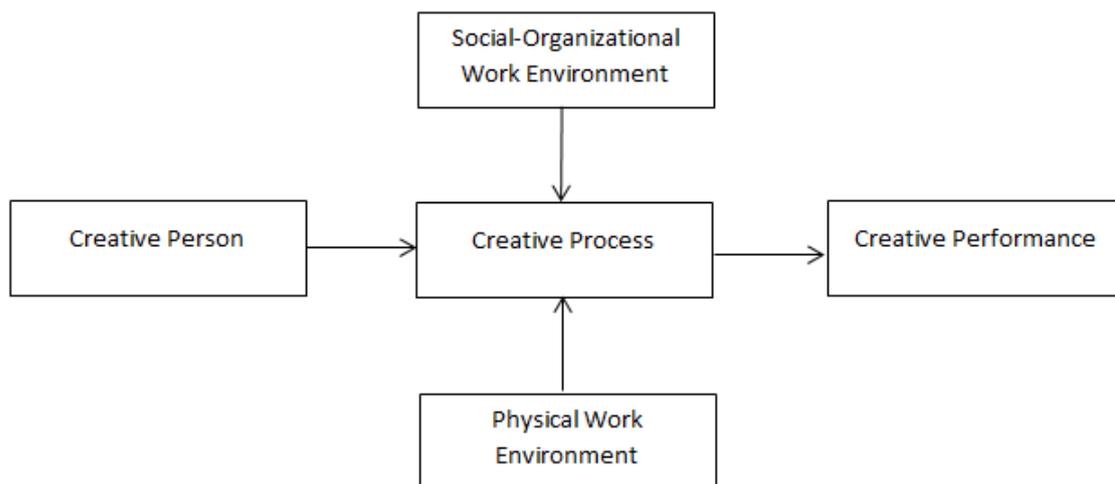


Figure 1 – Conceptual Model of Entrepreneurial Creativity (according to Dul & Ceylan, 2011)

2.2.1 History of Creativity

Before addressing the question of how the working environment can influence creativity in an enterprise, it is necessary to first determine where the concept of creativity stems from. In the following section, we will therefore shed light on the development of creativity

through time and see how the explanations for the phenomenon “creativity” have changed and been developed.

Since the beginning of humankind, people have questioned where creativity comes from (Phillips, 2005). In ancient times, people were not attributed the power of being creative by themselves. It was rather a gift from gods that allowed for creative achievements. From this time the touch of something mystical has lingered on the concept of creativity.

When one follows the explanation of creativity throughout time, it becomes apparent that it represents mostly the usual assumptions of that time. For example in the patriarch times of the Roman Empire, the possibility to be a genius and therefore creative was attributed only to males. Before Christianity entered the beliefs, muses and special gods were the origin of creativity (Runco & Albert, 2010). Hence, the emergent concept of belief determined the explanation of creativity.

Today it is assumed that the presidential speech of Joy Guilford in 1950 at the American Psychological Association was the corner stone to more research in the field of creativity. In the span from the 1920s to the 1950s only 0.02% of published articles in Psychological Abstracts dealt with this topic (Guilford, 1950). Because of his call it became more acceptable for psychologists to study this phenomenon (Kaufman, 2009) and nowadays there are even own scholarly journals about creativity (for example Creativity Research Journal, Creativity and Innovation Management).

2.2.2 Focus of Creativity Research

As the origins of the concept of creativity have been made clear it is now time to focus on the different research strings that prevail today when discussing entrepreneurial creativity.

Basically, research about entrepreneurial creativity can be split according to its focus on one of the four different concepts of creativity: person, product, process or press (Rhodes, 1961). This according to Runco (2004) is one of the most popular structures in researching creativity. The discussion deals with the problem in which part creativity is manifested. As an example to understand the division better, one can think about whether a creative process inevitably leads to a creative product or could also end in an uncreative product according to the criteria of creativity.

Especially in the early years of creativity research, the focus was on the personality of creative persons (Amabile, 1982). The goal of this focus is to determine how creativity can be predicted by the characteristics of a person (Feist, 1998). While researchers who apply the process approach focus on the behavior of individuals, the press concept tries to explain how pressure on processes or persons might influence creativity (Runco, 2004). The last concept uses the product as means of measurement; in other words, the expression of the creative idea or the outcome which could also be seen as the most objective and appropriate approach as the three other concepts would ultimately lead to a creative product as well (Amabile, 1982; K. H. Kim, 2006). Hence, the product concept will be used in this study.

2.2.3 Stages of the Creative Process

As it became evident now that many researchers focus on different factors when discussing creativity, it is necessary to shed light on how creativity evolves.

Already in the 1920s a model was proposed to explain the development of creativity (Dul & Ceylan, 2011) and today it serves as basis for the model developed by Sawyer (2006).

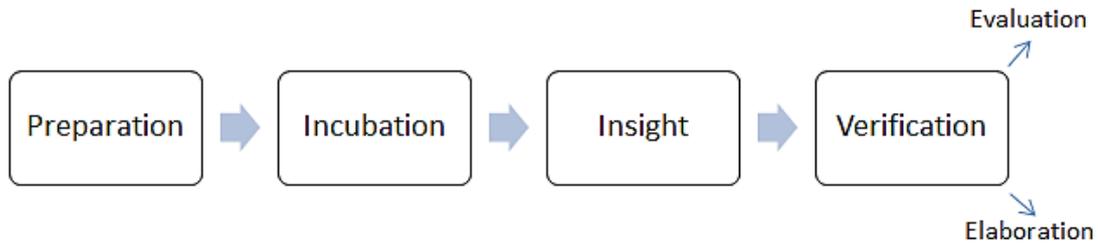


Figure 2 – Creative Process based on Sawyer (2006)

Sawyer divided the evolution process of creativity into four steps. In the initial stage the problem is defined and researched. After gaining knowledge about the problem, the mind works unconsciously on the problem during the second stage. The third stage is characterized as an “eureka” moment of insight when the unconscious idea of the second stage turns into the formulation of a specific idea. In the final stage, the feasibility of the ideas has to be determined. If adaption and changes are required, the idea moves backwards in the process. Nevertheless, if the idea seems to be realizable, the steps of verification and elaboration follow which are though no longer steps of the creative process. Those stages are concerned with the realization of a creative idea (Sawyer, 2006). From our point of view, this model of Sawyer (2006) gives a very good overview about the evolving process of creativity. It should be mentioned though that external factors can impact each of the stages. This provides the impetus for this research as we will explore which factors of the working environment stimulate women’s creativity.

2.2.4 Definition – Creativity

Working through the immense load of literature that has been written about creativity, it becomes evident that there are as many definitions as authors. Consequently, it is necessary to come to terms with a standard definition as Runco and Jaeger (2012) did. In their review of existing definitions they concluded that most attempts to define this concept dealt with a two-way criterion which can be traced back to the beginning of the 20th century. Using different terms, researchers agree that creativity needs originality and effectiveness. Still, the credit should go to Morris Stein who was the first to describe the two variables that constitute creativity without ambiguity and referring explicitly to creativity itself (Runco & Jaeger, 2012).

“The creative work is a novel work that is accepted as tenable or useful or satisfying by a group in some point in time.” – Stein, 1953, cited in Runco & Jaeger, 2012, p.94

We have chosen to use this definition for our thesis as it comprises all elements that we find to be the most important for defining the concept of creativity: a two-sided explanation comprising novelty and usefulness, the criteria of objective assessment and a product approach which we determined to be the best-fitting for this thesis.

The problem of objectivity in assessing creative work will be further discussed in the methodology part of our empirical research.

2.2.5 Methods of Creativity

“I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail.”
– Maslow, 2002, p. 15

What Maslow wanted to explain is that one should change the point of view from time to time. In our fast changing world, it is necessary to respond to new problems not by using

the same methods as decades ago but to come up with new ways to tackle problems. Therefore, companies need employees that are capable of working creatively. As a result, many approaches have been developed to enhance the creativity of workers.

Generally, these methods can be divided into intuitive and discursive practices (Schlicksupp, 2004). They are usually applied in the organizational setting in order to search for problem solutions or opportunities. Intuitive practices include such methods as brainstorming, Walt-Disney method or Lateral Thinking from De Bono. These methods have in common that no discussion between the participants takes place and therefore the results can be seen as individual thoughts and ideas that have to be developed further and tested for feasibility. Discursive practices however are based on the vivid discussion between team members and the end result builds upon the contributions of several members. Mind-mapping and the morphological box are frequently used discursive approaches (Schlicksupp, 2004).

However, the presented methods to improve employee creativity are not of interest to this study since we examine solely factors of the work environment that can enhance creativity. The effect that creativity methods can have in these settings will not be closer focused upon.

2.3 Work Environment

Before concentrating on the creative work environment, it is helpful to review general findings about the work environment. This will allow classifying the purpose of this study as a combination between the research fields of entrepreneurial creativity and working environment.

When defining the work environment, the basic distinction is between the external and the internal factors. In the International Encyclopedia of Business and Management, Van Witteloostuijn (2002) argues that it is important to match the internal and the external dimensions in order to make a company run efficiently.

Although we acknowledge that external and internal environment of an organization influence each other mutually, in this study the focus is only on the internal environment, i.e. the context that can be directly experienced by the employees.

Depending on the context, internal work environment can be related to very differing concepts. By combining the definitions of environment and work of the Oxford Advanced Learner's Dictionary (1992), the work environment is seen as the circumstance that affect people's lives at the place where they hold their occupation. This broad definition is reflected in research, e.g. in the definition by Amabile and associates (1996), resulting in different disciplines of research. For example, in the worldwide competition "Great Place to Work" the judges look for trust, credibility, respect, fairness, pride and team spirit in a company. They argue that these factors shape the environment of a firm in a way that makes it attractive for employees (Great Place to Work, 2013). Other researchers have been studying its effects on many factors such as the general well-being, health or performance (Parker, Baltes, Young, Huff, Altmann, LaCost & Roberts, 2003). Even special research centers focus on the effects of the work environment in vast directions (for example NRCWE, 2010; IfADo, 2013). Many companies try to create an atmosphere that enhances productivity or represents the vision of the firm such as the example of Google that has been mentioned in the introduction. Researchers are also interested in how the physical work space should be designed for promoting creativity (for instance Babcock 2004). This string of research combines ergonomics, environmental psychology, architecture and interior design with the research of creativity (for an overview see: Dul & Ceylan 2011).

As it became evident so far, there are many different strings of research focusing on the working environment. Hence, it is necessary to define the concept as it will be used throughout this study.

Our research will be based upon the distinction of Woodman, Sawyer and Griffin (1993). In their study they strive to develop a theory which explains organizational creativity by putting forward the assumption that the creativity of individuals is intertwined with group factors and organizational variables. Our own working model of a creative work environment will be based on their definition of external factors, namely organizational factors and the group or social factors.

2.4 Creative Work Environment

After reviewing existing literature and defining both entrepreneurial creativity and the work environment in organizations separately, both concepts are now combined.

In the following section, three models are presented that look into the factors of the work environment and illustrate their relationship to creativity. In other words, the models presented here combine factors of the work environment with the creativity of individual employees (Pirola-Merlo & Mann, 2004). Although this study is purely focused on the environmental factors, it still is necessary to determine what previous research contributed to the interaction of individual creativity regarding the work environment.

2.4.1 Amabile's Models on Creative Work Environment

The Componential Model of Organizational Innovation has been developed by Harvard professor Teresa Amabile in 1988 but she explored a similar model before (Amabile, 1983). Its underlying belief can be formulated as the assumption that every human being can be creative as long as certain contextual factors support it (Amabile, 1997b). In this sense it contradicts the long line of research about traits and personal characteristics that foster one's creativity. Her model combines three elements of the organizational work environment and three elements of individual creativity. Thereby the contextual factors influence individual's creativity. The individual components, expertise, task motivation and creativity skills, are used to explain how individual creativity can be generated (for example in Amabile, 1998). However, since the focus of this research lies on the contextual factors, we will not go further into these factors.

The elements of the work environment in Amabile's model are resources, management practices and organizational motivation. The motivation towards innovation that employees experience from their organization should not only come from top management but also from direct supervisors (Amabile, 1997b). The second element of the organizational model is resources while the last element, management practices, is defined broadly. It includes all factors that have a positive impact on creativity and can be controlled by management. To sum up, when all elements of the organizational side work together and creativity exists through the individual factors, then innovation can evolve.

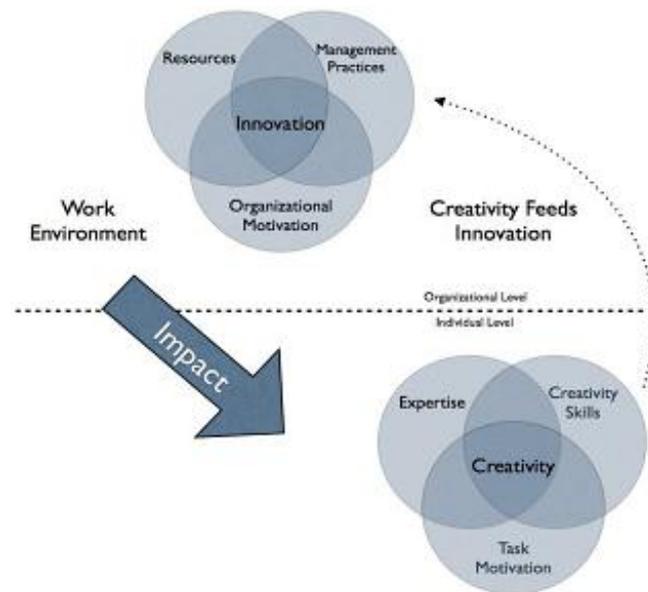


Figure 3 – The Componential Model of Organizational Innovation (Amabile, 1997b)

We acknowledge that the Componential Model of Organizational Innovation has been one of the first to combine individual creativity with contextual factors. However, in our eyes there are several flaws in this model such as the superficial elaboration of single elements. Thus, the follow-up model which is called KEYS Environment Scales as a starting-point is more appropriate for this study.

Amabile together with several researchers created this framework to assess the relationship between work environment and creativity (Amabile et al., 1996). Amabile herself states that this approach elaborates the single elements further in detail than the Componential Model. The KEYS scales include six stimulants to creativity, in other words factors that are assumed to positively influence creativity, and two obstacles, factors that have a negative relationship towards creativity. The stimulants include organizational encouragement as well as supervisory encouragement and support from work groups, freedom, sufficient resources and challenging work. The obstacles are workload pressure and general organizational impediments. Many researchers since have used KEYS to test special work settings for their creative potential (for instance Amabile & Conti, 1999; Ensor, Pirrie & Band, 2006). Also some consultant companies use the model for improving the work environment of their clients (Acorn Consulting, 2002).

This model influenced our working model to a great extent. Except for the organizational impediments, all elements are represented in our own model. Still, we see potential for further improvement of KEYS and therefore add several other elements that have been identified to influence creativity. Our decision to not include the organizational impediments is based on the belief that all detrimental actions that an organization can take are the negative formulation of positive elements. Consequentially, we argue that organizational impediments should not be given a distinguished position in our framework.

2.4.2 Model of Team Climate for Innovation by West

Since the organizational part of the working model in this study is built on the contribution of Amabile and her fellow researchers (1996), one more existing model was reviewed with the objective to find social elements that influence the creative work environment. This was necessary in order to fulfill the call of this study for both organizational and group factors. Michael West's model is suitable as it concentrates on the team effects on creativity

(West, 1990, cited in Pirola-Merlo & Mann, 2004). Four factors are identified to be important for innovation: a shared vision, participative safety, task orientation and support for innovation from team members. All of these four factors are included in our framework as sub-elements. Although this model focuses rather on innovation than on creativity, we argue that the results can be easily referred to since creativity is the starting point for any innovation in a company (Amabile, 1997b).

However, through our literature review several other important factors have been identified for the organizational as well as the social part which were not mentioned in the presented models. Those elements are included in the theoretical frame and extend the frameworks of Amabile and West. By extending the existing research we see the opportunity to contribute to existing literature and advance the state of science.

2.5 Women in Business

As stated before, existing literature on organizational and social factors of entrepreneurial creativity does not take the role of female employees into account. We acknowledge that two Polish researchers attempted to shed light on this problem but could only find insufficiently supported evidence for gender-related differences (Kwasniewska & Necka, 2004). However, since they based their research not only on differences between men and women but also on the difference between manager and non-manager positions, we argue that by focusing separately on the work environment for female employees, more significant results can be obtained.

To begin with, it is appropriate to shortly discuss the importance of women in the workforce before combining existing research and creating a working model for the creative work environment of female employees.

Over the years, the composition of the workforce has changed enormously. While some centuries ago, most professions were held by men, today more and more women stream into the business world. For example, in the United States the female work force increased by 256.8% from 1950 to 2000 (Toossi, 2002). Further, a special focus should be put on the working situation in Germany since it is the environment in which our empirical research is conducted. According to the German Federal Labor Market Authority, 71.6% of women between 15 and 65 have been employed whereas 82.2% of men in the same age group were registered as employed in 2011 (Bundesagentur für Arbeit, 2013), which shows that the German labor force consists to 46.55% of women. These numbers are relatively high but there are still shortcomings in the German labor market that impede a more equal workforce (Connell, 2009). The main problems that German female employees face according to Connell's encyclopedia article are amongst others a gender pay gap for men and women who occupy the same position and a so-called "glass ceiling" that prevents women to be promoted to executive positions.

In a recent call by Helene Ahl for an expansion of research on the role of women in entrepreneurship she highlights that in previous research it is "assume[d] that men and women differ in important respects. Otherwise, there would be no reason for comparison" (Ahl, 2006, p. 596). Still, it has been shown that the presence and importance of female employees is neglected by researchers (Baker, Aldrich & Nina, 1997) and also to some degree biased by the media coverage as a study about media coverage of female entrepreneurship in Germany showed (Achtenhagen & Welter, 2011).

As already mentioned before, unconsciously entrepreneurship is often seen as a masculine act (Bruni et al., 2004) and men rather than women are attributed characteristics such as leadership and persuasiveness that are necessary for becoming a successful entrepreneur

(Ahl, 2006; Buttner & Rosen, 1988). However, as the workforce becomes gradually equalized and entrepreneurship is necessary for survival of companies nowadays as explored before, we argue that it is obviously incorrect to see the ability for coming up with new ideas only in male employees. Some researchers investigated the field of entrepreneurial creativity and how gender plays a role in it. For instance, it was shown that creativity by male managers can be predicted through the need for achievement while female managers are largely influenced by the need for affiliation (Chusmir & Koberg, 1986).

While existing literature on women in entrepreneurship focuses on the topic of female entrepreneurs, it fails to recognize the importance of female employees in this context. We argue that employed women also have a direct influence on the entrepreneurial outcome of the venture. Therefore, it is necessary to shed light on their role. Furthermore, academic literature also neglected the creative work environment for women as argued before. Combining the lack of research on “entrepreneurial employees” and on creative work environment for female employees, a new broader aspect will be added to the entrepreneurship research. Thus, we will create a framework about the creative work environment based on existing literature and use it to find out if female employees agree with these findings.

3 Theoretical Framework

In the following sections we will give an overview about the current state of knowledge regarding factors which are responsible for creativity in the work environment. As stated above, this framework will be based upon the distinction of Woodman and associates who determined that the working environment consists of a group and of an organizational dimension (Woodman et al., 1993). Further, in this section the classifications of Amabile and fellow researchers (1996) as well as of West (1990, cited in Pirola-Merlo & Mann, 2004) will be used. Additionally, current findings and controversial results are consulted to draw a sound picture of the state of research. Based on the individual findings, a working model is developed in section 3.3.

3.1 Organizational Factors

To start with, we concentrate on the organizational factors that have been identified to influence the creativity in a company.

3.1.1 Autonomy

The general finding of existing literature is that autonomy in an organization can be positively related to creativity (Oldham & Cummings, 1996; Amabile et al., 1996). Amabile and associates (1996) proved that when employees perceive to have a choice in how to approach a task and have a feeling of ownership and control over their projects, they tend to be more creative. More particularly, studies have revealed that the freedom to choose how to proceed with an assignment can stimulate creativity more than the choice between accepting a task or not (Amabile, Hennessey, & Grossman, 1986). We agree with this assumption as employees can apply their creativity directly when they have free hand in how to process a task. They can come up with new ways of handling it and immediately implement them. By experiencing freedom at accepting a task or not, less creativity is needed when the proceedings are strictly assigned. This kind of self-determination has shown to positively influence not only creativity but also the general well-being and performance of the employees. Hence, managers should for instance try to give employees a true choice and promote an environment where deviating opinions and ideas of employees are acknowledged (Deci, Connell, & Ryan, 1989).

However, research about autonomy has also resulted in inconclusive or even negative results. Shalley (1991) conducted a research focusing amongst others on the effects of personal discretion on creativity and performance. She could not prove that high autonomy does not necessarily lead to creativity because of the personal discretion, which represents in this case the freedom in fulfilling a task. Another study added to the mixed findings about the relationship between autonomy and organizational creativity. In his study Zhou (1998) constructed a role-playing task with 210 individuals. The findings were non-significant and hence contribute to the inconclusive research situation about the effects of autonomy. As a result it is assumed that there are variables in the environmental context of a company which can moderate the effect of autonomy and as a consequence explain the different research results (Chang, Huang & Choi, 2012). Chang and his fellow researchers explored how prior work experience has to be regarded as a moderating variable of autonomy. Other variables that have been identified to moderate the relationship are structural features of the assignment such as “task interdependence, task variability, and organizational formalization” (Langfred & Moye, 2004, p.941).

There are also some more factors belonging to the dimension of autonomy. For instance, an open climate is a basic factor for a creative environment (Andriopoulos, 2001; Feurer, Chaharbaghi & Wargin, 1996). These findings are in line with the assumption that

communication should flow freely between different employees and departments since this facilitates the sharing of information which could lead to new ideas (Amabile, 1988, cited in Andriopoulos, 2001). One more aspect identified in the literature is that risk-taking should be encouraged (Sternberg, O'Hara & Lubart, 1997), especially in a safe environment (Anderson, Hardy & West, 1992). Only new ideas that might sound adventurous in the beginning have the potential to become an innovation. Therefore, employees should be encouraged to take risks without having to fear harsh consequences if their ideas are unsuccessful. Lastly, the freedom to conduct self-initiated tasks should also be encouraged. Personal interest in an activity and the resulting intrinsic motivation are guarantors for creative outcomes (Amabile, 1998).

3.1.2 Resources

The second dimension that has been widely regarded in the literature about organizational creativity is the resources that a company provides the employees with. Generally, one can distinguish between money and time as resources. According to the threshold theory of Amabile (1988; cited in: Andriopoulos 2001) up to a certain amount of resources the resulting creativity increases but after that point a rise in resources does not lead to an increase in creativity. An illustrating example would be the resources for a marketing project; scarce resources would stimulate the creativity of employees to come up with new, deviating ways to carry out the project. However, if the team had too many resources, it could implement several strategies without engaging divergent thinking and creating better ways to market the product. Therefore, managers should make sure that their employees have sufficient resources to fulfill the task whereas showering them with resources will not improve their performance.

3.1.3 Structure and Systems

Another dimension is the structure and systems prevailing in a company. These include both the formal and the informal realizations (Cook, 1998). It is argued that a flat structure is the most suitable for fostering creativity since it allows for a better flow of information and an open climate (Isaac, Herremans & Kline, 2009). Isaac and his colleagues further argue that a flat structure is even beneficial for a climate that approves risk-taking. In a study conducted at 3M it was found that employees were more creative when the management applied a long-term perspective towards the individual's careers (Brand, 1998). This finding is related to the fact that employees are more creative when they feel secure enough to engage in risky ideas which are necessary to come up with something new.

One of the best researched elements is the reward systems that foster creativity. Creative ideas should be rewarded; nevertheless, verbal praising and recognition often have a better effect than a purely monetary bonus (Amabile et al., 1986). Rewards should be seen as recognition of the work and the competences of an employee and not as a bribe for coming up with creative ideas (Abbey & Dickson, 1983). The danger of rewards is that it undermines the intrinsic motivation behind a task. Therefore, non-monetary rewards have shown to be more effective as the employees feel encouraged but still are driven by a natural interest in that topic and not by the reward itself (Amabile et al., 1986).

3.1.4 Pressure

Another category that influences organizational creativity is pressure. While most of the literature has been based only on factors that influence creativity positively (Amabile et al., 1996), pressure can be positively as well as negatively related to it. For instance, if too much

pressure is exerted on the employees it is detrimental to the creation of new ideas. However, a certain amount of challenge can increase the creativity. When workers feel intellectually challenged or when the problem is urgent, more value is attributed to a task and hence the workers apply more creativity in the problem-solving process (Amabile et al., 1996). A good example is deadlines forcing employees to work more efficiently and productively. Still, a balance should be found between beneficial and detrimental pressure. Thus, Amabile stresses that managers should determine an amount of stretch of assignments for each employee individually which is challenging but not overstraining their capabilities (Amabile, 1998).

3.1.5 Organizational and Supervisory Encouragement

The four dimensions of organizational creativity mentioned before have to be always considered in the right organizational context regarding encouragement. Research has shown that the encouragement at work has a significant influence on employees' creativity (Madjar, Oldham & Pratt, 2002). Encouragement can occur on three different levels: organizational, supervisory and work group (Amabile et al., 1996). On the first level it is necessary that the top management makes creativity a priority throughout the whole organization. The top level management has to encourage creativity by facilitating all other dimensions. For instance, by implementing a suitable reward system, creating a context that appreciates risk-taking and allows for trial and error, the top management sets the right cornerstones for a creative environment. On the supervisory level the direct superiors should encourage the creativity of employees as well. The superiors are expected to be supportive and act according to the needs of employees (Oldham & Cummings, 1996). The encouragement expressed by team members will be discussed as a social factor.

3.2 Social Factors

Creativity has sometimes been described as the individual thinking, the social context of the individual and how both interact (Shalley & Gilson, 2004). In other words, when an employee has a creative idea, others can pick it up and influence the way in which it develops. Especially in companies the interaction gains in importance because team and group work become more frequent (Devine, Clayton, Philips, Dunford & Melner, 1999). Therefore, it is necessary to shed light on the social context in which employees work. This is also according to the classification of Woodman the second pillar of the work environment, the group dimension (Woodman et al., 1993). Throughout our research we have found four factors that will help us develop our theoretical framework regarding the social factors.

The terms "team" and "group" are often used as synonyms but for conducting our research it is necessary to acknowledge their difference. According to Katzenbach and Smith (1993) a team is a set of employees that have a mutual purpose and complement one another with their skills while a group is a cluster of employees that work only loosely together and do not have a common goal as team members do. By defining teams and groups it becomes evident that team members are expected to work more creatively than groups as a mutual purpose of a common vision is positively related to creativity (Amabile, 1998).

3.2.1 Diversity

In the past, managers saw only the moral and legal aspects of diversity (Thomas & Ely, 2005); today however, they would add the benefits that they expect from a diversified team.

Hence, it is not surprising that value in diversity is one of the main research topics for the social context of creativity at the workplace. It has been shown that diversity can positively influence not only creativity but also overall performance of a team (see Shalley & Gilson, 2004 for a review). Diversity can be expressed through origin, culture or intellectual capabilities (Bassett-Jones, 2005). Even more detailed, the way how employees approach problems and solve them can be seen as diversity (Kurtzberg & Amabile, 2001). Heterogeneous teams are therefore more prone to creativity. Diversity can lead to more experience in a team as team members bring knowledge, expertise, new perspectives and skills together from different disciplines (Wentling, 2004). Factors such as new members of a team that come from different functional areas (Agrell & Gustafson, 1994), the influence from deviating disciplines (Andrews & Smith, 1996) as well as the consequently more extensive network of contacts (Donnellon, 1993, cited in Bassett-Jones, 2005) have been shown to increase the information available for making decisions and improve the variety of discussions, resulting in more creative results regarding both quality and quantity. Furthermore, diversity can impact the way people interact and communicate with each other (Kurtzberg & Amabile, 2001) since diverse team members bring different and new perspectives to the team and stimulate the need to include different views and ideas.

A field study was conducted with top management teams that were diverse regarding their age. As a result the authors found a converted, U-shaped relation (Richard & Shelor, 2002); initially the more diverse the team is, the better it is for the creativity as divergent ideas and perspectives enter the discussions; but if the team becomes too diverse it is increasingly difficult to focus on the common goal and find a compromise that fits for each individual member. These results are confirmed by Kurtzberg (2005) and Rubenson and Runco (1995) who research this topic in detail and come up with the assumption of an optimal degree. Still, they admit that the degree might be influenced by other contextual factors.

It is evident that both homogeneous and heterogeneous teams can have advantages over the other (Ford, 1996). One should consequently rather acknowledge that diversity does not automatically result in a positive or negative outcome but that the management of teams is mainly responsible for its effect (Moore, 1999). The management should try to create teams that reflect the right amount of diversity and work style so that risks and opportunities of a heterogeneous team can be balanced (Bassett-Jones, 2005).

3.2.2 Conflicts

As shown in the last section, diverse teams are more prone to conflicts because of their heterogeneous nature which can lead to problems in communication and coordination (Bassett-Jones, 2005). Although one attributes conflicts with reduced openness towards new ideas and less acceptance of other opinions (Kurtzberg & Amabile, 2001), higher levels of work conflicts do not have to be automatically detrimental as research has shown; it can even increase creativity (Jehn, 1995). However, not every kind of conflict has the same effects. According to Jehn (1995; 1997) there are three different kinds of work-related conflicts: task, process and relationship conflicts. Task conflicts are about the work task itself and can arise from different views and opinions regarding the tasks that individual team members have. The relationship conflict is concerned with interpersonal discussions and could occur through interpersonal disputes and character clashes. The process conflict is about the way in which the work should be carried out (Amason, 1996; Kurtzberg & Mueller, 2005).

The relationship between task conflicts and creativity has been shown to be curvilinear which means that some degree of conflict can be beneficial but too much conflict is damaging creativity (De Dreu, 2006; Jehn, 1995). The cause of this relationship is the

discussion of relevant problems which can lead to better insights and new ideas. However, too much discussion can lead to distraction and harm the performance and the creative outcome. Because of the converted U-shaped relationship researchers argue for a moderate level of task conflict in each team in order to foster creativity most effectively (Kurtzberg & Amabile, 2001). For relationship and process conflicts the findings indicate that any degree of these conflicts is detrimental to creativity (Jehn, 1995) because these discussions distract employees from their actual task.

Although this is the prevailing belief, there are also studies that showed other results. For instance De Dreu and Weingart (2003) have shown that even task conflicts can be damaging and others have been able to find proof for a positive effect of relationship conflict on creativity (Greer & Jehn, 2005, cited in M. J. Kim, Choi & Park, 2012). To solve this controversy, contextual factors should be taken into account that could explain the deviating results (Hülshager, Anderson & Salgado, 2009). One of the moderators could be the timing of conflicts (Kurtzberg & Mueller, 2005). Kurtzberg and Mueller have found out that most of the negative feelings which can arise from a task conflict last only one single day. After that only the information that was the message behind the discourse remains. Therefore, the creativity can differ if it is measured on the same day of a conflict or later. Other moderating factors can be the cognitive style (M. J. Kim et al., 2012) or phases of the team work (Farh, Lee & Farh, 2010).

3.2.3 Communication

It has been shown that the way how coworkers communicate with each other can impact their creativity. This concerns especially the general contact as well as the communication of ideas and sharing of information (Shalley & Gilson, 2004). The style of communication can thereby be either formal or informal. Researchers promote a “psychological safe” environment for fostering organizational creativity (Isaksen, Laurer, Ekvall & Britz, 2001). That means employees should feel encouraged to take risks and to seek uncertainty from which ultimately new ideas derive. Hence, the climate should be open and allow seeking information and inspiration from several sources, both internally and externally. One advantage of teams is that members work on other’s ideas by building on thoughts that others have expressed. In this way new ideas can be generated (Kurtzberg, 2005).

An important part of open climates is the acceptance of criticism. Research has shown that debate and different points of views can be beneficial for creative thinking (Nemeth, Personnaz, Personnaz & Goncalo, 2004). This is in line with the above stated positive relationship between creativity and competing point of views that can arise from diversity or conflict.

However, the relationship between communication and creativity is not strictly positive; a moderate level of communication is best (Leenders, Van Engelen & Kratzer, 2003). Team members should exchange ideas but not be overwhelmed by too much information from others and they should still be able to concentrate on the value of each note. Furthermore, the authors state that the centralization of communication should remain low, in other words more members should be involved in the exchange of ideas in order to come up with creative solutions. This involves then the assumption of value in diversity, i.e. differing opinions from different team members enhance creativity.

3.2.4 Social Encouragement

In the same way that it has been shown for the organizational part, the social factors have to be embedded in an encouraging and supportive climate in order to be beneficial for the employees’ creativity. As an organizational factor, the organizational and supervisory

encouragements have been stressed. This section however focuses on the support from coworkers as a social element. Shalley and Gilson (2004) summarize in their review that the feeling of support is one of the most important variables for increasing creativity. The majority belief about the importance of a supportive environment among coworkers is challenged by mixed findings (see for a review Shalley, Zhou & Oldham, 2004).

Further, the presence of creative role models can have a positive impact. By imitating their behavior employees can gain creative strategies and approaches and become more creative themselves (Shalley & Perry-Smith, 2001). As a last point, it is to mention that the relationships between team workers should be rather distant. Perry-Smith and Shalley (2003) argue that thereby team members would also build ties with others outside their team and broaden their network which can lead to more creative stimulus as shown in the section about diversity.

3.3 Working Model

Altogether five organizational and four group factors have been identified which are acknowledged by previous researchers to have an influence on creativity in organizations. These will form the working model for the empirical part of this study.

On the one hand, the creative work environment is influenced by the organizational level of the company. In the theoretical framework, five organizational factors were introduced in this regard: autonomy, resources, structure and systems, pressure and encouragement. Autonomy refers mainly to the freedom at work, while resources are distributed by the organization for executing tasks. The structure and the system deal with the formal and informal organization of the company. Pressure can also influence creativity while organizational and supervisory encouragement promotes creative working.

On the other hand, four social factors have been identified which also impact the creativity of employees: diversity, conflicts, communication and encouragement. The first element is diversity and focuses on the question how heterogeneous a team is. Further factors are conflicts and communication in a work group. Whereas the last element, the encouragement, is similar to the organizational encouragement, it is a separately researched factor when exerted from team members. However, for our purpose encouragement from the organization, the supervisor or the team members will be seen as the basis for all other factors and hence will be treated as such. Therefore, it has a special function in the working model as the circumfluent area around all organizational and social factors.

As shown in the theoretical framework, for all elements of the working model there have been controversial research findings and often moderators have been identified that can change the result. Consequently, it would be wrong to claim that these factors always positively influence creativity. Rather, it should be suggested that these factors have the ability to influence creativity positively. In the empirical part, we will test these factors for their effect on creativity that female employees contribute to them. Their gender might explain some of the deviating previous results. Thus, in the empirical part a rather broad approach regarding the elements was applied instead of researching deeper into certain directions for which both proof and counterevidence has been found.

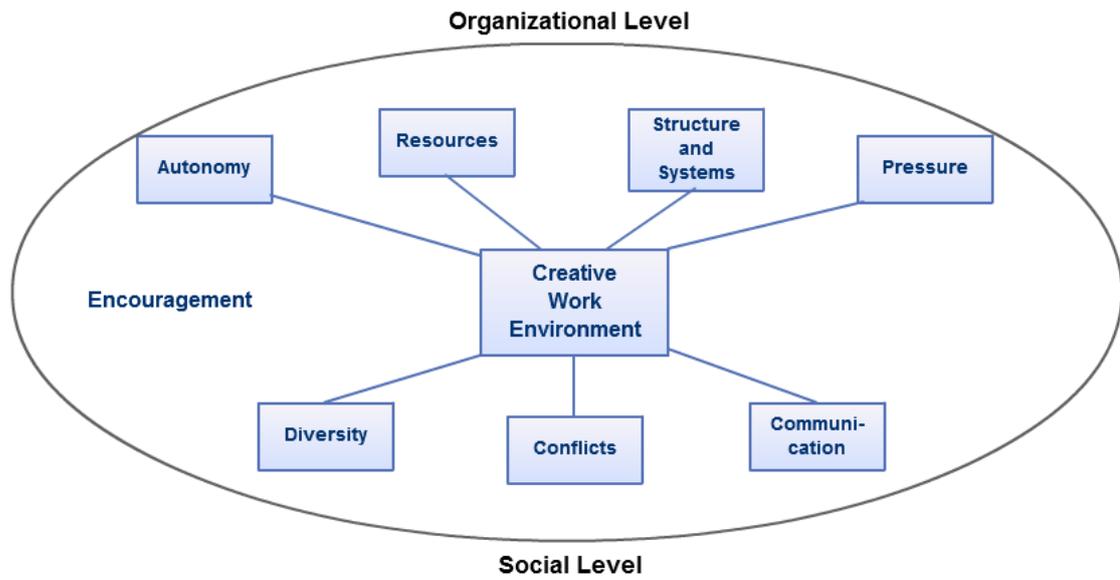


Figure 4 – Working Model of Creative Working Environment (own elaboration)

4 Methodology

For choosing the most suitable research approach, it is important to keep in mind the purpose of this study. We therefore based our methodology on the research problem and the developed research questions. Once the research approach was determined, it became evident which research method and kind of data collection to choose.

4.1 Research Approach

The research approach can basically be divided into two kinds: the deductive and the inductive approach (Saunders, Lewis & Thornhill, 2009). In short, the deductive approach uses existing literature to create hypotheses or theories which are tested subsequently. The opposite, the inductive approach, analyzes collected data and develops a theory from it (Easterby-Smith, Thorpe, Jackson & Lowe, 2008).

As the purpose of this study is to find out if the existing literature also holds for female employees and to determine how the working environment should look like for them, it makes sense to adapt a deductive approach. A detailed and sound theoretical framework is relevant for this study since the objective is to test its relevance in practice.

4.2 Research Method

The research method is a central part of any study as it gives shape to the research (Williamson, 2002). Therefore, it should be considered carefully if a qualitative or a quantitative method is better suited. Although it is becoming more popular to combine both methods (Saunders et al., 2009), in this research only one method (mono method) was used, namely a qualitative method, since it allows us to gain in-depth impressions on the research purpose.

In their book, Saunders, Lewis, and Thornhill (2009) describe quantitative data collection and analysis as a method that will ultimately generate numerical results, while the collection and analysis of qualitative data produces non-numerical findings. Qualitative research is about answering “how”-questions and to understand what the reality looks like for the subjects of interest (Pratt, 2009).

In order to fulfill the purpose of this study, a qualitative method is hence appropriate. According to Wigren the qualitative research “focuses on understanding the naturalistic setting, or everyday life, of a certain phenomenon or person” (Wigren, 2007, p.383). This definition embraces the ability of a qualitative study to research the context of an organization. Therefore, this research method fits perfectly to the purpose of this study, namely to focus on the organizational and social factors of creativity. Furthermore, qualitative research allows us to approach individuals closer than with a quantitative method such as surveys. Miles and Huberman (1994) further add that an advantage of qualitative research is the ability to create a more detailed view about the research problem and to make understandable what the reality in an organization looks like. The scientist Doz draws in this context the metaphor of “opening a black box” through qualitative research (Doz, 2011, p.583), which means that qualitative research is appropriate to shed light on phenomena that have not been illuminated and explained, yet. He also states that qualitative research is suitable to broaden existing theories or to test them in special settings. Hence, especially the possibility to observe and challenge the theories of existing literature in the real working life of women is provided by the nature of qualitative research. In other words, the qualitative approach allows us to get a detailed and in-depth picture of which factors the work environment is composed of.

4.3 Data Collection

The purpose of this study asks for a detailed picture of the existing literature in order to provide a well-argued starting point for the empirical part. Following this objective, information was extracted from primary as well as from secondary sources. As secondary sources existing literature was reviewed, while for the primary sources semi-structured interviews were conducted in start-ups in Berlin, Germany.

4.3.1 Literature Review

When starting a research project, it is important to know what opinions have been created in the existing literature beforehand (Yin, 2009). For this research project it was necessary to determine which models exist and how the work environment is described in the scholarly literature. This knowledge helped us to identify a gap in research and to formulate a research problem. Next, a working model was developed based on the theoretical framework. The literature review is mainly based on peer-reviewed scholarly articles, but also handbooks and relevant web pages were consulted.

4.3.2 Semi-Structured Interviews

Generally, there are two different strategies to gather primary information in qualitative research: focus groups and interviews. In an interview the participant and the researchers engage in a mutual conversation and the data is created through their collaboration (Miles & Huberman, 1994).

For this qualitative research, semi-structured interviews were conducted since they can be used to collect information that answer the research questions and the purpose of the research (Saunders et al., 2009). Beforehand, an interview guideline was prepared (see appendix, section 9.1) but the particular design allowed further inquiring whenever a topic of interest occurred. This approach enhances flexibility while still providing a certain frame of questions (Lee & Lings, 2008). As no limits exist regarding the questions or the answers, the results of semi-structured interviews do not have to follow a certain pattern but can deviate from each other significantly and hence allow for replicating dynamic situations as they occur in the work environment. Since the result of a deductive research as in this case is unclear in the beginning, semi-structured interviews provide the opportunity to start with questions which are developed from the theoretical framework. This knowledge can then be extended through the answers of the interviewees.

The open-ended and general type of asking questions gave the interviewees the freedom to interpret them according to their own understanding. This provided the possibility to guide the interviewee by giving prompts and enabling deep discussion of some aspects while not leading the conversation into one desired direction (Hancock, Ockleford & Windridge, 2009).

Other types of qualitative research that we considered such as focus groups do not fulfill the research purpose in the way semi-structured interviews do. Disadvantages of focus groups are that some participants are reluctant to open up in front of others and the process of organizing and conducting a focus group can be very time-consuming (Yin, 2009).

4.3.3 Selection of Interviewees

For selecting appropriate interview partners it was first necessary to determine the variables that the female interviewees should possess.

1. Employed in a start-up

The choice of using start-ups as a first criterion is well-based. As defined, innovation is a prerequisite of any start-up and hence each employee has to imply a certain degree of creativity in their work in order to support the company on its way to success. Therefore, employees in start-ups can be expected to be creative.

A lot of researchers have tried to find a universal definition for the phenomenon of a start-up company, but still there is no absolute one. According to Germany's most popular magazine for founders, "Gründerszene", a startup is a recently founded venture, which still is at the beginning of its life cycle (Gründerszene, 2013a). Further it states that a start-up results out of a great and visionary idea and through limited financial resources, and that a certain degree of innovation is indispensable. Summing up, start-ups can be seen as a form of entrepreneurial activity. Researchers tend to use the terms entrepreneurial venture and start-up interchangeably (for example Nabi, Holden & Walmsley, 2006). Hence, it is especially interesting to research entrepreneurial creativity in an entrepreneurial setting although the results should not be limited only to businesses in their launching phase.

2. Employed in a non-managerial position

This criterion is chosen because of the assumption that managers and founders of a start-up can influence the organizational environment to a high degree as it is part of their position to organize the setting and the rules for their company. Furthermore, research has shown that the perception of the creative work environment varies between managers and non-managers (Kwasniewska & Necka, 2004). Therefore, it is appropriate to analyze only either of them. Interviewing employees who are directly affected by the organizational environment is suggested to result in more deliberate and honest insights in the wishes and needs of female employees.

In entrepreneurship literature it is acknowledged that "creative ideas may be generated by employees in any job and at any level of the organization" (Shalley et al., 2004, p. 934). Thus, all female employees regardless of their non-managerial position were eligible to participate in this research.

3. Location of start-up in Berlin, Germany

Berlin has become one of the most popular places in Europe to launch a company. According to the German newspaper, "Die Zeit", a cluster has developed in Berlin, which refers to the trend that companies which are particularly active in the field of e-business choose Berlin as location (Tönnemann, 2012). To illustrate how popular the market in Berlin is for start-ups, the chamber of commerce of Berlin regularly publishes a business barometer for new ventures (IHK Berlin, 2012). This publication states that in 2011 44,267 start-ups were founded in Berlin. Therefore, we choose Berlin as the location criteria for this study as it provides the opportunity to access many suitable interviewees.

4. Start-up founded between 2007 and 2012

Ventures created in this five-year span are assumed to be located in similar situations regarding their business life cycle. Hence, this prerequisite creates the conditions in which the employees work more comparable.

5. E-business as industry

In order to refine the search results further, the criterion of belonging to the industry of e-business was introduced. This variable was interpreted rather broadly as any venture operating via the Internet. As stated above in Berlin a cluster of e-businesses has developed which makes it thus appropriate to choose those two criteria together.

One of the main problems for the empirical part was the objectivity of creativity. That means that according to our chosen definition, something can only be valued as creative when it is objectively regarded as such. For instance, some researchers use creativity tests to determine it, others advise supervisors to assess the creativity of their employees. However,

this was not manageable for this study because of limitations in time and financial assets. Therefore, we argue as follows: Innovation is the implementation of creativity and a start-up has to possess a certain degree of innovation in order to exploit opportunities. In our eyes, it follows from this that entrepreneurial creativity is a prerequisite of any start-up venture. As all selected companies are described objectively as start-ups in the public (see Gründerszene, 2013b) we conclude further that they possess a certain degree of creativity.

For researching such suitable organizations, one of the biggest German web-pages about the start-up scene was consulted (Gründerszene, 2013b). Those start-ups that were described as especially creative were further analyzed for the five required characteristics. 59 of those start-ups were contacted via email and 15 replied. The interviewees were then chosen because of their interest and ability to participate in the study. In the end, ten female employees from seven different companies were interviewed. A detailed description of the participating start-ups and the individual interviewees can be found in the appendix (see section 9.2).

Table 1 – Overview Interviewees

Interviewees	Number of Interviews	Startup	Position in the Startup
Madlen Jähnig	1	3D-Berlin	Marketing & PR
Sandra Mamitzsch	1	Re:publica	Program Coordination
Natscha Wegelin	1	NokNok24	Marketing & PR
Anna Kaiser	1	I-Potentials	Recruiting Consultant (Young Professionals)
Miriam Wilhelm	1	I-Potentials	Recruiting Consultant (Marketing & HR)
Jana Schilling	1	I-Potentials	Recruiting Consultant (Sales & Key Account Management)
Jördis Brankatschk	1	GoodBeans	Financial Accountant
Sophie Schmidt	1	GoodBeans	Project Coordinator
Lisa Bauer	1	Service.de	Press & PR
Kerstin Knebel	1	Team Europe	Programming

4.3.4 Interview Process

One trial interview was conducted via Skype to check the interview questions for understandability, clarity, formulation and bias. By doing so we gained experience for the interview process and were able to receive immediate feedback from one interviewee regarding the interview guidelines (Yin, 2009). After this the questions were slightly modified in order to obtain better results. All remaining interviews were conducted at the location of the individual start-ups in Berlin. This is argued to make the interviewees feel

more secure and open towards the interview (Hancock et al., 2009). Furthermore, the interviews were led by always the same member of our research team in order to reduce bias and to guarantee that the type of prompts is consistent. All conversations were in accordance with the participants recorded on tape.

The interviews were constructed in a way that allows the interviewee to feel comfortable through introductory questions at the beginning before the more complex question were asked at the end (Lee & Lings, 2008). In the beginning the participants were encouraged to narrate in detail about themselves and their employer. Questions about the choice of working in a start-up and the location in Berlin followed before the single elements of the working model were raised. As the working model consists of five organizational and four social factors, one question for each of the factors was asked in order to gain insight on each element. Therefore, the topics autonomy, resources, structure and systems, pressure, organizational encouragement for the organizational part, and diversity, conflict, communication and team encouragement for the social part, were each awarded one question in the interview layout. The participants explained their experiences with the variables which remained uncommented and undirected from the interviewer. The interview ended with questions about their role as a woman in the business and the inquiry about whether they feel the need to have a different work environment than their male colleagues.

Before the analysis, the collected data has to be transcribed. We choose to do this word by word as it allowed us to get a more detailed account of what has been said than by only listening to the record. The transcribed versions were sent to the respective interviewees for verification. This reduced any bias from wrong interpretations of interviews.

In consideration of anonymity, several participants asked for a change of their own names and of the name of their employer in this study.

4.4 Data Analysis

“The separation between research design, data sources and data collection, analysis, and presentation of findings is never clear-cut, or wanted, in qualitative research.” – Caudle, 2004, p.417

As the quote already shows, in qualitative research it is difficult to clearly distinguish between the different steps of research. In our opinion, this is beneficial as it stresses the continuity of research. The objective of the analysis is to shed light on issues that are important but were unknown before the data collection and can provide stimuli to further research and hence initiate continuous research.

Keeping this in mind, the conducted interviews were analyzed following the guidelines of Lee and Lings (2008); the first step is to code the data. In other words, the content is analyzed and labels attached to important themes. This allows reducing the collected data to the parts which will contribute most to the analysis (Caudle, 2004). Coding was rather simple in our case as the interview structure was semi-structured which provided a first framework of themes to analyze. The next step is to display the themes in some way (Lee & Lings, 2008). This helps the reader to get a first overview over the collected data. Hereby it is very important to present the data unbiased (Pratt, 2009) which was achieved by depicting the data prior to any analysis and presenting them in the appendix (see section 9.3). However, the semi-structured nature of the data collection already dictates a certain structure which will be followed in the data presentation as well.

As a last step the data is analyzed. Lee and Lings stress the importance of “letting the data speak for itself” (Lee & Lings, 2008, p. 252) which means that the analysis should be drawn from the collected data and should not try to reach some predetermined research results. The analysis part can be in text form and explain and elaborate the data displayed in the previous step (Lee & Lings, 2008). Hereby, the theoretical framework and the qualitative data are combined, compared and finally conclusions are drawn from it.

Eisenhardt (1989) stresses the importance of cross-case analysis as it reduces the probability of bias by processing the data divergently. By comparing interviews, differences and similarities can be found between them. The findings from these comparisons can help detecting unexpected patterns or elements and deepen the understanding of the reader for the results of this study. Eisenhardt adds that by analyzing data this way, a reliable basis can be created for new theories and models. This will be the aim of this study and therefore combining the data analysis methods of Lee and Lings (2008) and Eisenhardt (1989) is most suitable for fulfilling the purpose of this research.

4.5 Research Credibility

“Short of reliable methods and valid conclusions, research descends into a bedlam where the only battles that are won are by those who shout the loudest.” – Silverman, 2005, cited in Lee & Lings, 2008, p.237

This strongly formulated quotation shows explicitly the significance of the credibility for any study. Researchers have to carefully consider the design of their work in order to make it valuable for readers. Hence, credibility has to apply to every single step of the research process. Whereas credibility is most often connected to the quantitative design, it is just as necessary for a qualitative empirical part. There are though no quality standards in qualitative studies on which all researchers agree (Wigren, 2007). In order to obtain credibility of the qualitative research, researchers have to decide by themselves how to handle quality issues. Some academics try to avoid using terms for the trustworthiness of qualitative research that are derived from the quantitative design, however, the attempt to name concepts differently or give them new meanings only highlights the assumption of some that qualitative research is not as trustworthy as quantitative studies (Robson, 2011). Therefore, this thesis follows the distinction of credibility offered by Saunders, Lewis and Thornhill (2009) focusing on reliability, validity and generalizability with the objective to characterize this study as scientific.

4.5.1 Reliability

For creating reliable research, Robson advises generally to be “thorough, careful and honest in carrying out the research, but also being able to show others that you have been.” (Robson, 2011, p. 159). This can be achieved by presenting data first and subsequently analyzing it in order to provide the reader with the possibility to re-enact the single steps and the interpretation (Pratt, 2009). Procuring the readership with interview guidelines and prompts can be further helpful. In order to generate a reliable research, the findings have to be consistent if the same empirical research is repeated. In this research, reliability was achieved through multiple ways: regarding the consistency all interviews were conducted by the same person. Furthermore, particular focus was put on presenting the data and analyzing it in the thesis before presenting a conclusion. Thus, interested readers can reconstruct the line of argumentation and monitor its reliability. Therefore, we argue that this research is highly reliable.

As the empirical part was conducted by interviewing ten female employees, it is not given that the same approach at a different point of time will result in the same data. This is due

to the fact that all data that is produced in the interaction between the interviewer and the participant may vary over time. However, this is a general shortcoming of qualitative research and should hence be accepted.

4.5.2 Validity

Validity indicates how appropriately and accurately the used method for collecting data meets the objective of the measurement (Saunders et al., 2009). Several threats exist to this internal validity. We cannot rule out that the interviewees confused events or mixed up the cause-effect relationship of the organizational and social factors. Furthermore, the timing of the interview can have influenced their perceptions of factors depending on the situation or their mood. Just as well, the interpretations of the empirical findings are based on our judgments and opinions. However, we can assume that these threats were avoided by the interviewees. The interpretation of results is valid based on the usage of existing literature which was selected unbiased and on the gradual analysis of the data as mentioned before that allows the reader to control the validity.

4.5.3 Generalizability

Generalizability, which is also known as external validity, is concerned with the ability of the conclusions to depict an underlying truth in the real world (Lee & Lings, 2008). In other words, the findings are generalizable when they can be transferred to other contexts (Saunders et al., 2009). To achieve this, the readers should be given sufficient information. The external validity can become difficult to implement when the sample size is small. To overcome this problem several things were considered which are proposed by Miles and Huberman (1994). First of all, full information is provided about the characteristics of the interviewees and their organization. This permits to compare the findings to other settings. Additionally, the outcome is described in a generic way that allows using the conclusion in different settings, too. We argue that the findings are especially relevant for similar cases as several women from different firms, yet all in the same industry, were interviewed. Hence, the conclusion can be easily applied to other companies in the same industry.

In conclusion, this study is well constructed. For designing the empirical part up-to-date literature about methodology was taken into account which allowed focusing on possible threats and shortcomings that were subsequently eliminated throughout the research design. All three arguments of credibility were scrutinized and guarantee the trustworthiness of this study.

5 Analysis

In this chapter the empirical findings will be analyzed. After processing the collected data as explained in the methodology, we will discuss the findings and set them into the context of the theoretical framework. For logical reasons we will follow the order as proposed in the working model. Several citations for each subcategory are summarized in the appendix which will allow the reader to view the raw data clustered for themes (see section 9.3).

5.1 Autonomy

“Probably everybody would say that you can never have enough freedom.” – Sophie Schmidt

Researchers such as Oldham and Cummings (1996) or Amabile and her associates (1996) proved that autonomy at the work place positively influences the creativity of employees. The participants in the interviews confirmed without exception that they experience freedom at their work. Two main subcategories emerged during the conversations. On the one hand, the women stressed the importance of autonomy and explained in which areas they feel especially free. On the other hand, they commented upon other factors that influence their autonomy at work.

First, we will analyze the general autonomy at work. Anna Kaiser’s statement expresses the opinion of the others in a nutshell: *“If I met any restraints in this job, I would have left a long time ago.”* All women agree that autonomy is essential for them in order to perform creatively. Another participant underlines the importance of freedom by stating that nobody could ever have enough freedom.

The assumption that there are different types of autonomy (Amabile et al., 1996) is reflected in our findings. Autonomy can exist in the choice between accepting and refusing a task or in the choice of how to process a given task. Some women have the freedom to accept tasks rather than being assigned to them. The majority states though that they have less influence on the tasks they get assigned but have free hand how to deal with the tasks. *“You have certain goals which you have to reach. But how you do it is up to you.”* In a research conducted by Amabile, Hennessey and Grossman (1986) evidence was found that the autonomy regarding the proceedings have a bigger positive impact on creativity than the choice of accepting or not. However, during the interviews it was not apparent to the participants whether one kind of autonomy stimulates the creativity more than the other.

As stated above, different factors emerged during the interviews which influence the autonomy at the workplace. One of them is the responsibility that accompanies autonomy. Some of the women acknowledged that increased autonomy leads also to higher authority for their work. Sometimes the autonomy can though feel overburdening because you are responsible for your own achievements and failures. However, Miriam Wilhelm sees this as a *“luxury problem”* because she knows that higher responsibility can be seen as an impediment for embracing higher autonomy. Still, she argues that she can rely on the support of supervisors and team members wherefore one should not be afraid of accepting higher freedom at work. Another factor mentioned is the open and encouraging climate which will be discussed in detail in the analysis of the communication.

The interviewees provided insight that many other factors are necessary to foster autonomy. Besides the mentioned open climate, trust, a safe feeling in the company and encouragement to take risks from all sides facilitate the autonomy for our interviewees. Furthermore, self-initiated projects are supported as this leads to a higher degree of intrinsic motivation and hence creativity (Amabile, 1997b). One employee states that when

she has freedom and is allowed to work on one of her own ideas, she experiences a real boost of motivation and creativity.

Concluding, we can argue that autonomy is of high importance to the female employees. They experience freedom in choosing and processing tasks. However, they not only see the benefits for creativity in it but also obstacles such as increased responsibility. Consequently, they list other variables and factors that are essential for fostering an enhancing autonomy. This is in line with our literature analysis where it became evident that contextual factors are necessary for getting positive results from autonomy concerning entrepreneurial creativity.

5.2 Resources

“A limited budget can be a bit restraining. And then there is the time. Sometimes I would like to do things for a longer time or try out something new longer.” – Lisa Bauer

In order to perform, employees are assigned resources that build the fundament on which projects and tasks are executed. Asking the participants about their resources, two main groups were mentioned: time and money. Amabile (1988, cited in Andriopoulos, 2001) proposes a threshold theory for resources which states that up to a certain point there is a positively reinforcing relationship between resources and creativity.

However, this is not confirmed by the results of the interview. Without exception all women state that they feel constrained by the amount of resources available. Lisa Bauer for instance states that she feels constrained not only by the budget but also by time. She would like to engage longer in certain activities or spend more money on projects. Additional evidence was provided by Madlen Jähnig. She reports that her supervisors encourage her to not consider time or money when thinking creatively which indicates that usually resources restrain her in being creative. Both examples show clearly that the participating women did not allocate a positive influence to resources but mainly saw the low amount of them as constraining. According to them, the presence of resources is positively influencing whereas the lack of sufficient resources limits them in their creativity. However, the question is how objectively the employees can assess whether they are given sufficient resources. Wegelin states that the more money you have, the more you can do with it. In other words, one can never have enough resources. It is difficult for employees to judge objectively when they are allocated sufficient resources and when they have so many that it hinders their creativity. Therefore, we argue that Amabile’s threshold theory can still be valid for female employees even though no evidence for it could be extracted from the interviews.

All in all, resources are seen as a very determining factor of work and creativity. The participating women though see them as rather limiting as they state that they never have enough time or sufficient money.

5.3 Structure and Systems

During the interviews two main subcategories appeared regarding the structure and the systems of the company. On the one hand, the interviewees focused on hierarchy in their companies; on the other hand, they provided insight about their reward systems, opportunities of promotion and how this affects their creative work.

“I wanted the feeling to be needed; I wanted to really contribute and to be an important part of a company.”
– Jördis Brankatschk

Several participants highlighted the fact that they deliberately chose their company because of its flat hierarchy. *“That’s why I decided to work in something smaller where you’re not only one amongst others but where you can make real decisions.”* The feeling to be needed and to be heard and to be more than some interchangeable employee at the bottom of a big company motivated them to work for a company with a flat structure. Our participants preferred flat structures because their ideas can be recognized and implemented directly. *“If I have an idea, it will be nearly implemented at the end of the same day.”* This means that in flat structures creative ideas can be more easily realized because fewer supervisors have to be convinced first. The prospect to realize own ideas and to have an impact on the tasks, will lead to a higher degree of motivation. However, the increased impact that the women have in their current positions leads also to more responsibility according to Natascha Wegelin. The flat hierarchy appeared to be a very important component for the female employees since this topic was mentioned in all interviews.

This can also be related to the fact that start-ups are typically characterized as having a flat structure since it often is newly founded and employs only few workers. *“A start-up means to me short ways, flat hierarchy, quick decisions and simply doing it.”* This definition of a start-up by Sophie Schmidt emphasizes this characteristic. Concluding, we can notice that without exception everybody mentioned the importance of a flat hierarchy for being creative.

In accordance with Isaac and associates (2009) an open climate and a direct flow of information are seen to be a consequence of a flat firm structure. This is clearly beneficial to entrepreneurial creativity since more input and feedback can be received and mostly creative outcomes are not the effort of an individual but fostered through the exchange of thoughts with different colleagues. This point is agreed upon by the majority of the participant but a deep analysis will be found in the section of communication.

“Feeling proud that everything worked out; that is your reward. For that feeling you could even waive your monthly salary.” – Madlen Jähnig

The second part of the structure and system that a company applies is how the employees are rewarded. Abbey and Dickson (1983) argue that creativity should be recognized and rewarded. This will underline the significance of creativity and motivate employees to generate creative ideas. Extensive research by Teresa Amabile determined that monetary rewards are less appropriate for doing so than verbal praise and recognition (Amabile et al., 1986). When creativity is to be rewarded, Lisa Bauer wonders how to measure it. The same question is asked by researchers who are either trying to establish a general definition of creativity (see Runco & Jaeger, 2012) or by those scholars covering the question whether the personality, process or product should be used to measure creativity (see Runco, 2004). Rewarding creativity is hence difficult. During the interviews we could not find any formal systems that recognize the creativity of employees. Only one employee confirmed that she is rewarded with appreciation. As seen in the introductory quote, Madlen Jähnig does not need any external appreciation, it is sufficient for her to see the successful end product whereas the majority receives external rewards for their work. The basis for bonuses is for all of them the turnover or the achievement of other monetary goals. Jana Schilling justifies it with increased ambitiousness and the aim to do your best. However, according to Amabile and associates (1986) monetary rewards can undermine creativity. If the bonus is based on the turnover, employees are motivated to pursuit only profit-making activities. Taken together this leads to a decreased amount of creativity at the workplace. Schilling summarizes that in those moments you are less creative because you try to handle things as pragmatically as possible. Another possibility to value creativity is via promotions. Still, throughout the interviews no evidence of this reward strategy could be found. *“It is difficult*

to get promoted because we have such a flat hierarchy.” This quotation sheds light on an interesting aspect in the field of structure and systems: flat hierarchy and rewards in form of advancement are mutually exclusive. Working in a company with a flat structure as in a start-up impedes promotions. Therefore, by implementing a flat hierarchy for influencing the creative potential it should be acknowledged to search for other kinds of rewards than promotions. The most positive effect comes from verbal praise and appreciation (Amabile et al., 1986).

All in all, the empirical findings for the structure and systems in a company are in line with the existing literature. The flat hierarchy which all participants experience is highly appreciated by them. This positively influences their creativity as they can come up with creative ideas and implement them more directly than in steep hierarchies especially when combined with an open climate and direct information. Additionally, the interviews provided insight in the importance of rewards. Women appreciate it when their work is recognized in some way. However, no evidence could be found that creativity itself is rewarded. Interestingly, it became evident that female workers do not necessarily feel the need for external rewards but become motivated by their own work results. In this case the findings deviate from the existing literature; rewards are less important for fostering creativity of female workers than assumed.

5.4 Pressure

“A little pressure is quite exciting. A healthy degree of pressure helps you to step it up – but only as long as you enjoy it!” – Anna Kaiser

Pressure has a two-sided influence on entrepreneurial creativity (Amabile et al., 1996). On the one hand, it can be beneficial when it helps to concentrate on the task at hand and allows mobilizing creative ways to handle the pressure. On the other hand, too much pressure can hinder creativity when it inhibits free and divergent thinking. During the interviews both aspects came up. *“It is not a strict or negative pressure but rather productive pressure.”* The majority agrees that a certain amount of pressure is helpful for their creativity. It helps them to *“step it up”*, to go the extra mile and to perform better. Jana Schilling confirms that she needs to be pushed and therefore appreciates a healthy degree of pressure. She adds that if the pressure becomes too much however it constrains her in her autonomy and her creativity. She is no longer able to work in a way that allows her to deviate from the usual way of doing. Therefore, the women confirm that a certain amount of pressure can be beneficial for their performance and creativity but when the pressure exceeds a certain limit, they feel hindered and limited.

An interesting finding of the interviews is that pressure is imposed from different directions. The interviewees often experience some kind of external pressure such as deadlines, a high degree of workload and the reaching of financial goals. Additionally, some women state that they are their own source of pressure. *“I have the ambition to excel and I strive to fulfill my own expectations and those of my colleagues.”* It is a recurrent pattern that the interviewees try to meet their own standards which are higher than what the organization expects from them. This self-made pressure is an interesting finding that did not come up during our literature search for the working model.

Throughout the interviews it became evident that most pressure derives from those deadlines or in other words time constraints. Furthermore, the interviews showed that responsibility is a cause of pressure. This is for instance the case for Lisa Bauer. The more responsibility she has for a project, the more pressure she has to perform well. A flat

structure has been shown to be beneficial for female creativity but in a flat structure employees have automatically more responsibility for their projects than in a steep hierarchy since there are fewer supervisors controlling them. This leads to the finding that while a flat structure is beneficial for creativity it leads to increased responsibility and hence pressure which can be detrimental.

5.5 Encouragement

“When I want to do anything creative I am definitely encouraged to do so, but then I have to do it myself. It is always based on my initiative.” – Miriam Wilhelm

According to findings in the literature encouragement has a vast impact on creativity and the performance of employees (Madjar et al., 2002). Amabile states that there are three different stages, in which encouragement is able to occur: organizational, supervisory and work group (Amabile et al., 1996). During the interview all three stages were mentioned.

On the organizational stage it is important that the top management encourages the employees actively to be creative. Lisa Bauer says that she is encouraged to work creatively because creative outcomes are expected; nevertheless there is never enough time for doing so. Hence, encouragement has to be accompanied by sufficient resources. Another interviewee reveals that she is definitely encouraged to work creatively but that it is always based on her initiative. In this case it becomes apparent that autonomy and encouragement are related; in order to promote creativity among employees both have to be provided by the organization.

The second stage that was mentioned in the interviews is the supervisory stage. It is necessary that employees experience encouragement from their direct supervisors. Several women state that their supervisors encourage them to think differently and more divergently which leads to creative and new ideas. For instance, Jana Schilling explains that her supervisors support creativity by encouraging employees to get further education which stimulates and helps them to try new creative methods.

Jana Schilling continues that she is also encouraged by her own colleagues to work creatively. This forms the third stage of encouragement. However, during the interviews it was difficult to differentiate for the participants from whom they get encouraged. This may be due to the nature of start-ups; because of a flat hierarchy and the usual low number of employees it can be difficult to see who is a supervisor and who a team member. Many interviewees state that the classification is not so simple in their cases. This motivated also our choice to cluster encouragement as one factor of the analysis although it can be experienced by either the organizational or the social side.

Furthermore, the interviewees provided the insight that there is much more to the social part of encouragement. Generally, a supportive environment is necessary to increase creativity (Shalley & Gilson, 2004). During the interviews it was mentioned that the female employees prefer open climates where they can receive feedback. This is in line with the assumption that employees rely on the confirmation of others whether they are creative or not (Ford, 1996).

Furthermore, creative role models can impact creative performance (Shalley & Perry-Smith, 2001). Jördis Branktaschk states that other women who make a difference such as her supervisor inspire her. Therefore, she takes her boss as a role model and works more creatively in order to follow in her footsteps. The necessity of role models and guidance is also highlighted by Miriam Wilhelm. She reveals that one always has the feeling to be able to know much more, and that she sometimes has the desire to be guided by someone in

the sense of professional advice. She understands the beneficial impact that a mentor or a role model can have on one's creativity and overall performance.

Recapitulating, all interviewees agree that encouragement is beneficial. In the interviews the encouragement of all levels were appreciated equally. Also a generally supportive environment where one can always approach supervisors and communicate openly, is regarded as an essential part of encouragement. Our interviewees additionally stated that the sheer presence of role models inspires them to be more creative.

5.6 Diversity

"We all have different backgrounds." – Miriam Willhelm

The effect of diversity on creative performance has been extensively researched. During the interviews it became apparent that the understanding of diversity among employees is also deviating. Some see it as differences in the nationality, in gender or in professional background. This is in line with the notion of Bassett-Jones (2005) who states that diversity can appear through origin, culture or intellect. One participant gives the example that even though the tasks in her team are all very similar, everybody approaches them differently. This is supported by the view of Kurtzberg and Amabile (2001).

The views were dispersed whether diversity is enriching or not. However, the majority sees diversity as beneficial for their creativity. One of the participants states that through having an extremely diverse team with different strengths and characteristics, a lot of different areas are covered. Her opinion is supported by research findings that diversity enriches the teams in ways of bringing knowledge, expertise, new perspectives and skills together from different disciplines (Wentling, 2004). Furthermore, Anna Kaiser clearly sees diversity as a positive influence on creativity: *"Well, if we were a very homogeneous group that would be very one-sided."* Another interviewee adds that because of diversity her way of thinking changes. Therefore, it has an impact on how people interact and communicate with each other (Kurtzberg & Amabile, 2001). Although the predominant opinion is that a heterogeneous team is beneficial, one woman could not identify any benefits from the diversity. She rather sees it as problematic since it makes communication more difficult. The research of Kurtzberg and Amabile (2001) confirms that diversity does not necessarily lead to positive effects on creativity, especially regarding communication and interaction. Therefore, it is necessary to have an appropriate level of diversity in a team as Natascha Wegelin realized: *"We are that different that we stimulate each other but also not too different so that we could not stand each other."* Too much diversity could be hence detrimental. This is in line with the optimal degree of diversity that research calls for (Kurtzberg & Amabile, 2001).

Whereas in the theoretical framework it became evident that diversity should be a well-managed process in a firm, in the empirical research the interviewees saw diversity rather as a positive by-product of employment strategy than as a steered effort. It has to be questioned if the benefits of a heterogeneous work group are acknowledged by the organization. At least, as our research showed, the employees do in most instances.

5.7 Conflict

"Nobody is perfect." – Jördis Brankatschk

All participants confirmed that conflicts are unavoidable but they differentiate between two kinds of conflicts. On the one hand, there are conflicts related to their tasks and jobs, and on the other hand, they experience personal disputes. Regarding the task conflicts, Madlen

Jähniig thinks that they are not beneficial for the task itself, but rather help to get to know your coworkers better. Another woman disagrees by arguing that task conflicts help improve the task but it is difficult for her to determine if this phenomenon also applies to others. Generally, the interviewees think that conflicts have a positive influence on creative performance and that they can be very stimulating for further progress as long as they are kept professional and honored. Their opinion is backed up by research stating that task conflicts can have a positive influence on creativity and employee performance. However, research proved further that too many conflicts are detrimental (De Dreu, 2006; Jehn, 1995). Interestingly, the participants did not mention that task conflicts can negatively influence them. They focus on the end result of a conflict which can help them to improve rather than on the problems during a conflict.

The second kind of conflict is relationship-based which has been shown to only negatively influence the creativity of employees. Only one woman confessed to experience relationship conflicts at work. She adds that those conflicts should be solved as quickly as possible as they can hold you back from the actual work, hence agreeing to the negative effects of it.

Jehn (1997; 1995) identified besides the task and relationship conflict a third type of conflict: the process-related conflict. Those discussions are concerned about how the work should be carried out (Amason, 1996; Kurtzberg & Mueller, 2005). In so far, none of the interviewees has mentioned these conflicts. This might be due to the autonomy promoted by the nature of start-ups. One of the interviewees for example states that she experiences freedom in terms of how she carries out her job. This underlines the freedom in how to proceed and can thereby avoid process conflicts.

One female employee added that in her team they usually let one day pass after a conflict because they made the experience that it is easier to find a compromise then. This empirical finding is confirmed by Kurtzberg and Mueller (2005) who found out that after one day the message of the conflict is left but any personal feelings evaporated. Therefore, timing can be an important factor in handling and solving conflicts.

In conclusion, conflicts can have a positive effect on employee's creativity as long as they are task-related and kept on a professional level. Nevertheless, it should be tried to solve them as quickly and as objectively as possible so that the negative influence can give way to positive effects on creative processes and performance.

5.8 Communication

"Another guideline of our venture is 'Open communication rocks'." – Sophie Schmidt

The way of communicating in an organization has a huge impact on creativity and the performance of employees. In order to create an environment in which it is able to have an open communication, which enhances creative work processes and performance, different factors have to be fulfilled.

Short communication ways and an open climate foster the creativity of employees (Isaac et al., 2009). The female workers supported this position and highlighted the transparency within their teams. *"Our internal communication is very direct and open, and we put the focus on transparency."* However, one interviewee admits that her supervisors do not always share their knowledge with the team but she argues that they know when it is better to keep details to themselves without hurting the flow of information. However, most participants do not necessarily agree with her point of view since they experience short communication

ways which increase the flow of information. Furthermore, an open climate is essential to many interviewees. Mentioned key-words include open doors, no fear towards supervisors or team members, friendship among team colleagues, and nurturing feedback. Also the mentioned feedback can foster creativity because it provides the employees with some kind of confirmation that can stimulate new ideas (Ford, 1996). A good example was provided by one woman saying that she can shout her ideas loudly into the room and will get immediate feedback from her team mates. The climate is hence very open and supporting since she feels free to express her ideas without fearing judgment or negative reactions. This might seem excessive but is in line with the experience of the other interviewees. These findings are confirmed by Shalley and associates (2004) who state that a fair and safe climate has to be created in order to promote creativity. One consequence of the open climate is that criticism is allowed because fair comments by coworkers or supervisors could provide employees with different points of views and constructive debates (Nemeth et al., 2004). The interviewees reported many conflicts that took place in their team but generally a positive effect regarding creativity was attached to the solving of the problem. This has been discussed in the analysis of conflicts.

Contrary to the majority, one interviewee detected negative effects when the communication is open. She stated that sometimes it can be overwhelming for her and that she has to seal herself off in order to work creatively. Another woman agrees with her since it can be distracting to be surrounded by too many noises when everybody is always talking and discussing. Their point of view is supported by Leenders and associates (2003) who explain that a moderate level of communication is best. Employees should not immerse in too much information but should have the possibility to focus on their tasks in order to benefit the most from their creativity.

To sum up, it is important in a venture to support and promote an environment in which open communication and interaction is possible. It has been shown that communication is very important for the participating women and that also other factors such as a flat hierarchy have to be present in order to positively influence creativity. Also conflicts can be seen as a part of communication. Therefore, it becomes apparent how intertwined the single factors are.

5.9 Creativity

“That’s difficult... How do you define creativity?” – Jana Schilling

As Jana Schilling states, figuring out what creativity is can be quite difficult. Just as the experts are at variance regarding a definition of creativity, the interviewees provided different definitions and explanations. Basically all strings of literature were touched during the interviews. All analyzed factors have been shown to positively influence the creativity of the female employees to some degree. In the following section the interviewees’ opinion is analyzed regarding their creativity.

First of all, some interviewees referred to creativity according to the creative personality perception (Feist, 1998). For instance, they stated that they like to paint or play an instrument in their free time and regard this as creativity. Still, the vast majority sees creativity in the end product they generate at the workplace or in the process how they handle tasks. This perception is in accordance with our own view on creativity and those of most researchers (Amabile, 1982).

The interviewees are confident that creativity can be learnt and improved and that it is not a particular trait which only few persons possess. Natascha Wegelin summarizes: *“I believe that every person is a little creative in his or her own way.”*

Regarding one academic assumption no consensus was reached, namely the necessity of creativity at their work place. While most employees stated that they need creativity in order to perform their job, one interviewee stated that she does not need creative ideas since she works with finance. Another participant states the exact opposite, namely that she has to apply creativity in financial tasks. Her point of view is confirmed by research revealing that creativity and innovation are needed in all positions and departments (Shalley et al., 2004). These different points of view demonstrate very well how deviating the understandings of creativity can be and that usually all persons have their very own definition of creativity.

5.10 Prerequisites of Creativity for Women

As a last but not least point, the participants were asked about the conditions of a work environment that stimulates their creativity as female employees.

Interestingly, all women started their answers by stating that they cannot formulate general differences in the needs between men and women, it always depends on the personality. However, every interviewee then came up with things that they prefer and that they often miss in their male colleagues. Through a meta, cross-case analysis it becomes evident that their opinions are consistent. The findings are clustered and displayed in the following figure.

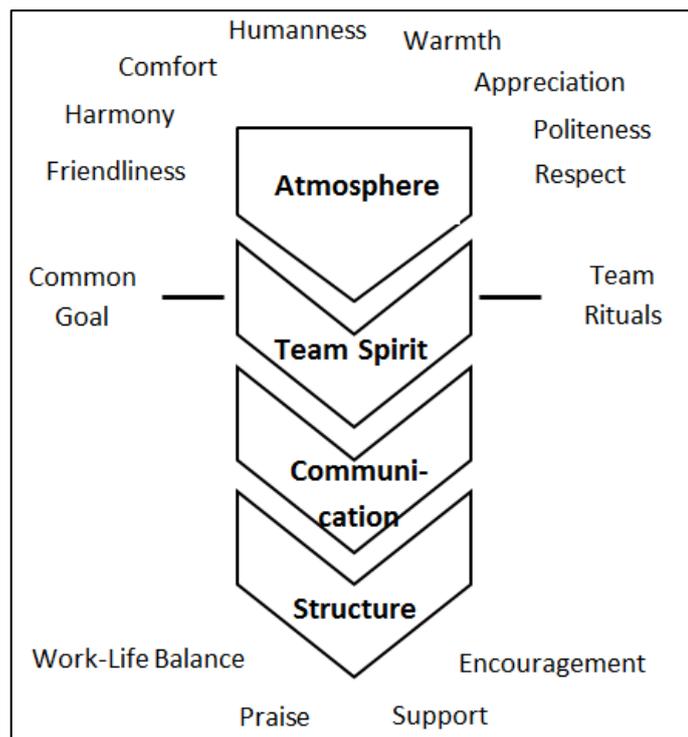


Figure 5 – Important Factors that foster Creativity of Women (own elaboration based on interview results)

First, all women stated that they need a pleasant atmosphere in order to work creatively. Jana Schilling’s opinion is that women need a more harmonic milieu than men. And this is supported by the key-words friendliness, harmony, comfort, humanness, warmth, appreciation, politeness and respect that came up during the conversations. Women feel more comfortable in a *“cuddle company”* as one interviewee confesses. Some female

employees state that they wish more respect from their male colleagues for their way of working. Conflicts should be reduced to a minimum and communication should be as open as possible. They further prefer to be more than only working colleagues; friendships at work are seen as beneficial by our interviewees because they feel more accepted and motivated in this atmosphere. *"For me the interpersonal appreciation is the most important. I would even change my job if I wouldn't experience it."* This statement summarizes perfectly the importance of the atmosphere between the employees. We were quite surprised to find this factor to be of high importance to all interviewees as it is the opposite of what existing research proposes, namely that distant relationships to colleagues is most beneficial to creativity (Perry-Smith & Shalley, 2003).

This leads to the next identified topic, team spirit. It is essential for our interviewees to have a common goal and the willingness to succeed as a team. But also outside the company, a common goal is helpful for them. In the start-up scene they encounter many people with the same interests and one participant added that she attends special meetings for business women. The common goal that all of them share enriches their point of view and often helped them to come up with creative ideas. *"I love the sensation of community and the feeling to pursue a common goal."* Two interviewees narrated further that their companies actively foster the team spirit by establishing rituals. For instance, in one company every morning the employees have a special meeting where they exchange ideas in an entertaining way, while in another company it is tradition to go out for lunch as a team where the employees can get to know each other better and exchange ideas inter-departmentally.

The pleasant atmosphere and a team spirit will facilitate the communication throughout the company. Even though mentioned before, the concept of good communication is so important for the women we encountered that it should be mentioned explicitly again. Here the women also see the biggest difference in contrast to their male colleagues. *"Sometimes we don't see the forest for the trees"* states Anna Kaiser implicating that women tend to communicate too much at times and do not come to a conclusion. Men however rather do than talk, she adds. All in all, the interviewed women prefer to talk about any problems or concerns and expect others to do the same. Therefore, the open climate is so important. The last point that the participants stress is the structure that supports the pleasant atmosphere, the team spirit and the open communication. While the before-mentioned factors are of informal nature, the structure is the formal equivalent to them. The women expect a high level of support from the organizational side. They favor praise and verbal recognition for their work. *"Women need to be 'petted' and to be told regularly that they do a great job."* Some women fear that their work is not sufficiently recognized by their male supervisors as they argue themselves that they are sometimes not as self-confident as their male colleagues. Another important factor appeared to be the work-life balance. *"We need soft structures"* which indicates that the interviewees need flexible structures in order to fulfill not only their professional but also their personal lives. Several interviewees highlighted the importance that they have flexible working hours in order to bring their children to kindergarten. Also the possibility to work from home in special cases was stressed. Thus, it appears to be essential for women to work in flexible structures *"where one doesn't have to fear to get pregnant"* as one participant declared.

Summing up the perfect working environment in one word it would be 'appreciation': Women need appreciation by their colleagues for their personality, they ask for appreciation of their work from the organization and they want appreciation when they manage not only their jobs but also their personal lives successfully.

6 Conclusion

6.1 Reflection

During the analysis several topics appeared that should be shortly discussed before concluding this thesis.

The overall finding is that the opinions of the female employees regarding the different factors presented in our working model correspond to a large extent to the generalized theories of the literature. In other words, all elements proposed by the working model are able to positively influence the creativity of women. Even though the view of some women deviate from the majority belief this can be explained by two factors: on the one hand, as several women state, it always depends on the personality of the individual rather than on the gender. For instance, for most women the open communication is essential but two women stated that they prefer isolation from time to time where they can better concentrate on their work. On the other hand, it should be highlighted that the sheer presence of the factors is not sufficient but the right management practices are needed to support them. Therefore, the decision to create the working model on the basis of encouragement proved to be very valuable. In order to reach the full potential of the single factors of the work environment it is essential to have a management which actively promotes creativity. This leads to the interesting notion that although the participants declared to experience positive effects from all factors, most women were not actively encouraged to be creative. Hence, the top management and the supervisors are too focused on the financial goals and apparently undervalue the importance of creativity in their companies.

Another general finding of this research is that all organizational and social factors mentioned in our working model correlate. They cannot be seen separately but are mutually intertwined. This becomes apparent for several factors and was elaborated throughout the analysis. For example, encouragement has to be the basis of all other factors in order to allow for a positive influence on creativity. Furthermore, open communication was mentioned by the interviewees in regard to the autonomy, the informal structure of their company and the general communication. Hence, those factors cannot be seen separately but in order to enhance creativity, all factors should be considered for the work environment.

Regarding the special needs of women in the work environment, we experienced a general discomfort of our participants. They repeatedly highlighted that one cannot generalize gender and felt at unease to fall into stereotypes. Instead they stressed the individualism of each person. However, as explored in the meta-analysis of the interviews, it becomes apparent that there are several factors that are especially important. Female employees feel much more comfortable to work in a non-competitive and harmonic working environment. This includes also a high degree of communication and a certain team spirit in the company. The harmony needed by women should be furthermore reflected in the structure by higher recognition and the possibility of maintaining a work-life balance. What women need to work creatively was summarized as 'appreciation'.

In our eyes, it is worth mentioning that all women mentioned the same factors as especially important to them but still emphasize that it is wrong to generalize their needs because of their gender. Hence, it seems that women had difficulties in admitting that they could have different needs than their male colleagues. They rather preferred to be treated just as any employee. We argue that this might be because of the fact that several women experienced

some kind of sexual discrimination. Therefore, they could try to leave out any gender-related needs in order to have the same possibilities as their male colleagues. However, as shown the female employees do have differing needs regarding a creative work environment which underlines the importance of this research.

6.2 Contribution

As stated in our purpose the objective of this research was to contribute to both the knowledge of executives and the state of science. We hope that management executives find our identified factors helpful when creating a work environment for their female employees. By taking the identified factors as guidelines they will be able to foster the creativity of their employees and especially of the women.

Additionally, we hope that this study will be seen as a real contribution to existing research. As stated before, several of the most influential models in the field of entrepreneurial creativity see the subjects of their research as “individuals” (Amabile et al., 1996, p. 1155) or as “workers” (Dul & Ceylan, 2011, p. 13). Also the presented models such as the Conceptual Model of Entrepreneurial Creativity by Dul and Ceylan (2011) or the KEYS Environment Scales (Amabile et al., 1996) do not specify whose creativity is to be enhanced. Furthermore, the models which were presented in the section about the theoretical point of departure did either concentrate on the organizational or the social factors, or did as in the case of KEYS mix the two different aspects without mentioning it explicitly. For both presented gaps this study achieved to contribute clearly. First, by combining two different models which put their focus either on organizational or social elements and adding up-to-date literature findings, a holistic overview about the conditions at the workplace was created in our working model. Second, the clear purpose of this study was to explore those factors from a female perspective. Therefore, the shortcomings of previous research were overcome by stating explicitly the subject of the research. Since the participants of the qualitative research confirmed generally the validity of the single factors in our working model, it is suitable for researching further the creative work environment for women. Additionally, the gap which was pointed out in the problem section of this study namely that so far the literature fails to recognize special needs of women was successfully addressed. Based on the findings in the interviews we created a model depicting the most essential factors of creativity to female employees. These findings open a new field of research and can be used as a starting point for further studies.

6.3 Final Thoughts

The main purpose of this study was to find out how far the general advisements for a working environment that fosters creativity are applicable for female employees and which other factors have to be considered. In order to receive accurate results and to come up with useful insight on how entrepreneurial creativity can be advanced, two main research questions were formulated. Firstly, to see if the organizational and social factors presented in the literature are valid for female employees' creativity. Secondly, to find out which other factors can have an impact on their creativity.

Summing up the results of the previous reflection, it is evident that the first research question was explicitly answered through the interviews. Generally, the existing literature is valid for women as well. The working model provides a good starting point of creating a work environment that enhances the creativity of female employees.

The second research question was not explicitly answered by the interviewees as they had difficulties in defining general female needs. However, a meta-analysis brought up several

factors that are of especial relevance to the women. Four main categories, atmosphere, team spirit, communication and structure build a new model for fostering women's creativity. Since three of these factors are rooted in the social part of the organization, we feel confirmed to have not followed one of the existing models; combining two models which put their focus on either the organizational or the social side of the work environment allowed us to gain an overall impression of the factors that enhance the creativity of women.

6.4 Further Research

Since this study can only be regarded as a basis for researching the factors that constitute a creative work environment for women, it should be acknowledged that research is never finished. It cannot be denied that our research holds limitations and hence we would like to provide insights into future research possibilities which can overcome these shortcomings.

First of all, the empirical background of this study is very specific. Testing the findings by interviewing female employees in different industries or different geographical locations could improve the generalizability of the findings.

Additionally, broadening the range of the findings could be achieved by including women in managerial positions. This can provide new points of view on the topic and could be helpful to see how superiors try to foster their employees' creative performance.

Furthermore, it could be very useful to gather primary data by interviewing not only female, but also male employees. It would enable a direct comparison of the findings between the genders. Especially a focus on the perceptions of both men and women in the same setting could broaden the understanding of which factors really influence the creativity for each gender.

Last but not least, the choice of method in this study can be criticized. It should not be neglected that this is the first study addressing this research gap. The findings should therefore be tested in larger samplings for further demonstrating their credibility. We propose to use quantitative research in order to access more female employees and gather more information. Testing the results by distributing surveys for instance will help to proof the findings in a broad sampling group.

7 Reflections on the Writing Process

We have worked on this study for a period of almost four months which can be classified in different phases:

- We started by reviewing academic literature in the field of our research, which provided us with a general overview and insight in the topic. This phase probably was the most time consuming phase. It was quite important to stay on track and to not get carried away by interesting articles, which however were not relevant for the purpose.
- Later, potentially relevant literature for the study was sorted out and reviewed more closely. Based on those articles and books we developed our own working model. This was a very important phase since it generated the overall framework for the remaining research.
- The next step was to conduct semi-structured interviews with the help of our working model. In this stage we received a lot of positive feedback from the participants which motivated us and confirmed the relevance of our study. The interviews were conducted with ten female interviewees of seven different start-ups in Berlin, Germany. The interviews brought a great change to the research routine and provided an insight in actual everyday life of employees. Although the choice of the location and our willingness to visit them personally in their offices rather than conducting the interviews via phone was associated with higher effort, it was definitely worth it. Through the personal interaction we had the feeling that the interviewees were more willing to open up and give us deep insights in their working life.
- As a last step, the primary data was analyzed with the help of the working model. This allowed not only to answer the research questions but also to provide new ideas and opinions that have not been researched before. This phase showed us the end result of our study. However, we would like to mention that the analysis part should not be undervalued both in terms of time needed to do it properly and the fascinating and surprising conclusions that can appear.

All in all, we benefited immensely from the experience of writing a Bachelor thesis. Conducting our own research and the freedom in choosing a topic of real interest motivated us to achieve more than we ever thought possible.

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9 Appendix

9.1 Interview Questions

- 1) Can you tell us a little about yourself and your career?
- 2) What is a start-up for you?
- 3) Why did you decide to work in a start-up?
- 4) Can you tell us something about your start-up?
- 5) Do you see Berlin as a special environment for start-ups?
- 6) How does your daily work life look like?
- 7) What role does creativity play in your daily working life?
- 8) Would you define yourself as creative?
- 9) Can you tell us one incident where you did something particularly creative at work?
- 10) Do you face any restraints in your work? How does this influence your creative work?
- 11) How are you assigned resources? How do you handle them?
- 12) Are there any systems that determine how you get rewarded or promoted?
- 13) How much pressure do you feel at your daily work? How do you perceive it?
- 14) Are you encouraged to work creatively from your supervisors or your coworkers?
- 15) How diverse is your team? How does this influence your creativity?
- 16) Do you often face conflicts in your team? How do you handle them, how do they influence you and others?
- 17) How is the level of interaction with supervisors?
- 18) Is anybody inspiring you regarding creativity?
- 19) How would you describe the communication in your start-up?
- 20) Do you think that you as a woman need a different work environment than men?
- 21) Do you have the feeling of facing any challenges as a woman in your organization?

9.2 Presenting the Participating Start-Ups and Interviewees

3D-Berlin was founded in 2007 by virtual reality specialist Björn Clausen and engineer Adrian Zentner as a start-up of the Free University of Berlin and was finally established as the 3D-Berlin vr solutions GmbH in September 2010. The company provides 3D indoor navigation by applying Guide3D which is a patented building guidance and information system.

Madlen Jähnig started to work for 3D-Berlin in 2009 in the field of marketing and public relations. In 2001 she completed a professional training as a technical design assistant with emphasis on graphics. After an internship in an advertisement agency, she decided to study economic communication at the University of Applied Sciences in Berlin, Germany and obtained a Bachelor of Arts.

The **Re:publica** team started off with a simple and spontaneous idea of organizing a meeting for bloggers in 2007. Since then the conference focuses on discussing and sharing the digital life. It is open to the public and all people interested. Six years later the Re:publica conference is “one of the most important social conferences in Europe” (Re:publica, 2013).

Sandra Mamitzsch has been working for two years for one of the founders of the Re:publica. She studied political sciences at a small university in Bavaria. Before starting to work in the area of program coordination for Re:publica, she was able to gain practical experience in the field of editorial work and conference organization in Berlin.

Noknok launched in July 2012 when two former fellow students had the idea to ease, socialize and make the search for shared apartments more efficient. The online service on the one hand offers people who are looking for a room a platform to present themselves; on the other hand, it helps people who offer a room in their apartment to manage the whole application process. Now Noknok works together with one of Germany’s biggest housing agencies, ImmobilienScout24, in Berlin, Germany.

Natascha Wegelin completed a Bachelor degree in media management and a Master degree in business administration with emphasis on marketing in Münster, Germany. She gained practical experience through internships in different organizations, among others Google in Hamburg. She started to work for an online dating platform in the field of project management before becoming a member of Noknok.

The recruiting agency **I-potentials** was founded in 2009 by Constanze Buchheim. The goal of the start-up is to concentrate on the employment market of the digital economy. The team helps to connect potential employees and potential employers of the young and flourishing digital industrial sector. They try to ease and improve the employment process so that both parties are satisfied.

Anna Kaiser received a teaching degree for elementary school from the University of Passau, Germany and was active in educational policy for a long time. During her studies she was introduced to the start-up world and launched several own start-ups with friends.

After her studies she moved to Berlin where she found her way into I-Potentials as a recruiting consultant in the field of young professionals.

Miriam Wilhelm started to work for I-Potentials in early 2012 as a recruiter and is additionally responsible for the marketing of the company. She received a Master degree in the field of human resource management. Before starting at I-Potentials, Miriam was able to gain a lot of practical experience during different internships in marketing and human resource management.

After receiving her degree in international information management, **Jana Schilling** worked as a key account manager for an intercultural consulting agency. Before joining I-Potentials she gained experience in the field of sales. Jana started to work for I-Potentials six months ago and works as a recruiter in the area of sales and key account management.

GoodBeans was founded in 2007. Their mission is to develop the media usage for children by offering a safe and family-friendly environment for the first contacts with the online world. As Europe's leading provider of the online gaming world, the GoodBeans team offers entertaining apps and online games for children and their families. Whenever possible they try to include feature that enhance the learning process.

Jördis Brankatschk completed a professional training as an industrial business management assistant with emphasis on finance and accounting. After gaining practical experience in human resource management, she started a further training as a financial accountant. Among other companies she worked at Universal Music in the field of finance and accounting. Three years ago Jördis started at GoodBeans as a financial accountant.

Sophie Schmidt (name changed) has been a project coordinator at GoodBeans for two and half years now. She received a degree in the field of business administration with emphasis on finance, accounting and controlling.

Service.de (name changed) is, broadly defined, specialized in family services and was founded in 2007.

Lisa Bauer (name changed) received her Master degree in media science, German philology and science of art. One year ago Lisa started at Service.de in the field of press and public relations.

Team Europe was founded in 2008 and is specialized in developing and establishing new ventures. Team Europe created several online companies in the last couple of years and thus generated hundreds of workplaces.

Kerstin Knebel received a Bachelor degree in computer sciences from the University of Potsdam, Germany. She gained a lot of experience during and after her studies in start-up companies, where she always was involved in the areas of programming. Now she is programming for Team Europe and their launched ventures.

9.3 Selected Citations from the Interviews

Table 2 – Quotations from Interviewees on the Role of Autonomy

Autonomy	
Madlen Jähnig	<i>“You have a lot of freedom to do what you think is right. But sometimes this is overburdening.”</i>
Lisa Bauer	<i>“He gives me free rein and we can talk at equal terms.”</i>
Jördis Brankatschk	<i>“We have full confidence, mutual confidence.”</i>
Sophie Schmidt	<i>“Probably everybody would say that you can never have enough freedom.”</i>
	<i>“I experience freedom regarding how to carry out my job.”</i>
Jana Schilling	<i>“If I have too much workload then it is my fault because I accepted it.”</i>
	<i>“You have certain goals which you have to reach. But how you do it is up to you.”</i>
Miriam Wilhelm	<i>“This is for me a ‘luxury problem’ because I myself can influence it and everybody will support me.”</i>
Anna Kaiser	<i>“If I met any restraints in this job, I would have left a long time ago.”</i>
Natascha Wegelin	<i>“Basically we can do whatever we want. As long as the results are in line.”</i>

Table 3 – Quotations from Interviewees on the Role of Resources

Resources	
Madlen Jähnig	<i>“I experience financial constraints.”</i>
Lisa Bauer	<i>“A limited budget can be a bit restraining. And then there is the time. Sometimes I would like to do things for a longer time or try out something new longer.”</i>
Jana Schilling	<i>“I think that the time factor can be very limiting.”</i>
Natascha Wegelin	<i>“We have a business plan with a given budget. And we are told how to allocate this budget approximately.”</i>
	<i>“Sometimes we have reached the limits of our budget. The more money you have, the more you can do with it.”</i>
Kerstin Knebel	<i>“I face no constraints. Time of course. But regarding money rather not.”</i>
Sophie Schmidt	<i>“We have four guidelines in our company and one of them is ‘Quality comes first’.”</i>

Table 4 – Quotations from Interviewees on the Role of Structure and Systems

Structure & Systems	
Madlen Jähnig	<i>“Feeling proud that everything worked out; that is your reward. For that feeling you could even waive your monthly salary.”</i>
	<i>“Usually we have open doors; you can always come to our supervisors.”</i>
Anna Kaiser	<i>“You get a bonus depending on the turnover that you are responsible for.”</i>
Natascha Wegelin	<i>“It depends on how successful our venture is. In other words, how much turnover we generate.”</i>
	<i>“Internal communication is very direct and open and we put a lot of emphasis on transparency.”</i>
Sandra Mamitschk	<i>“There are no incentives regarding financial rewards or career opportunities.”</i>
Jana Schilling	<i>“We are rewarded with bonuses because then you become ambitious and aim to work as well as you can because you get additionally financial rewards for it.”</i>
	<i>“It is difficult to get promoted because of the flat hierarchy.”</i>
Lisa Bauer	<i>“We have quarterly goals, which we formulate every three months and when we achieve these goal, the whole department receives a financial reward, which is supposed to be used to equip the offices better.”</i>
	<i>“Creative potential is hard to measure.”</i>
Jördis Brankatschk	<i>“We are all hard-working. Apart from that we try to motivate the team with little goodies. It is always important for us to have the feeling of a team.”</i>
	<i>“I wanted the feeling to be needed; I wanted to really contribute and to be an important part of a company.”</i>
	<i>“I think it is important to experience a flat hierarchy.”</i>
Sophie Schmidt	<i>“Somebody who gets a good job done receives a salary increase, but mainly appreciation.”</i>
	<i>“A start-up means to me short ways, flat hierarchy, quick decisions and simply doing it.”</i>

Table 5 – Quotations from Interviewees on the Role of Pressure

Pressure	
Madlen Jähnig	<i>“I put myself under pressure.”</i>
Jördis Brankatschk	<i>“I don’t feel pressurized in this position.”</i>

Jana Schilling	<i>"I put myself under pressure but I also feel pressure from the top."</i>
	<i>"I feel pressure when I have a lot of different things to do."</i>
	<i>"But if you are the person responsible then you put yourself naturally under pressure. And I think this is healthy because sometimes you need to push yourself or get pushed from others. Still, the pressure should not become too much."</i>
Anna Kaiser	<i>"A little pressure is quite exciting. A healthy degree of pressure helps you to step it up – but only as long as you enjoy it."</i>
Natascha Wegelin	<i>"The pressure is horrendously high. And I have the ambition to always excel and I strive to fulfill my own expectations and those of my colleagues. But on the other hand there is also a lot of external pressure."</i>
Sandra Mamitzschk	<i>"I have to meet clear deadlines. I think this leads to some kind of pressure. And of course the fact that the workload is enormous. But I don't see it as some strictly negative kind of pressure, it is rather positive pressure."</i>
Lisa Bauer	<i>"The pressure that I experience is mainly because of more responsibility."</i>

Table 6 – Quotations from Interviewees on the Role of Encouragement

Encouragement	
Miriam Wilhelm	<i>"You always have the feeling that you could know much, much more and especially in start-ups you sometimes have the desire that another person guides you, in the sense of someone who provides you with professional advice."</i>
Natascha Wegelin	<i>"We are encouraged to work creatively by our supervisors."</i>
Jana Schilling	<i>"[Creativity] is very important and it is also promoted. We get even supported to further educate ourselves. This can stimulate to try out new methods. And I think that we are encouraged in this area not only from our supervisor but also from our colleagues."</i>
Lisa Bauer	<i>"Not really. You get encouraged, because [your supervisors] expect nice things to happen and that the numbers sum up in the end."</i>
	<i>"In this respect it is encouraged, but on the other hand there is not enough time."</i>
Jördis Brankatschk	<i>"I have to say that I am inspired by women who make a difference. That includes also my colleague. She has a drive that directly encourages me to work harder just as she does."</i>
Sophie Schmidt	<i>"I think my supervisors encourage many others to think differently and more divergently."</i>
Miriam Wilhelm	<i>"When I want to do anything creative I am definitely encouraged to do so, but then I have to do it myself. It is always based on my initiative."</i>

Table 7 – Quotations from Interviewees on the Role of Diversity

Diversity	
Madlen Jähnig	<i>“We are completely diverse with completely different strengths and characters. Through the diversity you cover a lot of different areas.”</i>
Sophie Schmidt	<i>“I would say our team is relatively homogeneous, except the fact that they are all individuals and originate from different countries.”</i>
Anna Kaiser	<i>“We have different characters. And of course you need this to be creative. Well, if we were a very homogeneous group that would be very one-sided.”</i>
Natascha Wegelin	<i>“We are so different that we stimulate each other but also not too different so that we could not stand each other.”</i>
Kerstin Knebel	<i>“Cross-cultural but besides the problems in communicating it doesn’t influence us at all.”</i>
Jana Schilling	<i>“It is exciting because we all do similar things but approach our tasks differently.”</i>
Jördis Brankatschk	<i>“Because of the fact that we have different nationalities, you have to adapt to each individual and handle each one differently. Your way of thinking changes and you get more relaxed. That influences everybody.”</i>
Miriam Wilhelm	<i>“We all have different backgrounds; we have not studied the same subject, and have not experienced the same.”</i>

Table 8 – Quotations from Interviewees on the Role of Conflicts

Conflicts	
Madlen Jähnig	<i>“Usually it is always task-related. From the conflicts you learn nothing except about interpersonal relationships. But it is not beneficial for the task.”</i>
Anna Kaiser	<i>“I think the conflicts are not personal but task-related. I would rather say that it influences. I cannot say to what degree it impacts others but I would rather say it does.”</i>
Natascha Wegelin	<i>“Of course conflicts come up but only task-related. And it usually works like this: we discuss it and then leave it until the next day when we usually have reached a compromise.”</i>
Sandra Mamitzschk	<i>“We try to solve team conflicts quickly because they hold us back in our work.”</i>
Jana Schilling	<i>“It is usually always positive. Discussions can be very stimulating for progressing further. However, they also have to be honored.”</i>
Lisa Bauer	<i>“I do think that it has a positive influence, when one talks about it openly, as long as it is kept professional.”</i>
Jördis Brankatschk	<i>“Nobody is perfect.”</i>

Table 9 – Quotations from Interviewees on the Role of Communication

Communication	
Madlen Jähnig	<i>“Open doors, we can come with any concerns.”</i>
Sophie Schmidt	<i>“Openness, there are no secrets. All employees can freely state their opinions directly or via an anonymous mail box.”</i>
	<i>“Another guideline of our venture is ‘Open communication rocks’.”</i>
	<i>“We have a really tight relationship. I know a lot of private stuff about my colleagues.”</i>
	<i>“Really open, really direct, less from behind, and less gossiping.”</i>
Anna Kaiser	<i>“Team spirit and great interactions. I think it is great to be as transparent as possible.”</i>
Natascha Wegelin	<i>“Our internal communication is very direct and open and for us transparency is very important.”</i>
Jana Schilling	<i>“I could always get feedback or approach [my supervisors] with any concerns.”</i>
Lisa Bauer	<i>“In the department it is definitely transparent [...]. But sometimes you do seal yourself off in order to be concentrated, and then it is hard to stay on track.”</i>

Table 10 – Quotations from Interviewees on Creativity

Creativity	
Madlen Jähnig	<i>“Creativity not only in the sense of playing around but well founded with a goal, and not just colorful.”</i>
Jördis Brankatschk	<i>“I am a part-time musician and therefore I can say that I am absolutely creative.”</i>
	<i>“Creativity is needed to get a structure. I use creativity to structure such complex areas as finance or accounting.”</i>
Sophie Schmidt	<i>“Creativity means creating something new and regards arts. Especially finance has nothing to do with creativity and the same applies for strategy.”</i>
Jana Schilling	<i>“That’s difficult... How do you define creativity?”</i>
Anna Kaiser	<i>“Creativity is much more than only about the grades I get in art.”</i>
Natascha Wegelin	<i>“I believe that every person is a little creative in his or her own way.”</i>