Co-working spaces: creating a supporting environment

An empirical examination of the perceived influence of co-working spaces on innovative work behavior

Master thesis research

Author:	Max van Eupen
Student:	s4383540
Email:	eupen.van.max@student.ru.nl
Supervisor:	Dr. A. De Beuckelaer
Second examinar:	Dr. J.P. De Jong

Radboud University, Nijmegen, The Netherlands

Submitted on June 14, 2020

Abstract

Prior research on innovative work behavior points out that the process of innovative work behavior needs to be stimulated and supported to have a better chance at success. Co-working spaces are such places which are set up to support and stimulate individuals. Even though co-working spaces are gaining more attention in academic research, empirical research regarding the influence on innovative work behavior is lacking. This research provides insights in how individuals perceive the influence of co-working spaces on their innovative work behavior. The data for this research was obtained through semi-structured interviews. The semi-structured interviews were coded and analysed using an indicative approach. The inductive analysis resulted in four categories, which describe how individuals perceive the influence of co-working spaces on their innovative work behavior: The co-working host, group composition, social intensity and internal knowledge events. This research examines the influence of co-working spaces on supporting innovative work behavior. This research contributes to the existing research regarding the influence of co-working spaces, by providing empirical data from the perspective of the individual.

Keywords: Co-working spaces, Innovative work behavior (IWB), Individuals

Table of content

1. Introduction

Nowadays, the challenge that businesses face is to stay competitive and become successful in the long term. This challenge has led to an increased interest in innovation through innovative work behavior of employees in research and practice (Janssen, 2000; De Jong & Den Hartog, 2010; Scott & Bruce, 1994). Innovative work behavior (IWB) is the process in which employees search for new business opportunities and ideas and implementing these new found ideas (Janssen, 2000; De Jong & Den Hartog, 2010; Drucker, 1985). This process of innovative work behavior is seen as a crucial factor for businesses to become and stay successful in the long term. Past research (Janssen, 2000, De Jong & Den Hartog 2010) has specified a couple behaviors: idea exploration, idea generation, idea championing and idea implementation, which are the stages of innovative work behavior.

A large part of the research regarding innovative work behavior has been focussing on supporting and stimulating innovative work behavior of employees (Afsar, Badir & Saeed, 2014; Janssen, 2000; Knol & van Linge, 2009; Prieto, & Pérez-Santana, 2014). Several researchers have composed frameworks of a couple supporting factors how to effectively stimulate and support innovative work behavior (Bos-Nehles, Renkema & Janssen, 2017; Prieto & Pérez-Santana, 2014). These frameworks identify sets of human resource practices, which serve as either direct or indirect stimulators of innovative work behavior. Employees are the ones able to initiate the innovation process and detect potential business opportunities for improvement and development. Most innovation processes start if employees engage in innovative work behavior to generate and implement innovative business opportunities (Bos-Nehles, Renkema & Janssen, 2017). It is necessary to know how innovative work behavior of employees can be stimulated and supported. The general consensus in research is that successful innovation through innovative work behavior of the individual employee requires support and is dependent on well-chosen effective human resource practices to support the employee (De Jong & Den Hartog, 2010; Bos-Nehles et al., 2017).

Building on the consensus that innovation depends on the innovative work behavior of the individual employee and the organizational support through human resource practices. The concept of co-working spaces is set up to support and stimulate the innovative work behavior of self-employed, start-ups and freelancers, which will all be referred to as

individuals in this research. Co-working spaces are flexible and community-oriented workspaces, where individuals can work (Moriset, 2013). "Co-working spaces are one type, particularly designed to encourage collaboration, creativity, idea sharing, networking, socializing, and generating new business opportunities for small firms, start-ups and freelancers" (Fuzi, 2015, p.462). Since 2005 there has been a spectacular growth in co-working spaces globally. By 2013 over 2500 forms of co-working spaces, located in 80 countries, have been reported (Moriset, 2013). The rapid increase in co-working spaces also led to different forms of co-working spaces. Kojo and Nenonen (2016) identified six different forms of co-working spaces: public offices, third places, collaboration hubs, co-working hotels, incubators, and shared studios. This research will focus on co-working hotels and shared studios. Co-working hotels and shared studios are in line with the definitions of co-working spaces given by several researchers and primarily used when co-working spaces are researched (Fuzi, 2015; Moriset, 2013). Co-working hotels and shared studios are co-working spaces that are privately owned, have a rental fee, and focus on co-workers to create a business-like environment by providing extra services to users of co-working places (Kojo & Nenonen, 2016).

The growing popularity of co-working spaces has also led to more attention in academic research. Several researchers have addressed the topic of co-working spaces through a literature review questioning what co-working is and what are co-working spaces (Gandini, 2015; Bouncken & Reuschl, 2016). Even though co-working spaces are gaining more attention in research, empirical research on this subject is still limited (Brown, 2017; Leclercq-Vandelannoitte & Isaac, 2016; Lukes, 2013; Moriset, 2013). Several researchers have started researching specific factors of co-working such as knowledge transfer (Capdevila, 2013), promoting entrepreneurship (Fuzi, 2015), strengthening innovation and productivity (Bueno, Rodríguez-Baltanás, & Gallego, 2018; Moriset, 2013) and the social dynamics within co-working spaces (Bouncken, Aslam & Reuschl, 2018). Some researchers have made a start in researching what user preferences are and how co-working spaces could help them innovate and be more creative (Brown, 2017; Moriset, 2013; Weijs-Perrée, Koevering, Appel-Meulenbroek, & Arentze, 2019).

However, only a couple researchers delivered empirical evidence as well, showing the positive effects of co-working spaces as perceived by individuals. Brown (2017) used an explorative research design to find several positive influences individuals experience from a

co-working space. Individuals positively experienced peer interactions and support provided by the co-working space. Bueno et al. (2018) used a quantitative research design to find a positive influence of social interactions and environment on productivity within a co-working space. Weijs-Perrée et al. (2019) used an experimental research design to find several preferences individuals have regarding co-working spaces such as moderate diversity of individuals and a community-driven environment. The empirical research shows several preferences and positive influences individuals perceive, but also acknowledges more empirical research needs to be done to reach consensus on which factors of a co-working space positively influence innovative work behavior (Brown, 2017; Bueno, 2018).

Past research has stressed the importance of innovative work behavior as a crucial part in the ongoing process to purposefully search and exploit opportunities for innovation (De Jong & Den Hartog, 2010; Drucker, 1985). The process of innovative work behavior needs to be stimulated and supported to have a better chance at successful innovation. A co-working space is set up as a concept to support the individual and possibly the ongoing process of innovative work behavior by creating a business environment. Research so far has mentioned the benefits and supporting role co-working spaces could provide. However only a couple researchers have tested these benefits and delivered empiric results from the perspective of the individual showing positive influences (Brown 2015; Weijs-Perrée et al, 2019). This research will empirically evaluate how individuals perceive the influence of co-working spaces regarding their innovative work behavior. This approach will contribute to the current research by providing more insights from the perspective of the individual. By examining from an individual perspective more in depth knowledge can be attained about underlying perceptions individuals have of co-working spaces, which can be utilized by owners of co-working spaces.

This will lead to the following research question that will be examined in this research:

How do individuals perceive the influence of co-working spaces on their innovative work behavior?

The rest of this research is classified as followed, the concepts of innovative work behavior and co-working spaces will be conceptualized and discussed through a comprehensive literature review. The literature review will be the Theoretical background section in which

several research propositions will be formulated to be empirically tested. After formulating the propositions in the Theoretical background section the Method section will explain the Research design. The Method section explains how the different propositions will be empirically tested and measured. The Method section will lead to the Result section, which elaborates on the outcomes of the research. Finally a Discussion and Conclusion section at the end of the research discusses the outcomes of the research and the practical- and theoretical implications and limitations of the research.

2. Theoretical Background

This study is aimed at generating empirical evidence on the perceived influence of co-working spaces on innovative work behavior. The theoretical background will provide a conceptual construct of innovative work behavior. The construct leads to several propositions that examine the perceived influence of co-working spaces on innovative work behavior, which will be researched.

2.1 Innovative work behavior

Innovative work behavior has been defined and reconstructed by several scholars. Farr and Ford (1990) define innovative work behavior as an individual's behavior that aims to achieve initiation and introduction of new ideas. This definition is worked out in several constructs, which distinguishes several stages of innovative work behavior. One of these constructs comes from Scott and Bruce (1994), who conceive innovative work behavior as a complex individual level work behavior consisting of three different individual-level behaviors: idea generation, idea promotion and idea realization. The construct of Scott and Bruce (1994) has been a starting point for other constructs of innovative work behavior that have been used in recent literature (Janssen, 2000; De Jong & Den Hartog, 2010). De Jong and Den Hartog (2010) redefined and extended the construct of Scott and Bruce by adding an extra stage: idea exploration. Based on entrepreneurship literature, De Jong and Den Hartog (2010) found that idea exploration is regarded to precede idea generation and therefore, of importance to the process of innovative work behavior. The new construct of innovative work behavior consists of idea exploration, idea generation, idea championing and idea implementation (De Jong & Den Hartog, 2010). The four stages constructed by De Jong and Den Hartog (2010) will be used to determine the perceived influence of co-working spaces on innovative work behavior. The different stages of innovative work behavior will be used in the data analysis to determine which stage of the process of innovative work behavior is perceived to be affected.

2.2 Propositions

With the concept of innovative work behavior defined, the next step is to set up research propositions based on factors a co-working space provides. As mentioned in the introduction, only co-working hotels and shared studios are taken into account in this research when mentioning factors of co-working spaces. Co-working hotels and shared studios offer the most

extensive service to individuals to create a business and organizational like environment (Kojo & Nenonen). Because co-working hotels and shared studios offer the most extensive service to individuals, all the factors of co-working spaces described in previous research can be taken into account.

Previous research has found several factors co-working spaces provide to individuals (Bouncken & Reuschl, 2018; Weijs-Perrée et al., 2019). Bouncken and Reuschl (2018) found six overarching dimensions regarding factors of co-working spaces. Weijs-Perrée et al. (2019), on the other hand, listed all the individual factors a co-working space provides and the motivations of users to work at a co-working space. The extensive table of factors and motivations Weijs-Perrée et al. (2019) came up with from a literature review can be divided into several dimensions. Based on the dimensions found by Bouncken and Reuschl (2018) and new factors and dimensions Weijs-Perrée et al. (2019) add with their research a set of dimensions can be distinguished. Showing seven factors classified as dimensions related to co-working spaces (Table 1).

Dimension	Description
Co-working Host	The host of manager within a co-working space
Social intensity	Social interactions and support between coworking-users
Professional Focus	Offering of training and events and the composition of the group
Physical assets	Availability and design of co-working space, equipment, technical infrastructure, and supplies
Institution of the co-working space provider	Affiliation of coworking-spaces to other organizations
Availability	Opening hours and accessibility models
Co-working users	Individual characteristics and targets of coworking-users

Table 1: Dimensions Co-Working spaces (Based on Bouncken & Reuschl, 2018; Weijs-Perrée et al., 2019)

This research will not take all of the dimensions into consideration when researching which factors individuals perceive to have an influence on their innovative work behavior. The dimension Co-working users will not be taken into consideration in this research because, Bouncken and Reuschl (2018) describe this as a personality trait of co-working space users and not as a supporting factor. The dimension institution of the co-working space provider will also

not be taken into consideration, because Bouncken and Reuschl (2018) describe this as an ownership feature of a co-working space and not as a supporting factor. The ownership topic is already covered by choosing to research only shared studios and co-working hotels, which are privately owned, based on Kojo and Nenonen (2016). Finally, the dimensions of physical assets and availability will not be taken into consideration in this research because, Bouncken and Reuschl (2018) and Weijs-Perrée et al. (2019) describe these dimensions as assets which can be found anywhere. The literature and research provided does not show a possible direct supporting influence on innovative work behavior (Bouncken & Reuschl, 2018; Weijs-Perrée et al., 2019). The exclusion of four dimensions leaves the dimensions Co-working host, Social intensity, and Professional focus as supporting factors a co-working space provides. These factors will now be described, explained, and complemented with additional research findings regarding innovative work behavior to give an overview how individuals might perceive the influence of these factors on their innovative work behavior.

2.2.1 Co-working host

A co-working host is a host or manager in a co-working space promoting facilitated encounters and interactions between individuals (Brown, 2017; Weijs-Perrée et al., 2019). The co-working host can have several functions within a co-working space. The co-working host can help create a good atmosphere and stimulate interaction, but also in a more formal way help networking and create collaborations between individuals (Weijs-Perree et al. 2019). A co-working host can play an important role in creating networks and stimulating collaborations and relationships. Research highlighted that a co-working space alone is not enough in stimulating interactions and collaborations and a co-working host can be the one enabling interaction, collaboration and networking (Brown,2017; Fuzi, 2015). Although Fuzi (2015) highlighted the benefits of a co-working host, empirical evidence to support these assumptions is missing.

However, the role of a manager has been researched in human resource research in a corporate setting (Afsar, Badir & Saeed, 2014; Prieto & Pérez-Santana, 2014). Management support was found to positively influence innovative work behavior if done the right way. When managers promote personal initiative through positive feedback, facilitating skill development and provide support, a positive influence can be seen on employee's innovative

behavior (Prieto & Perez-Santana, 2014; Veenendaal & Bondarouk, 2015). Similar results were found for a transformational leadership style in which managers encouraged, inspired and motivated employees to generate innovation through innovative work behavior (Afsar, Badir & Saeed, 2014). On the other hand, a management style that is perceived as controlling has negative effects on innovative work behavior as this style shifts attention away from work activities (Prieto & Perez- Santana, 2014). However, the controlling management style is not directly applicable in co-working spaces, because a co-working host or manager has no direct interest in the results of individuals. The performance of individuals has no effect on the co-working space, but only on the individual itself. Therefore, a result control-based management style is less likely to appear in co-working spaces. The supporting and encouraging management style described in previous research is a style, which is more likely to be enforced by a co-working host and have a positive effect on individuals. Nevertheless, this research will take into consideration the possibility a co-working host can have a different style as well.

This research proposes the following.

Proposition 1: *Individuals perceive the presence of a co-working host to have a positive influence on their innovative work behavior if the co-working host has a supporting and encouraging management style.*

2.2.2 Professional focus

Professional focus is the composition of individuals from similar specializations and the offering of training and networking events within a co-working space (Bouncken & Reuschl, 2018; Weijs-Perrée et al., 2019). A high level of overlapping expertise from individuals in similar specializations working at the same co-working space increases their performance and social interaction (Gandini, 2015). Attracting more individuals from similar industries or specializations creates a more homogeneous group of professionals and thus professional interaction. Next to a homogeneous group, a co-working space could be less homogeneous with individuals from different industries and specializations creating a heterogeneous group. A heterogeneous group can also be of value, because individuals have different knowledge and skills, which can be utilized by other individuals (Bouncken & Reuschl, 2018; Gandini, 2015).

Several researchers have empirically examined the different aspects of creating a professional focus (Brown, 2017; Bos-Nehles, Renkema & Janssen, 2017; Veenendaal & Bondarouk, 2015). The first aspect of professional focus is the composition of individuals from similar specializations. A professional focus, with "like-minded" individuals facing similar work challenges as a way to benefit from the knowledge and skills of other individuals, was perceived as most desirable by individuals (Brown, 2017). However, this research did not distinguish between a homogeneous and heterogeneous group. The composition of groups and impact on innovative work has been discussed in a corporate setting (Somech & Drach-Zahavy, 2013; Choi, 2007) The results showed that functional heterogeneity, meaning employees with different skills, knowledge and background, promotes creativity which in turn positively influences the climate for innovation (Somech & Drach-Zahavy, 2013; Choi, 2007). Even though the results are from a corporate setting in which groups had to work together, this research argues a heterogeneous group is perceived as preferable in a co-working space. The results indicate that innovative work behavior and creativity is more stimulated by a heterogeneous group. Taken together with the results of Brown (2017) who argued individuals perceive knowledge and skills of other individuals as valuable and the theoretical propositions of Bouncken & Reuschl (2018). This research proposes a low professional focus, which is a heterogeneous group, is perceived to have a greater positive influence on innovative work behavior compared to a homogeneous group.

This research proposes the following.

Proposition 2: *Individuals perceive a low professional focus, which consists of a heterogeneous group, to more positively influence their innovative work behavior in comparison to a more homogeneous group.*

The second aspect of professional focus is the training and networking events. The co-working space can offer training and networking events to individuals in their work (Bouncken & Reuschl, 2018). Training and networking events can improve skills and create a new way of doing things, which could be more efficient or productive. Training and networking events offered by organizations can be seen from a human capital and knowledge perspective. Training and networking events can help individuals to increase their knowledge, skills and abilities, which in turn can be used to engage in innovative work behavior (Bos-Nehles, Renkema & Janssen, 2017).

Several researchers have empirically examined the different aspects of creating a professional focus (Brown, 2017; Bos-Nehles, Renkema & Janssen, 2017; Veenendaal & Bondarouk, 2015). Regarding the aspects of training and networking events, similar positive influences on innovative work behavior can be found. Bos-Nehles, Renkema & Janssen (2017) found a positive effect of training events on innovative work behavior. Training events were found to have a direct positive influence on innovative work behavior. Veenedaal & Bondarouk (2015) found similar but more specific results regarding innovative work behavior. Training events were found to have the most influence on idea generation within the dimensions of innovative work behavior. Although these researches were done in an organizational setting, the positive influence on innovative behavior is likely to appear in co-working spaces as well. The explanation Bos-Nehles, Renkema and Janssen (2017) give, regarding training events, with the human capital and knowledge perspective can also be applied in a co-working space setting. Networking events on the other hand, have already been researched in a co-working space setting and were found to be highly appreciated by individuals working at a co-working space. Because of the few extant opportunities to develop a network, these networking events offered by co-working spaces were perceived as highly valuable (Brown, 2017). Similar to training events the explanation of Bos-Nehles, Renkema and Janssen (2017) can be applied here as well, so networking events are perceived to positively influence individuals innovative work behavior.

This research proposes the following.

Proposition 3*: Individuals perceive a high professional focus, which consists of the offering of training and networking events, to positively influence their innovative work behavior.*

2.2.3 Social intensity

Social intensity is the social interaction and support between individuals of co-working spaces (Bouncken & Reuschl, 2018). An important part of co-working spaces is providing social interactions. The social interactions were found as an important motivation for individuals to work at a co-working space (Weijs-Perrée et al., 2019). Social interactions can take place between individuals in casual conversations, small talk or just working alongside other individuals. These seemingly casual forms of interaction are an important aspect for individuals when working in a co-working space (Bueno, 2018; Weijs-Perrée et al., 2019). A co-

working space provides social interaction with other individuals, which an individual otherwise might not have had. Research has highlighted the importance and benefits of social interactions in a work environment (Bouncken & Reuschl, 2018; Bueno, 2018). Social interactions create job satisfaction and commitment, which in turn leads to increased productivity. Social interactions usually also promote spreading and creating new ideas (Bueno, 2018).

Current research has demonstrated the positive perceived influence of co-worker support on innovative work behavior (Hayton, 2005; Prieto, & Pérez-Santana, 2014). The support between co-workers refers to the goodwill and support between individuals. The Human Resource practices in an organization should create a work environment for collaboration, interaction and support between employees (Hayton, 2005; Prieto, & Perez-Santana, 2014). Co-workers who trust each other tend to feel safe and discuss problems more openly, and are thus more willing to share ideas and information. This increased knowledge exchange can lead to knowledge exploitation and even to knowledge creation (Prieto, & Perez-Santana, 2014). Bueno (2018) empirically examined the social interactions in a co-working space in terms of productivity. Social interactions between co-workers were found to be an important factor in explaining increased productivity. Although productivity is not the same as innovative work behavior, this research will argue that social interactions in a co-working space positively influence individuals innovative work behavior as well. Based on previous research of Prieto and Pérez-Santana (2014) and Hayton (2005), which has demonstrated and explained the positive effects of social interactions on innovative work behavior. Together with the research of Bueno (2018), which demonstrated the importance of social interactions in co-working spaces perceived by individuals.

This research proposes the following.

Proposition 4: *Individuals perceive the social interactions provided by the co-working space to have a positive influence on their innovative work behavior*

3. Methodology

3.1 Introduction

The aim of this research is to examine and explore how individuals perceive the influence of co-working spaces regarding their innovative work behavior. How several factors of co-working spaces can positively influence the individual's perception of their innovative work behavior. Based on the literature on co-working spaces and innovative work behavior four propositions have been formulated which described the expected outcomes of the research. A qualitative research design will be used to examine the four formulated propositions. Because this research tries to generate knowledge of the perceptions individuals have, a qualitative research design is preferred. Qualitative research can gather in-depth information about a specific phenomenon to generate deeper understanding of individuals' perceptions (Bleijenbergh, 2015). A qualitative approach in this research provides data on individuals perceptions regarding co-working spaces and the influence on their innovative work behavior. Through semi-structured interviews in-depth perceptions of respondents are better captured. Semi-structured interviews will be used to gather the data, which will be analysed and coded. In the next part of the methodology section the data collection methods and respondent characteristics will be described. After the descriptions of data collection methods and the respondent characteristics the data analysis will be elaborated on. Finally, due to the recent societal development caused by Covid-19, some changes were made which will be elaborated on.

3.2 Data collection

The data for this research was collected through semi-structured interviews. The semi-structured interviews with the respondents were held in April 2020. As explained the qualitative method used in this research is best suited to capture the perceptions of the individuals through semi-structured interviews. The use of semi-structured interviews allows respondents to clarify certain views and perceptions they have. The use of semi-structured interviews also enables the interviewer to ask for more explanation of certain answers to gain a more comprehensive view on the perceptions individuals have (Bleijenbergh, 2015; Yin, 2014). The goal of the interviews to gather data about the perceptions of the individuals

regarding co-working spaces and innovative work behavior is best captured through the use of semi-structured interviews.

For the interviews an interview guide was set up beforehand (Appendix A). The interview guide for the semi-structured interview was set up to ensure each of the four propositions would be mentioned during the interview. The interview questions were derived from the theoretical background for each of the four propositions and listed in the interview (Appendix A) As mentioned before a semi-structured interview method was used, so there was room to ask for clarification or a new topic mentioned by the respondent (Bleijenberg, 2015). The use of a semi-structured interview also enables the interviewer to ask more questions about a specific topic mentioned during the interview. All the interviews started with a short introduction of the topic and goal of the interview. The introduction was followed up with several introduction questions. After the introduction questions each proposition was mentioned through several questions discussing each proposition separately. To increase validity all the questions were asked in a neutral way. Asking questions neutrally leads to a lower chance of potential bias due to questions guiding respondents to favourable answers (Bleijenberg, 2015; Yin, 2014). To increase accuracy a test interview was conducted. Based on the outcomes of the test interview some small modifications were made. The order of question for some of the propositions was changed and some questions were asked in a different way when the question was unclear. Furthermore question 10 was changed, because the concept of homogeneous and heterogeneous was unclear for the respondent and created confusion.

3.3 Respondents

The data was collected through 8 semi-structured interviews. Due to societal developments regarding Covid-19 some changes had to be made in the research design, which will be explained. The interviews were held at an independent co-working space, Start-up Nijmegen. Start-up Nijmegen is a co-working space located in the Netherlands, which offers more than just a professional place to sit as an individual. Start-up Nijmegen was approached beforehand to assess the co-working spaces. The assessment was to determine if the co-working space is a space that is privately owned, has a rental fee and focuses on co-workers to create a business-like environment by providing extra services to users of co-working places (Kojo &

Nenonen, 2016). Start-up Nijmegen is a co-working place conform to the description of Kojo and Nenonen (2016) and can be classified as either a Co-working hotel or Shared studio. Initially, two co-working spaces were selected, assessed, and contacted beforehand. However, one co-working space withdrew due to Covid-19, as they did not feel comfortable with the interviews while Covid-19 was around. Another co-working space was approached to participate, but did not respond. Due to time restrictions and non-response, the choice was made to only take into account individuals from StartUp Nijmegen.

After the assessment of the co-working space, individuals within the co-working spaces were approached to participate in this research. The basic information about the individuals for this research is provided in Table 2. Due to Covid-19 all the individuals were approached via e-mail, instead of face-to-face. Approaching individuals via e-mail resulted in a lot of non-response, which perhaps can be explained by Covid-19. All the individuals who were approached are self-employed, start-ups or freelancers, which has been classified in the introduction of this research. However, due to restrictions of the government a lot of these individuals were perhaps unable to work, which could be an explanation for the non-response. The initial plan was to hold the interviews face-to-face, but due to Covid-19, the interviews were held via skype or telephone.

Participant	Gender	Years' experience	co-working space
Respondent 1	Women	6 Months	StartUp Nijmegen
Respondent 2	Men	3 Years	StartUp Nijmegen
Respondent 3	Men	1 Year	StartUp Nijmegen
Respondent 4	Men	2,5 Year	StartUp Nijmegen/ Nex'D
Respondent 5	Women	3 Years	StartUp Nijmegen
Respondent 6	Men	4 Months	StartUp Nijmegen
Respondent 7	Men	6 Months	StartUp Nijmegen/
Respondent 8			

Table 2: Information participants

3.4 Data analysis

The next step in this research is the analysis of the data. For the analysis of the data all the interviews were transcribed after the interviews were conducted. There are many ways to analyse the interview transcripts, however not all of the methods are useful in this research.

This research will use an inductive analysis approach. An inductive approach requires extensive reading of the interview transcripts to develop dimensions (Bleijenberg, 2015). The interview transcripts are coded in an inductive way to connect the empirical data to the abstract theories and propositions set up in this research. The coding process used in this research stays close to the empirical data and the codes are based on the answers of the respondents (Bleijenberg, 2015). The coding phase has several phases. The first phase in the data analysis is reading the interview transcripts and highlighting sentences in the interview transcripts, which are relevant according to the four propositions and the different stages of innovative work behavior. The relevant sentences are given a code, which summarizes the sentence. This process is referred to as open coding (Bleijenberg, 2015). The next phase in the coding process is axial coding where codes from the previous phase are connected to form clusters. The final phase is the selective coding process in which clusters are compared with each other to identify patterns (Bleijenberg, 2015). These patterns form the final categories. Before examining the data this research is expected to have at least four categories, because the interview guide is based on four propositions from the theoretical background. However, because an inductive approach is used different categories can emerge from the date from what is expected.

3.5 Research ethics

Some ethical considerations were taken into account in this research. First, all the respondents were informed about the aim of the research beforehand and the use of the interview for the research. Second, the interviewer made clear the respondents knew the interviews were recorded by asking permission to record the interview beforehand. Furthermore, it was explained that the respondent could withdraw from the interview at any moment if the respondent did not feel comfortable anymore. Third, the interviews were used anonymously, so the names of the respondents would not be mentioned in the research. The interview transcripts were adjusted so names and other personal or sensitive information would not be included in the interviews. Finally, all the respondents were given the opportunity to read the interview transcript and make adjustments to make sure everything they said matches what they meant (Bleijenberg, 2015).

4. Results

From the inductive analysis of the eight interview transcripts, four categories are derived. The co-working host, group composition, social intensity, and internal knowledge events have an impact on innovative work behavior as perceived by individuals. These four categories are slightly different from what was expected. The internal knowledge event category was derived from the inductive analysis and not the training and networking category. The inductive analysis made clear that training and networking was insufficient as a category, and more events were organized, which individuals perceived as valuable, regarding their innovative work behavior. To clarify the result from this category and the other three categories, translated quotes from the interview transcripts will be given for each category. The translated quotes can be found in the codebook in Appendix B. Each category will be separately discussed and explained.

4.1 Co-working Host

All the individuals have multiple ways of how they utilize the presence of the co-working host regarding their innovative work behavior. All eight respondents registered at least one way how they use or have used the presence of the co-working host. Three separate aspects of the co-working host are found in the inductive analysis.

Firstly, several respondents mentioned how they perceive the knowledge of the co-working host as a significant factor, because his knowledge can help and accelerate the idea generation and idea implementing. One respondent mentioned the substantive knowledge of the co-working host: "I see the co-working host mainly as the person who can and wants to help entrepreneurs in terms of content, because he also joins so-called Bam groups" (respondent 6, p. 76). Other respondents mentioned, because the co-working host has a broad range of knowledge he can provide quick feedback and discuss on a content level about new ideas: "When we had that idea, we walked indirectly to the co-working host and said, hey this is our idea, and we plan to do it" (respondent 2, p. 50) and "that you can walk in as it were and say I have a new idea for my company or I am looking for customers or whatever" (respondent 2, p. 49).

Secondly, some respondents have mentioned the attitude of the co-working host to be an essential factor in whether the co-working host plays a role in their process of innovative work

behavior or not. A pro-active and energetic attitude is perceived as helpful by the individuals, as the following quotes illustrate: "They are extremely proactive in making the whole a success and I think that is the distinguishing factor for StartUp Nijmegen" (respondent 3, p. 57) and "The co-working host was also very much involved. He was really into what you are doing, what you are running into. He was very actively engaged" (respondent 4, p. 62).

Finally, individuals perceive the role the co-working host takes on as the most crucial aspect in the process of innovative work behavior. Individuals perceive a co-working host who enables, facilitates, and takes the initiative, capable of starting and accelerating the process of innovative work behavior. Several respondents mentioned how the co-working host is the one who takes the initiative, which in turn contributes to the idea and knowledge sharing: "He also took all initiatives in the beginning when setting up StartUp Nijmegen" (respondent 2, p. 50) and "everything that is organized as a result, and the workshops, and the questions you can ask, and the BAM groups" (respondent 4, p. 63). Next to taking the initiative and organizing activities, a respondent mentioned the facilitating role of the co-working host as a valuable factor in increasing the value of the organized activities: "Look everyone can come up with ideas, but some people are just good in the role as facilitator, and then such a session is much more productive, and everyone gets more out of it" (respondent 6, p. 77). Several respondents mentioned the role the co-working host has as the 'driving force', which is described as a lot of stimulation and support, as the following quotes illustrate: "Yes, he calls himself the driving force of StartUp Nijmegen and his title. That is also a bit of what he does, he boost and drives everything" (respondent 2, p. 49) and "Because the co-working host is, as he describes himself, the driving force. He stimulates you to work better" (respondent 4, p. 62).

4.2 Group composition

Every respondent experienced a diverse group composition as valuable factor of the co-working space. Respondents had mainly two reasons for this, namely creating a different perspective and the diverse knowledge of the group of individuals. In terms of creating a different perspective several respondents mentioned how individuals from different backgrounds provide a different perspective on a problem or situation. Creating new perspectives is perceived as relevant with regard to creating new ideas or solutions to problems, as illustrated in the following quotes: "And then you think, hey maybe I can do something with that, because of course you talk to each other and you hear new insights, new

opinions, new ideas and that makes you think again" (respondent 4, p. 66) and "But sometimes it is also nice to talk to people who do something completely different and can give a completely different perspective" (respondent 2, p. 41). Another common thing individuals mentioned is that within a co-working space you meet with people from different backgrounds, which otherwise you would not, as illustrated in the following quote: "It actually comes naturally here, I start talking to people who do something completely different from what I would normally look at" (respondent 6, p. 85).

Secondly, individuals mentioned how a diverse group of individuals provides more benefits, because of the different backgrounds and thus knowledge. Most individuals mentioned they specifically used knowledge of an individual, who has a different background, to learn or generate new ideas, as illustrated in the following quotes: "so if, for example, I want to learn about marketing when I look for new marketing strategies" (respondent 2, p. 52) and "but when I look at the real added value for me, it is more IT people sitting there, who I can ask a question, because I myself am not so deep in IT" (respondent 1, p. 45). Respondents also mentioned how there is always someone to brainstorm who has expert knowledge, as illustrated in the following quotes: "That is also the nice thing about the concept, because suppose you want to brainstorm with someone about your website, company or something you must have programmed. You immediately have someone who is specialized in that" (respondent 2, p. 51) and "And if the co-working host was already talking to someone else, you walked over to someone else, who might has more knowledge about it" (respondent 4, p. 62).

Finally the interviews revealed the size of the group to have an effect on individuals. One individual mentioned how she felt the size of the group was too big which held her back from talking to others and did not experience much benefits: "So as far as I am concerned, for my personal taste there are too many entrepreneurs at StartUp to have a nice interaction with" (respondent 1, p.47). While other individuals mentioned how they experienced more benefits from the size of the group: "There are now 90 people in it, so there are always people who can help you or who have experienced the same" (respondent 4, p. 64).

4.3 Social intensity

A lot of the respondents mentioned the social intensity as an important factor of the co-working space. Almost all the individuals mentioned the social interaction to be one of the main reasons to join a co-working space. Social interactions are not just a reason for individuals to join a co-working space, the social environment of the co-working space is perceived as valuable to learn and come up with new ideas, as illustrated in the following quotes: "In the beginning I really enjoyed meeting new people. Back then I thought I just want to know different people, expand my network, learn new things from people" (respondent 2, p. 54) and "So it is very nice to have people around you who you can spontaneously approach and get ideas that you would not actually get from home" (respondent 2, p. 55).

Next to the social environment a co-working space creates a lot of informal interactions, which take place at different places within the co-working space. These informal interactions are perceived as valuable to the individuals in different stages of the innovation process. Some individuals mentioned how spontaneous encounters take place ,which led to new ideas: "Things like that often happen without you consciously talking about work, but by just showing interest. This way, new businesses or ideas are regularly published" (respondent 6, p. 81) and "Sometimes I get into a spontaneous conversation with people at the coffee machine and you get new ideas" (respondent 2, p. 51). Other respondents mentioned how they met different people during lunchtime and without consciously talking about work they were stimulated with new ideas or solutions to problems they experienced, as illustrated in the following quotes: "You just say hi to someone when you have a coffee in the canteen and then they ask you a question that makes you think, hey that is actually a good one and it brings you new ideas" (respondent 2 , p. 54) and "but it is often fun to find a local catering facility with two or three people to sit down and discuss"(respondent 3, p. 60).

4.4 Internal knowledge events

The final category is the internal knowledge events. Individuals mentioned several events organised by the co-working space where they can discuss problems, talk about ideas and increase their knowledge. Individuals mentioned several events, which are organised and perceived as valuable to discuss ideas, such as small collaboration groups "Bam groups are small groups of entrepreneurs who sit down once a week to share some knowledge and help

each other." (respondent 6, p. 76), partner conversations "Then you have about an hour where you get the time to ask an experienced entrepreneur questions or to discuss certain matters or ideas" (respondent 1, p. 44) and social media accounts "there are internal social media pages with issues that come up. There is a lot of discussion on these social media accounts" (respondent 3, p. 58).

Individuals also mentioned the workshops, which were organized by the co-working space. Individuals perceived the benefits of the workshops differently, one respondent mentioned how he gained knowledge from the different workshops he went to: "I certainly attended every workshop that was organized in the early days. Just everything, you can never get dumber" (respondent 4, p. 64). Another respondent mentioned how she did not perceive the workshops useful at all, because she felt the workshops were of poor quality: "I never find them interactive enough, I never think they take the target group into account sufficiently, I do not think they are well prepared enough, and I do not find them interesting in terms of content" (respondent 5, p. 70). One respondent even mentioned how he gained skills from the networking events he could use: "You learn to communicate and you learn to approach people. You learn to tell your story there, because you have to tell your story twenty, thirty times in one evening" (respondent 4, p. 65).

5. Discussion

In the final chapter of this research the conclusions of the present study are discussed. Furthermore, the limitations of this research and possible future research will be discussed based on the outcomes of this research.

5.1 Conclusion and implications

This research started with the following research question: "How do individuals perceive the influence of co-working spaces on their innovative work behavior?" Based on this research question and the literature regarding co-working spaces and innovative work behavior, four propositions have been formulated. The four propositions describe the expected outcomes of the qualitative research. The qualitative research resulted in four categories, which individuals perceive to influence their innovative work behavior, derived from an inductive analysis. The four propositions which were predetermined will be evaluated and connected to the four categories which emerged from the inductive analysis of the interviews. Based on the results from the inductive analysis the propositions will be supported, partially supported or not supported.

Proposition 1: Individuals perceive the presence of a co-working host to have a positive influence on their innovative work behavior if the co-working host has a supporting and encouraging management style.

Proposition 1 is supported by the results. All the individuals mentioned that they perceive the co-working host as an critical factor in the process of innovative work behavior. Having a co-working host can improve and accelerate the process of innovative work behavior. Individuals mentioned how the co-working host has a supporting role, but also an organizing and facilitating role. The co-working host is perceived as valuable not only because of his supporting role, but also because he organises events and brings individuals together to exchange knowledge and learn from one another. Individuals have mentioned several ways how they perceived one or more of these factors of the co-working host as helpful. These findings match earlier research findings by Veenendaal and Bondarouk (2015), which stated that managers who provide positive feedback, facilitate skill development, and provide support, a positive influence on the process of innovative work behavior can be seen. Individuals

Proposition 2: Individuals perceive a low professional focus, which consists of a heterogeneous group, to more positively influence their innovative work behavior in comparison to a more homogeneous group.

Proposition 2 is supported by the results. Individuals perceive a heterogeneous group of individuals to be more beneficial regarding their innovative work behavior, because of the diversity of knowledge and the different perspectives all the individuals have. Individuals mentioned how a diverse group of individuals provides different perspectives, which can be of value especially in the idea generation stage. Individuals also mentioned how a diverse group of individuals brings a wide variety of knowledge, which is helpful when new skills or knowledge need to be acquired. New skills can be developed from individuals in the same co-working space. The benefits of a heterogeneous group are perceived as more valuable compared to a more homogenous group. The results from this research are in line with earlier research.

Proposition 3: Individuals perceive a high professional focus, which consists of the offering of training and networking events, to positively influence their innovative work behavior.

Proposition 3 is not supported by the results. The category that corresponds to this proposition is, the internal knowledge events. Most individuals did not mention the training and networking events as valuable when it comes to their innovative work behavior. Individuals mentioned how the training events do not always match the targeted group and the quality of the training events is often not of a decent standard. Furthermore individuals mentioned how they often skip these training events. Only two individuals mentioned the positive benefits of training events in which they gained new skills or knowledge. Regarding networking events only one individual mentioned how he gained new skills. Other individuals did not perceive any positive benefits regarding their own innovative work behavior. The result is not in line with the research outcomes of Bos-Nehles, Renkema and Janssen (2017), which stated that individuals increase their knowledge, skills and abilities through networking and training events, which in turn can be used to engage in innovative work. Instead it seems that individuals search for new knowledge, skills, and abilities in other ways such as the discussion events as found in the inductive analysis.

Proposition 4: Individuals perceive the social interactions provided by the co-working space to have a positive influence on their innovative work behavior

Proposition 4 is supported by the results. Individuals perceive the social interactions as valuable when it comes to their innovative work behavior. Individuals mentioned how they perceive the co-working space as a space where they can meet people, get support, and discuss problems with each other. Most individuals mentioned how they actively search for social interactions, which can lead to new ideas of solutions to specific problems. Social interaction within the co-working space is highly valued by the individuals, because the social interactions are something the individuals would otherwise not have. Where support and interaction are seen as normal in an organizational setting, individuals do not have the support from co-workers if they work from home.

This research has given insight into the perceptions of individuals regarding the influence of co-working spaces on their innovative work behavior. This research has highlighted several factors that have a positive influence on the innovative work behavior of individuals. From the factors that are perceived to influence innovative work behavior positively, individuals see the co-working host as a crucial factor. The co-working host is perceived as someone who can enable, facilitate and support the process of innovative work behavior. The efforts of the co-working host can make a difference in creating a supporting and collaborative environment for the individual. Next to the co-working host, high social intensity and a heterogeneous group composition are perceived to positively influence the innovative work behavior. A heterogeneous group composition is perceived as more favourable because of the different perspectives and diverse knowledge of individuals. Different perspectives and knowledge are perceived to be more valuable when it comes to creating new ideas, implement ideas, and generate new skills. Social intensity is perceived as valuable because of the mutual support and idea-sharing. Most individuals had experience in working from home and mentioned how they did not have as much social interaction. Once they joined the co-working space, individuals noticed the benefits of having social interactions, which creates a supportive environment. Finally, individuals perceive the internal knowledge events to positively influence their innovative work behavior. Even though training and networking events are not perceived to have a positive effect by most individuals, most individuals do perceive the discussion events as valuable. Organised meetings with other co-workers or partners from the

co-working space to discuss problems and ideas. Overall individuals perceive the internal knowledge events to positively benefit innovative work behavior, either through discussion events or training and networking events.

The conclusions of this research give insight in the perceptions of individuals. This research has found a couple factors individuals perceive to positively influence their innovative work behavior. A supportive co-working host, a heterogeneous group composition, internal knowledge events and high social intensity between individuals. The insights from the present research are in line with earlier research which stated that innovative work behavior of individuals needs to be stimulated to have a better chance at success (De Jong & Den Hartog, 2010; Bos-Nehles et al., 2017). The findings in the present research can be used to optimize co-working spaces to the preferences of the individual when it comes to their innovative work behavior.

5.2 Limitations

This research has several limitations. First, this research has not been entirely inductive. The interviews were guided by the proposition, which were based on earlier research on supporting innovative work behavior. This could mean other supportive factors provided by the co-working space are overlooked in this research. However, this research addressed this concern as appropriately as possible. First of all, by using a semi-structured interview. This allowed the researcher to ask the participants additional questions when they came up with new factors. Furthermore, during the analysis of the data, distance was taken from the propositions and abstract theories. Both of these measures resulted in a new category during the analysis, which was different from the theoretical propositions. Second, the number of respondents was not as high as intended. During the data collection period this research had to take into account the COVID-19 pandemic. The pandemic resulted in the withdrawal from one co-working space from this research. Furthermore, this research had a lot of non-response in contacting individuals of the remaining co-working space via e-mail. Instead of approaching individuals face-to-face, the individuals had to be approached via e-mail, as explained in the methodology section. A combination of the withdrawal of a co-working space and high non-response resulted in a lower number of participants. Third, the interviews were held at only one co-working space. Therefore, this research does not cover the entire population of

individuals working at co-working spaces, which define as a shared studio or co-working hotel. Due to the withdrawal and time constraint only individuals from StartUp Nijmegen were taken into account. Co-working spaces come in a great variety. Therefore, consideration should be taken of the fact that different perceptions may arise when other co-working spaces are taken into account as well.

5.3 Future research

This research has fostered some suggestions for future research. First, as mentioned in the limitations section, it is recommended to research co-working spaces on a larger scale. This research has focussed on one co-working space, but as mentioned co-working spaces come in many forms. Therefore, individuals from other co-working spaces can have different perceptions. Taking more co-working spaces into consideration leads to a more complete understanding of co-working spaces and the perceptions of individuals. Furthermore, different types of co-working spaces can be taken into consideration. As mentioned in the introduction this research has focussed on co-working hotels and shared studios. Taking other forms of co-working spaces into consideration could lead to different perceptions and factors.

References

Afsar, B., Badir, Y. F., & Bin Saeed, B. (2014). Transformational leadership and innovative work behavior. *Industrial Management & Data Systems*, 114(8), 1270–1300.

Bleijenbergh, I. (2015). *Kwalitatief onderzoek in organisaties.* Amsterdam, NL: Boom Lemma uitgevers.

Bos-Nehles, A., Renkema, M., & Janssen, M. (2017). HRM and innovative work behaviour: A systematic literature review. *Personnel Review*, 46(7), 1228-1253.

Bouncken, R.B., Aslam, M.M., & Reuschl, A.J. (2018). The dark side of entrepreneurship in co-working-spaces. In A. Tur Porcar, & D. Ribeiro Soriano (Reds.), *Inside the mind of the entrepreneur* (pp. 135- 147). doi: 10.1007/978-3-319-62455-6_10

Bouncken, R.B., & Reuschl, A.J. (2018). Coworking-spaces: How a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship. *Review of Management Science*, 12(1), 317–334.

Brown, J. (2017). Curating the 'Third Place'? Coworking and the mediation of creativity. *Geoforum*, 82, 112–126.

Bueno, S., Rodríguez-Baltanás, G., & Gallego, M. D. (2018). Coworking spaces: A new way of achieving productivity. *Journal of Facilities Management*, 16(4), 452-466.

Capdevila, I. (2015). Coworking spaces and the localized dynamics of innovation in Barcelona. *International Journal of Innovation Management*, 19(3), 1–28.

Choi, J. N. (2007). Group composition and employee creative behavior in a Korean electronics company: Distinct effects of relational demography and group diversity. *Journal of Occupational and Organizational Psychology*, 80, 213–234.

De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management,* 19(1), 23-36.

Drucker, P. (1985). *Innovation and Entrepreneurship.* New York, US: Harper & Row.

Fuzi, A. (2015). Co-working spaces for promoting entrepreneurship in sparse regions: The case of South Wales. *Regional Studies, Regional Science*, 2(1), 462-469.

Gandini, A. (2015). The rise of coworking spaces: A literature review. *Ephemera*, 15(1), 193–205.

Hayton, J.C. (2005). Promoting corporate entrepreneurship through human resource management: A review of empirical research. *Human Resource Management Review*, 15(1), 21-41.

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness, and innovative work behavior. *Journal of Occupational and Organizational Psychology*, 73(1), 287-302.

Knol, J., & Van Linge, R. (2009). Innovative behaviour: The effect of structural and psychology empowerment on nurses. *Journal of Advanced Nursing,* 65(2), 359–370.

Kojo, I., & Nenonen, S. (2016). Typologies for co-working spaces in Finland – what and how? *Facilities,* 34(5/6), 302–313.

Kuratko, D.F., Ireland, R.D., Covin, J.G., & Hornsby, J.S. (2005). A model of middle-level managers' entrepreneurial behavior. *Entrepreneurship Theory and Practice*, 29(6), 699-716.

Leclercq-Vandelannoitte, A., & Isaac, H. (2016). The new office: How coworking changes the work concept. *Journal of Business Strategy*, 37(6), 3–9.

Lukeš, M. (2013). Entrepreneurs as Innovators: A Multi-Country Study on Entrepreneurs Innovative Behaviour. *Praque Economic Papers,* 22(1), 72-84.

Ma Prieto, I., & Pérez-Santana, M.P. (2014). Managing innovative work behavior: The role of human resource practices. *Personnel Review,* 43(2), 184-208.

Montani, F., Odoardi, C., & Battistelli, A. (2014). Individual and contextual determinants of innovative work behavior: Proactive goal generation matters. *Journal of Occupational and Organizational Psychology*, 87, 645–670.

Moriset, B. (2014, January 23-25). Building new places of the creative economy: The rise of coworking spaces. Paper presented at the 2nd Geography of Innovation Conference. Utrecht, The Netherlands. Retrieved from: https://www.semanticscholar.org/

Romero, I., & Martinez-Roman, J. A. (2012). Self-employment and innovation. Exploring the determinants of innovative behaviour in small business. *Research Policy*, 41(1), 178-189.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal,* 37(3), 580-607.

Somech, A., & Drach-Zahavy, A. (2013). Translating team creativity to innovation implementation: The role of team composition and climate for innovation. *Journal of Management*, 39(3), 684-708

Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30(6), 933-958.

Veenendaal, A., & Bondarouk, T. (2015). Perceptions of HRM and their effect on dimensions of innovative work behaviour: Evidence from a manufacturing firm. *Management Revue,* 26(2), 138-160.

Weijs-Perrée, M., Appel-Meulenbroek, H. A. J. A., De Vries, B., & Romme, S. (2016). Differences between business center concepts in The Netherlands. *Property Management*, 34(2), 100–119

Weijs-Perrée, M., Koevering, J., Appel-Meulenbroek, R., & Arentze, T. (2019). Analysing user preferences for co-working space characteristics. *Building Research & Information,* 47(5), 534–548.

Yin, R. K. (2014). Case Study Research: Design and Methods (5th ed.). Thousand Oaks, California: Sage Publications.

Appendix A – Interview Guide

Interview guidelines and operationalization of interview questions.

The interview will be held and in Dutch and therefore the interview is written in Dutch.

Bedankt voor uw deelname aan dit onderzoek door middel van dit interview. Voor mijn masterscriptie doe ik onderzoek naar de invloed van 'co-working spaces' op het innovatieve werkgedrag van individuen. 'Co-working spaces' zijn plekken waar individuen in een professionele omgeving kunnen werken zoals Start-up Nijmegen. Om dit te onderzoeken zal ik u in dit onderzoek een aantal vragen stellen over 'co-working spaces' en hoe u dit ervaart. Dit interview zal ongeveer een 20-25 minuten duren. De antwoorden die u geeft tijdens het interview zijn vertrouwelijk en zullen anoniem in het onderzoek worden gebruikt. Dit interview zal met uw goedkeuring worden opgenomen zodat de antwoorden later getranscribeerd kunnen worden en in het onderzoek kunnen worden gebruikt. Mochten er onduidelijkheden zijn in de vraagstelling of doel van dit interview kunt u altijd vragen om extra toelichting.

Algemene/ inleidende vragen

Vraag 1. Wat was uw motivatie om aan te sluiten bij een co-working space, start -up nijmegen?

Vraag 2. Hoe lang bent al aangesloten bij Start-up Nijmegen?

Vraag 3. Heeft u ook bij andere co-working spaces gewerkt, zo ja wat was uw ervaring daar?

> *(Deze inleidende vragen hebben als doel een beeld te schetsen hoe bekend de respondent is met co-working spaces. Daarnaast kan de motivatie direct of indirect te maken hebben met 'innovative work behavior'.)*

Vragen met betrekking tot propositie 1: *Individuals perceive the presence of a co-working host to have a positive influence on their innovative work behavior if the co-working host has a supporting and encouraging management style.*

Vraag 4. Welke rol heeft de co-working host vanuit uw perspectief binnen deze co-working space?

Vraag 5. Maakt u gebruik van de aanwezigheid en rol van de co-working host?

Vraag 6. Heeft de aanwezigheid van een co-working host uw geholpen met uw bedrijf, zo ja op welke manier?

Vraag 7. Denkt u dat de aanwezigheid van een co-working host als meer positief of negatief kan werken?

De vragen met betrekking tot propositie 1 zijn als volgt opgebouwd. De eerste vraag is een inleidende vraag hoe de respondent de rol van de co working-host ziet. De tweede vraag gaat over hoe de respondent gebruik maakt van de co-working host. Dit kan inzicht geven op de manier waarop de co-working host innovative work behavior stimuleert. De derde vraag sluit hierbij aan door te vragen hoe de rol van de co-host heeft geholpen met de groei van het bedrijf. De vierde vraag gaat na of een co-working host wel of niet wordt geprefereerd. Bij zowel de 2de als 3de vraag zal worden doorgevraagd naar ontwikkelingen met betrekking tot innovative work behavior

Vragen met betrekking tot propositie 2: *Individuals perceive a low professional focus, which consists of a heterogeneous group, to more positively influence their innovative work behavior in comparison to a more homogeneous group.*

Vraag 8. Hoe is de samenstelling van mensen binnen start-up nijmegen, zijn er veel mensen vanuit dezelfde of verschillende sector/ specialisatie/ sector aanwezig?

Vraag 9. Op welke manier heeft de samenstelling van de groep invloed op uw eigen bedrijf?

Vraag 10. Op welke manier heeft u gebruik gemaakt van kennis en ervaringen van andere co-workers?

Vraag 10. Zijn er volgens u meer voor- of nadelen van deze samenstelling in vergelijking met een meer diverse groep? (of een groep die niet divers is)

> *De vragen met betrekking tot propositie 2 zijn als volgt opgebouwd. De eerste is een inleidende vraag om erachter te komen wat de samenstelling is binnen de co-working space. In de tweede vraag wordt gevraag naar de ervaring die de persoon heeft met deze samenstelling met betrekking tot zijn eigen bedrijf. De derde vraag gaat over het gebruik van kennis van andere in de groep, om te kijken of dit heeft geleid tot innovatief werk gedrag .De vierde vraag gaat in op voor en nadelen van de groep die wordt beschreven door de respondent. Afhankelijk van de groepssamenstelling zal doorgevraagd worden op specifiek een homogenous of heterogenous groep.*

Vragen met betrekking tot propositie 3: *Individuals perceive a high professional focus, which consist of the offering of training and networking events, to positively influence their innovative work behavior.*

Vraag 11. Op welke manier worden er trainingen en cursussen aangeboden?

Vraag 12. Op welke manier maakt u gebruik van deze trainingen en cursussen?

Vraag 13. Helpen deze trainingen bij het genereren van nieuwe ideeën en uitbreiden van skills en kennis?

Vraag 14. Op welke manier worden er netwerk evenementen aangeboden?

Vraag 15. Maakt u gebruik van deze netwerk evenementen, zo ja op welke manier?

Vraag 16. Op welke manier hebben deze netwerk evenementen u geholpen?

> *De vragen met betrekking tot propositie 3 zijn als volgt opgebouwd (2x3 vragen). De eerste vraag zal vragen naar welke vormen van traingingen er worden aangeboden. De tweede vraag zal vervolgens ingaan op hoe hiervan gebruik wordt gemaakt. De derde vraag zal vervolgens ingaan op hoe dit helpt bij het genereren van nieuwe ideeën, skills en kennis, zoals beschreven in de literatuur. Hierbij zal worden doorgevraagd op welke manier het nog meer invloed heeft op innovative work behavior.)*

Vragen met betrekking tot propositie 4: *Individuals perceive the social interactions provided by the co-working space to have a positive influence on their influence innovative work behavior.*

Vraag 17. Op welke manier vind er onderlinge interactie plaats met andere co-workers?

Vraag 18. Hoe ervaart u de onderlinge interactie/ support met andere co-workers?

Vraag 19. Leiden deze onderlinge interacties/support tot nieuwe ideeën of nieuwe kennis?

(De vragen met betrekking tot propositie 4 zijn als volgt opgebouwd. De eerste vraag zal vragen naar welke vormen van interactie, plaats vind met andere co-workers. De tweede vraag zal vervolgens ingaan op hoe dit wordt ervaren. De derde vraag zal vervolgens ingaan op de vraag of deze sociale interacties/support helpen bij het genereren van nieuwe ideeën of kennis. Hierbij zal worden doorgevraagd op welke manier het nog meer invloed heeft op innovative work behavior.)

Appendix B - Code Book

Quotes Participants	Open code	Axial code	Selective code
Ja hij noemt zichzelf de aanjager van StartUp Nijmegen en zijn titel. Dat is ook een beetje wat hij doet hij jaagt alles zeg maar aan. (resp 2, p.49)	Driving force	Role of Host	Co-working Host
Hij heeft ook alle initiatieven genomen in het begin bij het opzetten van StartUp Nijmegen. (resp 2, p.50)	Taking initiative		
Dan is het handig om een centraal aanspreekpunt te hebben om even binnen te lopen en je vraag neer te leggen. (resp 2, p.50)	Point of contact		
Want de host is zoals die het zelf omschrijft de aanjager. Die stimuleert je echt om beter te werken. (resp 4, p.62)	Stimulating rol		
alles wat daardoor wordt georganiseerd en de workshops en de vragen die je kan stellen en de BAM groepen (resp 4, p.63)	Facilitator		
De alwetende, niet alles wat die zegt klopt en niet alles wat die zegt is waar, maar hij heeft altijd een goed woordje of een opbeurende opmerking of een prikkelende vraag of een confronterend iets (resp 5, p.67)	Excite		
Kijk iedereen kan met ideeën komen, maar sommige mensen zijn gewoon goed in de rol als facilitator en dan merk dan is zo'n sessie veel productiever en iedereen haalt er ook meer uit. (resp 6, p.77)	Facilitator		
Positief. Ik denk als je het niet hebt dat er wat mist. Je kan hele fijne stoelen hebben, goeie bureaus, goeie koffie, goeie wifi, maar een constante factor een constante menselijke factor. Dus niet alleen je collega's, maar iemand die er altijd is. Ik denk dat dat heel fijn is. (resp 5, p.68)	Presence of human factor		

Je gooit tegen hem aan, hij geeft een mening terug. Daar hoef je het niet mee eens te zijn maar het is een mening. En dat kan best wel verhelderend werken (resp 3, p.56)	Giving opion	Attitude of host	
Die onwijs pro actief bezig zijn om het geheel een succes te maken en ik denk dat daar de onderscheidende factor zit voor StartUp Nijmegen. (resp 3, p.57)	Pro active attitude		
De host was ook heel erg bij betrokken. Dus toen zat hij er heel erg bij wat ben je aan het doen, waar loop je tegenaan. Hij was heel actief bezig (resp 4, p.62)	Active rol		
Ze kennen altijd wel mensen in of rondom Nijmegen die jou kunnen helpen met specifieke dingen. (resp 2, p.49)	Connecting	Knowledge of Host	
Dat je als het ware kunt binnen lopen en zegt ik heb een nieuw idee voor mijn bedrijf of ben opzoek naar klanten of wat dan ook. (resp 2, p.49)	Pitching ideas		
Toen we dat idee hadden zijn we direct bij de host naar binnen gelopen en zeiden we, hee dit is ons idee en dit zijn we van plan. (resp 2, p.50)	Quick feedback		
Ik zie de host vooral als degene die ook ondernemers inhoudelijk kan en wil helpen, want hij sluit ook aan bij zogeheten Bam groepjes (resp 6, p.76)	Knowledgable		
merk je toch je hebt wat structuur nodig, zodat iedereen ook echt de waarde van zo'n sessie inziet en dat je ook echt ergens aan gaat bouwen. (resp 6, p.77)	Stucture		
Dus wat mij betreft, voor mijn persoonlijke smaak zitten er teveel ondernemers bij StartUp om fijne interactie mee te hebben (resp 1, p.47)	Group size	Group size	Group composition

Want het is wel echt een community, je hebt dezelfde mensen om je heen en die leer je dan kennen en bouw je een band mee op (resp 2, p.53)	Creating community		
Daar zitten 90 mensen nu in, dus er zitten altijd wel mensen die je kunnen helpen of hetzelfde hebben meegemaakt. (resp 4, p.64)	Similar experiences		
maar als ik kijk naar de echte toegevoegde waarde voor mij dan zijn het meer IT'ers die daar zitten dat ik hun een vraag kan stellen, omdat ik zelf niet zo diep in de IT (resp 1, p.45)	Shared knowledge	Group knowledge	
Dus wat dat betreft denk ik dat die grote variëteit wel heel veel voordelen kan hebben. (resp 1, p.45)	Sariety of knwoledge		
Dat is ook het fijne aan het concept, want stel dat je nou met iemand wil sparren over je website, bedrijf of iets dat je geprogrammeerd moet hebben. Dan heb je gelijk iemand die daar gespecialiseerd in is. (resp 2, p.51)	Grouped knowledge		
,dus als ik bijvoorbeeld wil leren over marketing als ik nieuwe marketing strategieën zoek (resp 2, p.52)	Looking for new knowledge		
En als de host dan al met iemand anders in gesprek was liep je naar iemand anders toe, die er misschien meer kennis van had op dat gebied. (resp 4, p.62)	Availability		
er zit veel kennis en ervaring. Alles waar jij tegenaan loopt, zit er ook wel iemand die er al een keer tegenaan is gelopen. (resp 4, p.62)	Past experience		

Dus op die manier ook juist mensen met een heel andere achtergrond en andere kennis. Je doet snel nieuwe kennis op om zelf efficiënter te werk te gaan. (resp 6, p.79)	Efficiency		
Een ondernemer die bij ons zit heeft heel veel ervaring op het gebied van sales. Hij heeft het daarvoor ook in verschillende functies gedaan. En ik heb daar wat minder ervaring op dus ik leer daar van (resp 7, p.85)	Learning form others		
Maar soms is het ook wel fijn om mensen te spreken die iets heel anders doen en een heel ander perspectief kunnen geven. (resp 2, p.41)	Change of perspective	Different perspective	
Want als ik alleen maar techneuten en juristen om heen zou hebben dan zouden ze vaak met dezelfde ideeën komen, want die denken vaak op dezelfde manier. (resp 2, p.51)	Different way of thinking		
En niet iedereen is altijd even happy, maar iedereen heeft wel ervaringen en die ervaringen kun je weer uit putten en die kun je in je eigen dienst weer vormgeven. (resp 3, p.60)	Different experiences		
Dan hoor je wel van die dingen, niet dat je het meteen goed aanpakt, maar je gaat er wel over nadenken om het te kunnen verbeteren. (resp 4, p.64)	Change way of thinking (training)		
En dan denk je, hee misschien kan ik daar ook wel wat mee gaan doen, want omdat je natuurlijk met elkaar praat dan hoor je nieuwe inzichten, nieuwe meningen, nieuwe ideeën en dat zet je ook weer aan het denken. (resp 4, p.66)	Makes you think		
Omdat ik denk dat andere manieren van doen en denken mij sterker maken (resp 5, p.70)	Different way of doing things		

Hier ontstaat het eigenlijk vanzelf en dan ga ik ook met mensen in gesprek die iets heel anders doen dan waar je normaal naar zou kijken. (resp 6, p.82)	Expanding own horizon		
Daar kun je een klein beetje netwerken met elkaar en daar kom je er meer achter wat iedereen doet en kun je een beetje sparren. (resp 1, p.47)	Informal gathering	Informal encounters	Social intensity
Heel soms raak ik spontaan in gesprek met mensen bij het koffiezet apparaat en krijg je weer nieuwe ideeën. (resp 2, p.51)	Spontaneous encounters		
Als ze dan in de kantine zitten of lunchen ofzo dan vertel ik over waar ik mee bezig ben en waar ik tegenaanloop. Of nieuwe ideeën die ik bij ze neerleg en zeg wat vind jij hiervan. (resp 2, p.54)	Canteen interaction		
Dan zeg je gewoon even hoi tegen iemand en ben je even koffie aan het drinken in de kantine en dan stellen ze je een vraag waardoor je denkt van hee dat is eigenlijk wel een goeie en brengt het je weer op nieuwe ideeën. (resp 2, p.54)	Spontaneous interaction		
maar het is vaak gezellig om met twee drie man ergens een lokale horeca gelegenheid op te zoeken. Even te zitten en te overleggen. (resp 3, p.60)	Lunch meetings		
En dat is ook hoe ik zaken doe. Als ik met iemand in gesprek raak die ik leuk vind en ik zie iemand zitten. Ik altijd naar alle nieuwe toe, van goh ik ken je niet (resp 5, p.72)	Meeting new people		
Dus ik heb ook veel mensen al eens opgezocht. Even met hen gezeten en wat ideeën gedeeld. En om advies gevraagd en andersom. (resp, p.79)	Sharing knwowledge		

Dat soort dingen gebeuren ook wel vaak zonder dat je het bewust over werk hebt, maar datje interesse toont. Op die manier komen er ook regelmatig nieuwe business of ideeën uit. (resp 6, p.81)	Spontaneous encounters		
En ook als je eenmaal een relatie hebt opgebouwd met iemand en ze komen bij een ander bedrijf terecht en ze vangen op dat die ook wat willen doen met wat ik doe. Dan zullen ze mij wel linken daaraan. (resp 7, p.87)	Building relations		
in het begin vond ik het heel leuk om nieuwe mensen te leren kennen. Toen dacht ik van ja ik wil gewoon allemaal verschillende mensen kennen, mijn netwerk vergroten, nieuwe dingen leren van mensen. (resp 2, p.54)	New environment	Social environment	
Dus het is heel fijn die mensen om je heen te hebben die je spontaan even kunt aaspreken en ideeën kunt opdoen die je eigenlijk vanuit huis niet zou krijgen. (resp 2, p.55)	Social interactions		
Bam groepje dat zijn ondernemers die samen eens in de week even gaan zitten om wat kennis te delen en elkaar te helpen. (resp 6, p.76)	Collaboration groups	Discussion events	Internal knowledge events
En dan heb je eigenlijk een uurtje dat je tijd krijgt om die ondernemer vragen te stellen of te sparren over bepaalde zaken of ideeën. (resp 1, p.44)	Partner conversations		
Je bent veel onderling aan het overleggen en er zijn interne social media pagina's met vraagstukken die langskomen. Daar wordt veel overlegd (resp 3, p.58)	Social media accounts		

Er zijn wel andere trainingsvormen die er zijn zoals de mogelijkheid om eens in de zoveel tijd in de middag in 5 minuten je bedrijf te pitchen en daar feedback op te krijgen. (resp 3, p.59)	Pitching ideas		
Ik heb zeker in de begin periode bij elke workshop geweest die werd georganiseerd. Gewoon alles, je kan er nooit dommer vandaan komen. Het enige wat kan gebeuren is dat je er vandaan komt en denkt hier heb ik niks van geleerd. (resp 4, p.64)	Gaining knowledge	Workshops	
Voor mijzelf ik ben iemand die echt naar hele specifieke vraagstukken kijkt, dus als ik bijvoorbeeld wil leren over marketing als ik nieuwe marketing strategieën zoek. Dan bezoek ik specifiek daar een workshop voor. (resp 2, p.52)	Learning new strategies		
Ik vind ze nooit interactief genoeg en ik vind ze nooit voldoende rekening houden met de doelgroep en ik vind ze niet goed voorbereid genoeg en ik vind ze inhoudelijk niet interessant (resp 5, p.70)	Course content		
Dus een online training of een Webinar, daar kan ik helemaal niks mee. Dan had ik net zo goed een boek kunnen lezen over het onderwerp (resp 5, p.71)	Webinars		
Je leert er wel door communiceren, je leert er wel door op af te stappen. Je leert er je verhaal te doen. Want je moet twintig , dertig keer je verhaal doen op een avond (resp 4, p.65)	Improve skills	Networking	
Ja en iedereen heeft ook een breder georiënteerd netwerk, waardoor je dus ook tweede en derdegraads netwerken hebt. Het netwerk van StartUp is daardoor veel groter. (resp 7, p.85)	Increase network		