MASTER THESIS

THE ROLE OF STUDYING QUALITATIVE RESEARCH METHODS IN ENABLING CAREER-ORIENTED SKILLS OF UNIVERSITY GRADUATES

Stefanie Scheckelhoff

Faculty of Behavioural, Management and Social Sciences (BMS)

University of Twente

EXAMINATION COMMITTEE

First Supervisor: Prof. Dr. Tanya Bondarouk

Second Supervisor: Dr. Aizhan Tursunbayeva

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PREFACE

I would like to use this opportunity to express my gratitude towards the people who helped me with completing this project. Especially in time of the pandemic I am thankful for all the help and support I received to guide me through my studies.
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ABSTRACT

The focus of this paper lies on gaining deeper knowledge on the role that studying qualitative research methods takes in enabling career-oriented skills of university graduates. We perform an inductive qualitative analysis of 165 reflective accounts written by master students after the completion of a qualitative research methods course. By applying Kolb's theory of experiential learning we expand the knowledge on the how an experience-based qualitative research methods course leads to attaining career-oriented skills. Many of the skills attained by the business graduates show resemblances to skills described as important for the job-market as revealed by prior academic research. We further argue that many of the career-oriented skills that were found are co-occurring with other relevant skills according to the students' reflective accounts. In conclusion, we found that qualitative research methods courses can be valuable for students' development of career-relevant skills and mention a range of skills that can be developed by practicing experiential qualitative research methods.

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INTRODUCTION

In the western world, qualitative research (QR) has been actively used as a research method for almost 100 years (Bailey, 2014). The legitimacy of qualitative research in academic research was initially contested. For a long time “QR is considered by positivism-minded scholars as too “subjective,” “impressionistic,” and “unsystematic.” Due to its small non-random sample and interpretive nature, QR is viewed as difficult framework from which to discuss issues of validity, reliability, and generalizability in putatively scientific terms” (Chen, 2016, p. 73). Even nowadays, much anecdotal evidence seems to point at the fact that qualitative research is still being looked down on by some practitioners of quantitative research. This can also be seen in academia as qualitative research is criticized for being too subjective or biased while some scholars fail to recognize the value it adds to modern research (Antwi & Hamza, 2015; Bluhm, Harman, Lee, & Mitchell, 2011; Collier & Mahoney, 1996). Authors are well aware of these patterns and try to shed some light on the perceived favoritism towards quantitative research. For example, Cassell (2018) found this bias in her study about students’ reflective accounts of their first experience with qualitative research. Part of the challenges perceived in conducting qualitative studies is the perceives credibility of qualitative research methods: "it seems there is some risk in that the data can be seriously distorted by the researcher; unlike the case of quantitative research." (Cassell, 2018, p. 127). The student seems to think that quantitative has by nature a higher face validity than qualitative research. Cassell summarizes her impression on the students’ reflective accounts as follows: "the students wanted to produce a good piece of work, but their assumptions about what constitutes good quality research focus upon the application of positivist criteria, such as objectivity, validity, and reliability of the research process." (Cassell, 2018, p. 127). Another example comes from Johansso, Risberg and Hamberg (2003), who show with their study in hospitals that primary care and hospital physicians do consider qualitative research less scientific than quantitative research. While results of qualitative studies are considered relevant the physicians doubt its scientific accuracy. For a qualitative researcher, being exposed to this view on qualitative approaches can be quite frustrating to deal with. Bansal and Corley (2011, p. 235) discuss that the goal of research is to contribute findings which “change, challenge of fundamentally advance our understanding of a phenomenon”. It has been recognized that qualitative research can fulfill this need as it considers the complexity of topics that would otherwise be reduced and condensed into numbers by quantitative research (Cassell & Gummesson, 2006). Further, authors argue that qualitative research manages to conduct a more intense, holistic collection of narrative data (Ahmad, Wasim, Irfan, Gogoi, Srivastava, & Farheen, 2019). The newer developments in research show that the trend of conducting research is increasingly often going towards mixed methods designs (Antwi & Hamza, 2015; Creswell, 2009).

Later, practicing qualitative research also spread beyond the western world and reemerged in Asian countries in order for the scholars to socialize academically amongst the western world (Chen, 2016). As reported in some studies, in the 1990s Chinese scholars wanting to teach and practice qualitative research methods had to face bias of universities which include “misunderstanding about QR as “unscientific” and “too subjective,” lack of support for doing and teaching QR, and irrelevance of some Western protocols and tacit knowledge in the Chinese context” (Chen, 2016, p.73). It was also noticed that in China it is more common than it is in western countries to teach a combination of a more theoretical and practical approach to qualitative research (Chen, 2016), meaning the pedagogy of unity of knowing and doing, also known as the Chinese epistemology. The thought behind their teaching practice connects to the belief that “knowing is the beginning of doing and doing is fulfillment of knowing” (Wang, 2014, p. 31).

According to many scholars who research the transition of students from studying to working, western business schools and universities do not prepare students to enter the job market after graduation or train them skills that are required in working life (Aram & Noble, 1999; Bennis & O'Toole, 2005). The skills that are taught in our educational system might prepare the graduate for the entry of the job market but not necessarily for the survival in a competitive working field (Aram & Noble, 1999; Bedwell, Fiore & Salas, 2014; Bennis & O'Toole, 2005). Students are not being taught career-oriented skills, which are impactful skills needed to become a leader. Many scholars criticize the focus on theory instead of preparing the students for how the world works and reflecting how businesses operate and teaching career-oriented skills. Scholars discuss that there is overemphasis of creating knowledge through research at loss of applying this knowledge in practice and gaining practical skills (Aram & Nobel, 1999).

The current university and business school system does not support students enough in practical learning (Cassell, Bishop, Symon, Johnson, & Buehring, 2009). Several authors have the opinion that cookbook approaches to teaching qualitative research or spoon-feeding information to the students are not sufficient for reaching the learning goals (Cassel et al., 2009; Dehler & Welsh, 2014). Further, a very theoretical approach to learning as it is practiced in many business schools and universities nowadays leads the students to apply short-term approaches to learning with an unreflective mindset which leads to the inability to distinguish key ideas (Dehler & Welsh, 2014). The authors describe that true learning requires meaning making and understanding. Integrative learning is needed for students to voice their opinion as a learning individual.

Beyond that Cotter & Cullen (2012) describe reflexive learning as another take on essential skills. "Reflexive management learning is used here to cover all conceptual and practical expressions of formal management learning, education, and development which endorse and include both reflective and/or reflexive elements situated within a variety of pedagogical settings. Reflection and reflexivity are interrelated contexts, but they do have some distinctive components" (Cotter & Cullen, 2012, p. 229) Beyond that, reflective learning and reflexive learning are emphasized as two skills that are essential for developing a sustainable practice for management development. Being able to practice reflexive thinking provides the experiences that an individual makes with meaning and learning these skills can be very beneficial upon entry of the job market.

Bedwell et al. (2014) argue that interpersonal skills are essential upon joining the workforce. They found that 32% of the variation in performance ratings of peers consists of interpersonal skills. These include collaboration and communication skills, teamwork, written and oral communication skills and social skills. Conquering communication and interpersonal skills can make the difference between what employees would rate a competent versus incompetent manger. Gebauer (2014) describes the idea of mindful organizing. This is a way to prepare managers for unexpected events challenging their ability to manage complexity in risk-prone environments. Managers are expected to act proactively in unanticipated situation and increase resilience to act accordingly immediately.

Aside from the problem that students are not adequately prepared to join the job market, when done right, educating on qualitative research methods can teach some of the skills that are essential for a successful professional or even managerial career (Aram & Noble, 1999; Bennis & O'Toole, 2005).

Based on the compiled academic literature, we argue that the most important career-oriented skills include - but are not limited to - interpersonal skills, integrative learning skills, practical orientation, managing complexity and challenges, organization skills and proactive behavior.

There are different skills that can be gained from studying qualitative research methods. The first set of skills is content specific and related to the science of conducting, analyzing, and writing down research.
Cassel et al. (2009) expand on these skills as knowledge of data collection, analysis skills and writing skills. Further, it can include critical evaluation of your and other peoples work. A second set of skills is more general and the more universally applicable skills of reflection, reflexivity and phronesis (Cassel et al., 2009). It further includes communication skills, listening skills, development of an inquiring mind, development of curiosity, flexibility, the ability to react to unpredicted situation and circumstances, reflection and problem solving.

Lee and Sobol (2012) discuss the functions that qualitative and quantitative data can have in a company. They point out, that while data can give the company an idea about patterns or trends, this does not answer the questions about why we experience these trends. Looking at the data past the numbers much like a researcher would with a qualitative approach can reveal important information critical for a business and its future growth and innovation.
Further than that, in the business world we rarely have raw numbers and quantitative data available (Lee & Sobol, 2012). The usefulness of studying raw data is limited when looking at everyday problems in companies and how much data is available on an everyday basis within organizations (Lee & Sobol, 2012). The authors discuss that those daily problems often require much intuitive thinking and responding based on experience and companies often only collect quantitative data on the larger project and more exhaustive problems. Therefore, many authors discuss which skills are learned through teaching and studying qualitative research methods and further pursuing an academic career (Aram & Noble, 1999; Bedwell et al., 2014; Chen, 2016). Further, research is done on which skills are needed in order succeed in the workplace or become a good manager (Cotter & Cullen, 2012; Bedwell et al., 2014). So far, no work is done on the connection which can made between those two. The question arises, how skills that are gained though studying qualitative research methods can benefit graduates in a career outside of academia. The following research question guided our investigation:

What is the role of studying qualitative research methods in enabling career-oriented skills of university graduates?

The goal of this paper is to expand the existing knowledge on the impact that learning about qualitative research methods can have on the professional life beyond conducting research. Beyond than that we aim to explore the skills that are often developed by students studying qualitative research methods and how these fit into established theories of learning. Lastly, we seek to find patterns of often simultaneously occurring skills and how these fit into groups of skills.
To achieve this goal, we explored learned skills and knowledge university students gained after completing a practice-oriented qualitative research methods course. The focus of this paper will emphasize the current status of, and development from qualitative research in the field of management development emerging from the fields of psychology, social sciences, and management (Cotter & Cullen, 2012). With this paper we have the intention of proving the relevance of teaching qualitative research methods and motivate the use of experiential methods in universities for business-related courses.
In the following, the theoretical background will be discussed to set a frame of analysis for the data that has been collected. The data of aforementioned students' self-reflections will provide a basis for

argumentation of this paper. The data is used for the analysis and will be discussed in the methods and result section. These will be followed by a discussion of the results, limitations of this paper and further research.

UNDERSTANDING THE LEARNING PROCESS

LEARNING: A DEFINITION

Before moving on to the learning theory that is fundamental to this paper, we need a definition of learning. One of the most widely known definitions of learning undoubtedly has its origin in Skinner's theory of classical and operant conditioning. Learning occurs as a mechanism for change in behavior to environmental stimuli (Skinner, 1965). Since these discoveries, many authors have worked on a more accurate definition of learning. De Houwer, Barnes-Holmes and Moors (2013) solve problems with previous definitions and propose learning to be an ontogenetic adaptation, namely the "changes in the behavior of an organism that are the result of regularities in the environment of that organism" (De Houwer et al., 2013, p. 633). As we perceive regularities in our environment, we adapt our behavior to match these regularities, including responses of changes in the somatic or autonomic nervous system as well as neural processes. This process is portrayed by research of Kolb, as explained in the following part. The assumption is that in four stages we actively experiment, experience, observe and reflect on our behavior based on these regularities we perceive in our environment. The outcome of this process is learning.

PREVIOUS RESEARCH

Previously, Cassell (2018) researched students' experiences with conducting qualitative research methods. Cassell discusses the importance of practical appliance of theoretical knowledge for students' development of interpersonal and managerial skills that can be developed during a practical application of qualitative research skills.

She reports on challenges the students perceive during the process and outlines practical concerns that her students have, their concerns regarding complexity of conducting qualitative research, the perceived credibility of qualitative research methods and lastly challenges to previous experiences (Cassell, 2018). These include problems in dealing with respondents and the time-intense nature of qualitative research methods, concerns regarding objectivity, validity and reliability and the novelty of the methods. Based on those findings about the challenges she comes up with "implications for Teaching and Learning Qualitative Research" and "Implications for Role of Qualitative Research Curriculum to Foster Interpersonal Skills Development" (Cassell, 2018, p. 132). Cassell found that based on students challenges implication for teaching practices are, amongst others, the importance of focusing on developing interpersonal skills, give opportunities for experimental exercising, prepare students for the unpredictable nature of data collection, emphasize the role of reflection and reflexivity and lastly to challenge premade assumptions about knowledge.

With this paper we want to build on the knowledge she established about the challenges of conducting qualitative research and the subsequent implications. Based on her findings, we move on in this paper to identify students' skill development specifically during the experiential exposure to qualitative methods based on Kolb's theory of experiential learning. As Cassell (2018) points out the usefulness of experiential learning, we want to take a deeper look into the different types of experiential learners and how these relate to business-specific interpersonal skills. Instead of looking

at students perceived challenges, we want to have a better look at the skills they gained during the process of conducting qualitative research.

KOLB'S THEORY OF EXPERIENTIAL LEARNING

To evaluate the acquisition of career-oriented skills by university students, we need to understand the process that those students go through. Different learning theories attracted our attention. However, our choice was done for the approach which emphasizes learning through experience, - the experiential learning theory brought forward by David Kolb. Kolb first introduced his theoretical advances based on the writings of Dewey, Lewin and some other scholars in 1971, calling it "Organizational Psychology: An Experiential Approach", and he later went on to advance his approaches further in his works, that became very influential like Experiential Learning Theory: Previous Research and New Directions (Kolb & Fry, 1974), and Experiential Learning: Experience As The Source Of Learning And Development (Kolb, 1984).

Kolb emphasizes the importance of experience and proposes that learning happens in four stages and takes place as a holistic process. He firmly believes that learning is best measured as a process, not by the outcome and underlines the value of subjective experiences for the learners, in contrast to the convergence of abstract concepts to learners via an educator (Kolb & Kolb, 2017).
Kolb's framework is made up of four stages (figure 1). The first stage consists of making concrete experiences which, in the second step are observed and reflected on (Kolb & Fry, 1974). In the third step the learner makes abstract concepts and generalizations about the experience. Lastly, these observations are used in order to modify behavior for upcoming experiences to apply the newly gained knowledge and start the circle over again. These four stages correspond to four skills that are hypothesized to be important during the learning process and grouped in four categories: experiencing, reflecting, thinking, and acting (Kolb & Fry, 1974). More precisely, these learning skills were named Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualization (AC) and Active Experimentation (AE) respectively (Kolb & Fry, 1974). These four stages are complementing the others and each stage is important for a holistic process of learning in which the knowledge that is learned can be applied in practice: "If we merely apprehend without comprehending, we act without knowing-the experience that is taken in perishes, impoverished and unfunded; if we comprehend without apprehending, we live in a solipsistic world of arid and unrealized concepts." (Hopkins, 1993, p. 49)

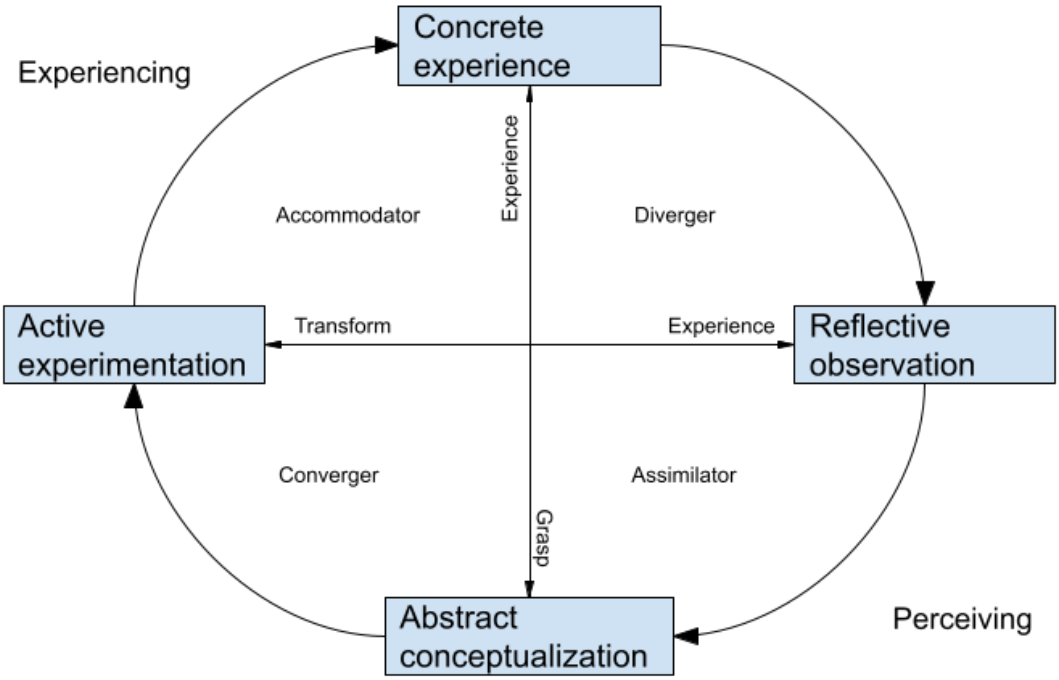

Figure 1: Kolb's framework of experiential learning and the learning styles. Based on figures of Kolb & Kolb, 2017 and Hickcox, 1990.

Based on these four groups of skills, the theory suggests that it is possible to group learners in different classifications of learning types, as approached differently by several scholars. For example, Hickcox (1990) split learners into two categories of what the main focus during the learning process is directed at: perceiving (prehension) and processing (transformation). These are based on Kolb's (1974) differentiation into emphasizing abstractness over concreteness (AC-CE) and active experimentation over reflection (AE-RO) (Kolb & Fry, 1974). On one hand, as the learner is perceiving, he or she is more dawn towards concrete experience and abstract conceptualization (Hickcox, 1990). On the other hand, a processing learner is more in favor of reflective observation and active experimentation.

Kolb and Fry (1974) further divided the four skills of Concrete Experience, Reflective Observation, Abstract Conceptualization and Active Experimentation into the four types of personalities. Here, it is emphasized that not all learners approach the process of experiential learning in the same way.

They identify a Converging personality style (AC-AE) consisting of people who find their abilities in solving problems and applying ideas and theories to practice, being drawn towards technical tasks instead of social problems, often found in engineering and nursing (Kolb, Boyatzis, & Mainemelis, 2001; Kolb & Fry, 1974). Diverging personalities (CE-RO) are skilled at coming up with new ideas and seeing a problem from many different angles. They have a broad range of interests and are open-minded and often include individuals with careers in psychology, languages, history, or political sciences. Assimilating learners (AC-RO) are talented at inductive reasoning and collecting much information to combine it comprehensively into theory. These skills can be found in many fields

including economics, mathematics, sociology, chemistry, physics etc. Accommodating personality styles (CE-AE) excel at carrying out plans with a very action-oriented approach and this personality can often be found in business (Kolb et al. 2001; Kolb & Fry, 1974).
What makes the theory of experiential learning so innovative is that it describes individual differences during the learning process. Earlier approaches which inspire Kolb's theory like the ones by Dewey, Lewin and Piaget did not place much emphasis on individual differences in their behavioral theories. Considering subjective experience as an important factor in how we learn makes it possible to come up with pattern and categories that learners can be classified into. The four stages of learning which require four specific skills of the learner to succeed in the process of learning bring forward more differentiated learning styles stemming from the original four styles. From the experiential learning theory, Kolb derived a learning style inventory (LSI) that makes it possible to easily identify different learning styles in individuals (Kolb, 1999).

Kolb's experiential learning theory has found wide appliance in many different fields including management (Kayes, Kayes, & Kolb, 2005; Kolb & Kolb, 2009), education (Hamer, 2000; Healey & Jenkins, 2000), information sciences, psychology (Biswas-Diener & Patterson, 2011; Earnest, Rosenbusch, Wallace-Williams, & Keim, 2016; Houge Mackenzie, Son, & Hollenhorst, 2014), nursing (Barnard, 1987; de Oliveira, do Prado, Kempfer, Martini, Caravaca-Morera, & Bernardi, 2015; Yardley, Teunissen, & Dornan, 2012), accounting (Baker, Simon, & Bazeli, 1987; Specht & Sandlin, 1991) and law (La Rue, 1991; Maranville, 2001)(Kolb & Kolb, 2005). The theory is widespread in the western world but also finds its influence in Brazil, China, India, and Japan (Kolb & Kolb, 2017). Between 1971 and 2016 there have been over 4100 entries citing the theory with 27% of the articles in management education journals referencing the theory and the learning styles (as cited in Kolb & Kolb 2017). Kolb's ideas have further found application in educational courses and programs (Kolb & Kolb, 2017). Scholars consider experiential learning to be important as "experiential lessons provide students with an opportunity to experience concepts first-hand and, as such, give students a richer, more meaningful understanding of course concepts and of how they operate in the real world" (Slavich & Zimbardo, 2012, p. 21).

Other authors since came up with possible applications of the experiential learning theory for classrooms as a new way of teaching. Thus, Dyer and Schumann (1993) want to address shortcomings in appliance of the original models by Lewin and Dewey: "Lewin's model demonstrates the importance of interaction, feedback, and the critical contribution gained from personal reflection on experience as it relates to knowledge. The Dewey model adds an emphasis on the iterative nature of experiential learning" (Dyer & Schumann, 1993, p. 34). Instead of repeating instructional approaches to the students, there is an emphasis on partnering existing knowledge with concrete experience. In the next step, traditional teaching approaches "i.e., multiple choice exams and essay exams, were eliminated in order to focus on a repeating cycle of lecture, discussion, and hands-on experiences" (Dyer & Schumann, 1993, p. 34). In this way, Dyer and Schumann aim at applying approaches based on the experiential learning theory in higher education. Further approaches aim at developing learning and teaching approaches for university students in management courses, engineering, and technology (Harb, Terry, Hurt, & Williamson, 1995; Lengnick-Hall & Sanders, 1997).
Based on approaches to experiential learning "Results indicate that despite wide variety in their learning styles, experiences, academic levels, and interests, students demonstrated consistently high levels of personal effectiveness, organizational effectiveness, ability to apply course materials, and satisfaction with both course results and the learning process" (Kolb & Kolb, 2017, p. 20).

To this day, David Kolb's works have been cited over 110000 times since his first proposal of the theory 50 years ago[1]. With gaining this much attention, the experiential learning theory and especially the learning style inventory have received some criticism over the years. The theoretical framework of the theory is criticized for oversimplifying the process of learning. The model can only account for so many aspects at the expense of others. "Kolb's work that prevail in management development invariably neglect the social, institutional, or cultural aspects of which experience is comprised." (Reynolds, 1999, p. 539). With less than 5% of between-group variance accounting for learning style and a low test-retest reliability the LSI is often regarded to have low reliability (Freedman & Stumpf, 1980). The authors further criticize the interdependence of the different scales which rules out inclusion into more than one group at the same time, scoring high on one dimension automatically causes lower scoring on the other dimensions (Freedman & Stumpf, 1980; Kayes, 2002). Most previous criticism has been addressed in the updated versions Kolb published of the LSI. With the current fourth version of the LSI Kolb proposes nine new learning style typologies (Kolb, 2007).

Kolb's theory of learning provides us with a framework that can ascribe meaning to students experiences and categorize perceived learning progress into different stages of the learning process. In the following we will have a look at the student's reflective accounts and investigate their impression of which skills they gained while planning, conducting, analyzing, and writing down qualitative research. We do this in an inductive way by observing the descriptions of the students, finding patterns and similarities amongst the descriptions and finally make sense of the experiences by looking into Kolb's concepts of experiential learning.

METHODS

To get an insight into the role of experientially teaching qualitative methods we look at reflective accounts written by MBA students following a course at the University of Twente teaching Qualitative Methods in Business Research during the academic years 2018/2019 and 2019/2020. The course counted for 2 ECTS which translates to 56 hours of work and was aimed at gaining experience with qualitative research techniques for data collection, analysis and learn about the theoretical background of a wide variety of methods. The course was conceptualized for the students to deliver two group papers and deliver an individual assignment due at the end of the 10-week course and made up for 60% of the final grade. Students were prepared for these assignments with weekly lectures and tutorials. The individual assignment involved interviewing two persons about a topic of interest within the field of Business Administration. For the students who completed the course in the year 2019/2020 the topic was additionally supposed to be focused on resilience during the COVID-19 outbreak.

After thinking of a main research question following a small literature review about the topic, the students came up with an interview schedule they thought answers their research question adequately and then conducted two interviews. In the academic year 2018/2019 the students conducted in-person interviews and in 2019/2020 due to COVID-19 the interviews were either conducted via phone or virtual teleconferencing tools. The interviews were recorded and later transcribed, and the students had to perform an analysis of the data that used any recognized form of qualitative data analysis technique. The individual assignment had a maximum of 2000 words and

[1] https://scholar.google.de/citations?hl=en&user=MBn_GG4AAAAJ retrieved on 15.06.2021

a maximum of 600 words for the personal reflection. We use the reflections of the student's subjective progress and challenges for analysis in this paper. A total of 198 reflections is available for analysis with 135 male (68%) students.

CODING

We analyze the reflective accounts with the coding program ATLAS.ti 8.4.25 using an inductive approach to analyze the documents. The exact steps to the coding process were not predetermined by a specific approach in order to keep flexibility while being alert for which steps are best to take next. The first step of the coding process was to read over all reflections. While reading we took notes on topics that struck out or themes that reoccurred. Next, while reading over the documents again, we applied a combination of open coding and structured coding to the reflective accounts, assigning concepts to the students perceived developments and learnings. This was done based on some of the concepts introduced above, i.e., skills that are important or helpful in the workplace. Next to that, we also coded concepts that did not fit into this category but struck out as important. Quotes that seemed to be important for further analysis but did not fit into any code so far were marked with a separate code to be found again later. After the first round of coding, we excluded 33 reflections as the students did not reach an adequate number of words or did not reflect on their own experience. It left us with 165 reflective accounts mounting in about 100.000 words. After the first round of reading and coding the reflective accounts, we applied axial coding (figure 2). By this, we sorted the concepts that were now summarized and labeled by the codes into categories according to Kolb's four steps of the experiential learning cycle: Abstract Conceptualization, Active Experimentation, Concrete Experience and Reflective Observation with 27 codes in total. Next, we continued with a second round of coding. Hereby, the original coding was checked so that divergence that happened while making progress with the coding were accounted for. Next to that, another five codes were added to include important information that did not fit within the original coding scheme. After the second round of coding, we compared the first few reflective accounts to the last ones from the second round to ensure consistency of the coding technique.

The size of the quotes that we selected for coding range from part of a sentence to several sentences. For each reflective account we marked between three and thirteen quotes with up to six codes for each quote. We further marked concepts as either students reported them themselves or from the context it became apparent that a certain concept is present. In the end, there are 32 codes (table 1) with 974 individual quotes throughout the 165 documents. Codes that are part of Kolb's framework were used multiple times throughout the reflective account. The codes that are of importance to report on but are not included in the analysis itself (e.g., first qualitative experience and previous qualitative experience etc.) were coded a maximum of once per document, so that frequency of codes under "other" (table 1) corresponds to absolute number of students. On the first level, the four stages of the learning cycle are mentioned with the frequency of how many time skills fitting into the category were reported by the students. Abstract Conceptualization was mentioned 0.66 times per reflective account, Active Experimentation was mentioned 1.75 times per student, Concrete Experience was on average exactly mentioned once per student, and Reflective Observation was mentioned 2.45 times per reflective account. On the second level, the skills are shown per learning stage with the number of times that each skill was mentioned in total in the 165 accounts. For definitions of the skills see Appendix A.

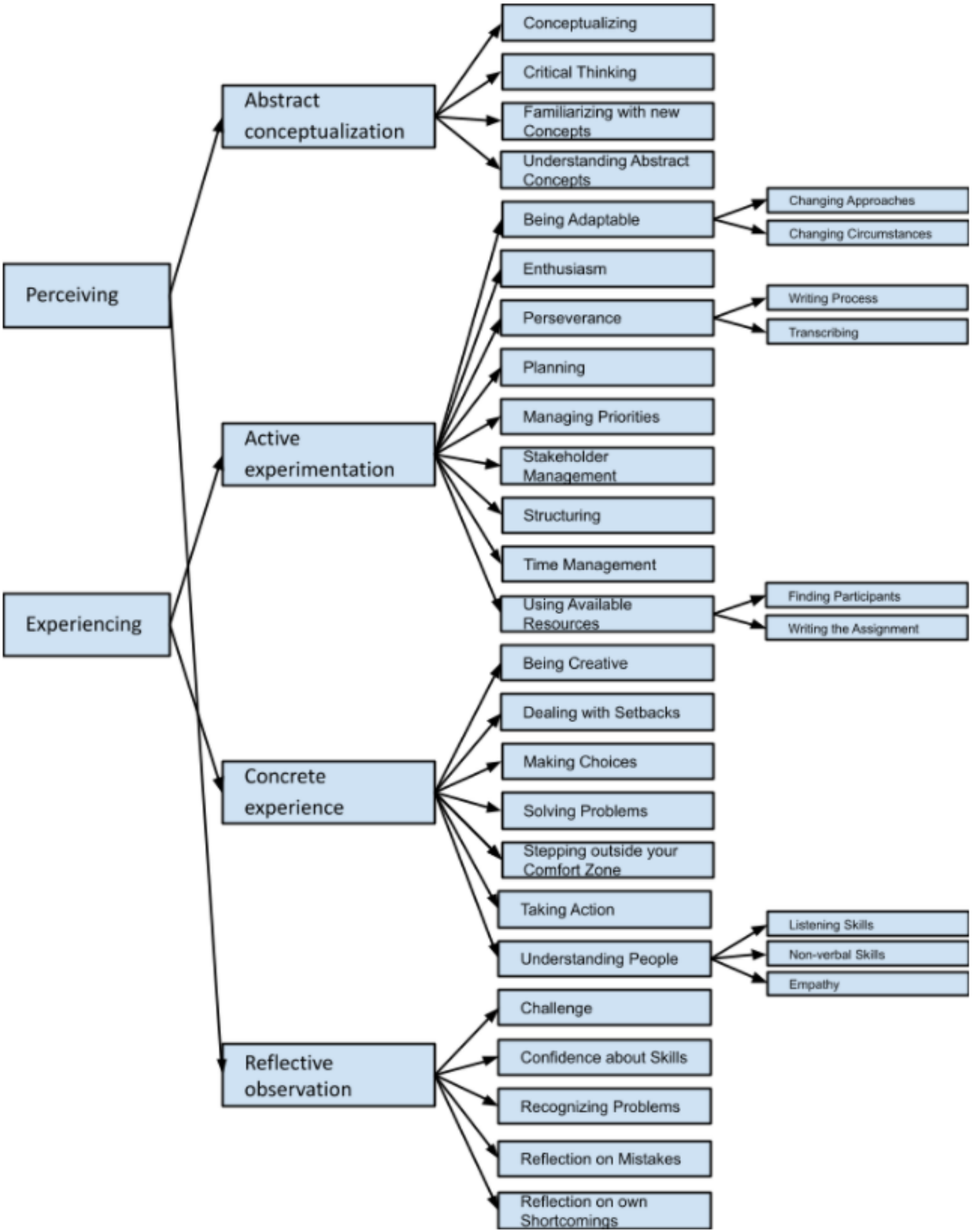
Perceiving
Experiencing
Abstract conceptualization
Active experimentation
Concrete experience
Reflective observation
Conceptualizing
Critical Thinking
Familiarizing with new Concepts
Understanding Abstract Concepts
Being Adaptable
Changing Approaches
Changing Circumstances
Enthusiasm
Perseverance
Writing Process
Transcribing
Planning
Managing Priorities
Stakeholder Management
Structuring
Time Management
Using Available Resources
Finding Participants
Writing the Assignment
Being Creative
Dealing with Setbacks
Making Choices
Solving Problems
Stepping outside your Comfort Zone
Taking Action
Understanding People
Listening Skills
Non-verbal Skills
Empathy
Challenge
Confidence about Skills
Recognizing Problems
Reflection on Mistakes
Reflection on own Shortcomings

Figure 2. Coding scheme after axial coding

Co-occurrences of skills

Next, the co-occurrences of the different codes were checked with the "Code Co-Occurrence" function in ATLAS.ti. A table with all codes on the x- and y-axis is shown with the frequencies and coefficients of co-occurring codes (see Appendix B). Further, above-average values are marked as distinct by the program. Next, we cross-checked outstanding co-occurring codes to find out which codes have an extraordinarily high number of co-occurrences. This analysis is done in order to find out if there are patterns of specific skills that often simultaneously occur. We could distinct four skills with an extraordinary amount of cooccurring skills.

Table 1

Frequency of the codes from an analysis in ATLAS.TI

First level (frequencies) (N=165)	Second level (frequencies) (N=165)
(AC) Abstract Conceptualization (109)	Familiarizing with new concepts (62)
	Critical thinking (23)
	Conceptualization (17)
	Understanding abstract concepts (11)
(AE) Active Experimentation (290)	Using available resources (69)
	Managing priorities (49)
	Perseverance (47)
	Enthusiasm (47)
	Being adaptable (35)
	Structuring (31)
	Stakeholder management (30)
	Time management (23)
	Planning (8)
(CE) Concrete Experience (166)	Understanding people (44)
	Making choices (44)
	Solving problems (27)
	Taking action (26)
	Being creative (20)

	Stepping outside your comfort zone (17)
	Dealing with setbacks (5)
(RO) Reflective Observation (405)	Challenge (196)
	Reflection on mistakes (137)
	Recognizes problem (71)
	Confidence about skills (33)
	Reflection on own shortcomings (20)
Other (198)	Valuable for future research (70)
	Some previous qualitative experience (36)
	First qualitative experience (34)
	Excluded (33)
	Previous qualitative experience (28)
	Doubting qualitative methods (18)
	Mentions career (7)
	Interesting (7)

TRUSTWORTHINESS

In order to ensure the trustworthiness of our methodological approach, there are some aspects that were taken care of to make this research as ethical and unbiased as possible. First, we made sure to safeguard the ethical aspects of the study. An ethical approval was given by the Ethics committee of the University of Twente. Students were given the option at the beginning of the course to opt out of their reflective account being used for research. Further, all accounts are fully anonymized. Trustworthiness of the study was ensured in several ways. First, eight sessions were planned for discussion with two senior researchers every few weeks to safeguard that the research was going the right direction and questions could be resolved. Next to that, we achieve a higher trustworthiness as data was collected over two academic years with changing circumstances that provide us with insight into the students' different methods of conducting interviews (in person vs. online).

FINDINGS

GENERAL FINDINGS

Out of the 165 reflective accounts that were used, 28 mentioned that they had previous experience with qualitative research methods and coding, and 34 explicitly mentioned that it was their first experience with qualitative methods. 36 students mentioned that they had limited experience, i.e., only know about qualitative research methods or interviews but never performed coding, the

remaining 67 did not mention their previous experiences at all. Further, 70 students consider the experience they gained from the course as valuable and helpful for further research, especially their master thesis. Lastly, only 7 students connected the skills they gained directly as valuable for their future career. In table 1, the frequency of all codes regarding the above-mentioned statistics, Kolb's learning cycle and other skills are mentioned.

Many students mentioned that the skills they gained in the course are valuable for future research projects. Above all, the majority of students sees the qualitative methods to be helpful when writing their master thesis, for example:

> *"as I have put lots of work in this assignment, I could acquaint myself in detail with the way of how qualitative studies work, how to conduct interviews, how to draw inferences to the textual data and how to draw conclusions. This was helpful with regard to my upcoming master thesis." (3:1)*

DOUBTING QUALITATIVE METHODS FOR THEIR SUBJECTIVITY

As mentioned above, many researchers leaning towards quantitative research articulated their doubt towards trustworthiness of qualitative research methods due to low perceived face value. This bias can be found in some of the students' opinions. It has to be mentioned that out of the 165 students only 18 question the reliability and validity of the methods. While some of the students try to pronounce valid criticism on the methods it seems like others overgeneralize their experience and project their subjective dislike on qualitative research:

Some students express their doubt about the reliability of the results coming from qualitative research as they perceive that there is little room for objectivity as qualitative research methods are not based strictly on numbers:

> *"The attempt to structure the methodology part taught me some very advantageous lessons. It made me once again aware of the fact that the chosen research design is a logical continuation on the researchers' ideas of how the world works." (41:2)*

> *"I personally prefer quantitative studies more than qualitative studies since I like facts more than subjectivity." (129:1)*

> *"I always tried to avoid qualitative research as much as possible in my prior study. This assignment forced me to get out of my comfort zone and face all possible limitations inherent in qualitative research." (41:1)*

Others do not believe that results are valid as findings are reported based on small sample sizes.

> *"Now this research had a tiny sample, only two interviews. This was hard for me to justify, as a "useful" research would not be able to only make use of two interviews, unless it would go in-depth." (94:2)*

QUALITATIVE RESEARCH AS CONTINUATION OF QUANTITATIVE RESEARCH

Lasty, there are some students that think qualitative research can be useful but see it as a logical continuation of quantitative research or only deem it valuable as at least some numbers or statistics are given.

> *"I also think it is very hard for researchers to draw conclusions which extends existing research. I think qualitative research could be more valuable in combination with quantitative research. The findings of qualitative research could be an explorative addition to the findings of the quantitative research." (146:5)*

> *"To determine whether it is relevant to do further research, it might have been more interesting to keep the questions on a Likert scale. This would have ensured that there is a score attached to it. Moreover, this would probably made it easier to see if there is a significant difference in Job Characteristics, by comparing the scores before and after." (161:3)*

SKILLS FOR FUTURE CAREER

Some students say that they can transfer the learned skills and put them to use in their future career. Firstly, conducting interviews is valuable in the process of understanding people and developing interpersonal skills. Being in an interview situation with someone who is a stranger can be challenging as interviews can be very personal. Developing and understanding for how to read people and is very important when working together with others:

> *"[The interview] has taught me to pay attention to a participant's tone, posture, length of response, et cetera. This will especially come in handy if I find a job in the United States, as communication there can be rather non-verbal compared to the more direct Dutch and Germans I am acquainted with." (64:3)*

Furthermore, working out concepts and thinking critically when researching new topics or interviewing people adds to building skills in scrutinizing information that you are presented with:

> *"I believe this course contributes to the students that continue their way after graduation in business, as you are triggered to interpret critically whether the information you receive during the interviews is the truth and will help you solve the research problem." (80:5)*

SKILLS RELATED TO THE EXPERIENTIAL LEARNING CYCLE

Based on Kolb's theory, the codes found in the reflective accounts of the students are organized according to the four stages of learning (figure 2).
As seen by Kolb's model, learning is a cyclical continuous process. As one of the students reflects on their progress:

"I think that is one of the most important aspects in every learning process; that you can see what you did wrong last time and based on new insights about a specific topic or process you can improve it by

doing it once more again. And that is what I just achieved with this assignment because I got the possibility to do the same process of qualitative research again, and now I actually learned how this process goes step by step." (175:2)

In the following, we touch upon all four steps of the learning cycle with its corresponding skills as can be achieved by experientially teaching qualitative methods, sorted according to frequency within each stage.

ABSTRACT CONCEPTUALIZATION

FAMILIARIZING WITH NEW CONCEPTS

As there are many students who went into this assignment with little to no previous experience with qualitative research methods, quite a few of them therefore had to learn about new ways of conducting research, new theories or even preparing and conducting an interview for the first time. Critical skills for business are to be able to learn about new concepts and being able to apply them. Therefore, finding this concept in many of the students' reflections shows that many of them succeeded in the first steps of the learning process, namely Abstract Conceptualization:

> *"I never did interviews and coding before, so it was a whole new learning process for me. I searched for examples and learned first by analyzing others and later by doing it myself." (76:3)*

> *"I only struggled a bit with finding the right data analysis technique for my research. To be honest, I doubted a lot about the right way to do it. I found a great Internet source, which is also supplied in the references, which explained the grounded theory and the way one should code within this method." (54:4)*

CRITICAL THINKING

One valuable skill to have is being able to critically reflect on a concept your presented with. Especially when being confronted with ideas that you do not agree with, it is crucial to reflect on all information you have and question you own assumptions. Due to the assignment, many students mention that they challenged their preexisting opinions on qualitative research:

> *"Previously, I viewed qualitative research as a less reliable and vague alternative to quantitative research. However, by carefully selecting interview questions and by describing the entire research process (such as the setting of the interview, the reasoning behind every choice) the results can be very reliable and valuable."* (7:5)

> *"Personally, I realized while conduction this research that I have underestimated qualitative research. It is a strong tool to gather information and the create or test new hypothesis. I learned that you don't always need high numbers and reliability to make or to proof a point."* (99:8)

CONCEPTUALIZING

Next, by conducting interviews and analyzing them in a qualitative manner, the students were asked to use coding in order to make sense of the data. After doing this, students had to use the codes they used and organize the data that was found, by making concepts and trying to understand connections the students learned to conceptualize raw data on a higher level of understanding.

> *"I had to use my open mind in order to find relationships between codes and that this was very interesting and fun to do." (20:4)*

> *"I realized later on how helpful and useful it is to code and analyze the gathered data in order to reach the final goal of answering the central research question of the topic. With every label and key words, everything started to make more sense. I personally found it like a puzzle, because with each new highlight, a new piece was added in answering the research question, thus completing the puzzle." (121:3)*

Apart from conceptualizing mentally, the process helped other students to construct actual frameworks to make sense of their collected data:

> *"Honestly I did not expect to come up with a visualization of a structured theoretical model based on two interviews when I started the assignment. Nevertheless, after developing a cognitive mind map and using the insights from the lectures, group assignments and literature during the course, I soon realized that this was a possibility." (176:2)*

UNDERSTANDING ABSTRACT CONCEPTS

Further than just being able to learn about new concepts, it is also important to understand rather abstract concepts. Several students describe that the assignment helped them with grasping abstract or complex concepts:

> *"As such, this assignment helped [me] in improving my capabilities to generalize and make a higher level of abstraction from my findings." (176:2)*

> *"'quality of relationships' is an abstract concept which makes it more difficult to obtain data about it. However, with the use of relevant literature, I was able to concretize this concept to 3 measurable constructs." (1:7)*

ACTIVE EXPERIMENTATION

USING AVAILABLE RESOURCES

FINDING PARTICIPANTS

Finding someone who wants to participate in interviews or surveys for research can be difficult. Especially the students feel like they are burdening possible participants. Having a network and reaching out to people you already know can be an advantage in these situations:

"Arranging the first interview was rather easy, because it was someone who I knew for a few years and I knew that he was an entrepreneur and registered by the 'Kamer van Koophandel' [2]. *When I contacted the entrepreneur, the interview was easily arranged and went smoothly."* (10:3)

WRITING THE ASSIGNMENT

As the students had almost total autonomy about how to conduct their assignment, surely some questions will come up at one point. It is of high value for the students to be able to use the resources they are provided with to resolve these questions.

> *"I contacted the course teacher and presented my issue. She clarified my issue and confirmed that I was on the right track."* (59:6)

Further than that, independency is an important trait, especially in the working field. Therefore, knowing how to utilize and consult your own resources and network can be very valuable:

> "However, there were some hurdles (which I luckily overcame) which I faced during the process of conducting this research. This mainly involved on how to code properly. As I am more quantitative research affine, my preexisting coding skills were not up to mark in order to code with precision. Thankfully, YouTube videos and Google came to the rescue." (67:3)

MANAGING PRIORITIES

Most of the students described having problems to stay within the timeframe or the wordcount that was set for the assignment. This forces them to put thought into what is essential to their research. Setting a clear focus and managing your priorities is essential to succeed with the assignment:

> *"Moreover, the coding process highlighted for me that not necessarily everything that you initially observe, or notice ends up being important for the research. The coding process helped with reducing the level of detail of the obtained until it was relatively easy to make connections." (85:3)*

[2] The Dutch Chamber of Commerce

"Analyzing my data was an interesting part of my research as I wanted to add a lot of interesting things which were mentioned in the interviews but not everything was of great importance for the research." (79:3)

PERSEVERANCE

WRITING PROCESS

During the writing process many students reported that they had to change their scope and shorten their work to match the word count. This usually means a lot of work:

"I must have rewritten every sentence three times to try and get it right." (147:2)

"I had to tweak the scope and my research question a couple times as I went along with the research and I better understood the content of the research and what was asked of me. That is something I have always struggled with is coming up with a set of questions that encompasses everything that is asked of me whilst at the same time keeping the research narrow and focused to give better results." (173:2)

TRANSCRIBING AND CODING

As transcribing and coding can very repetitive and time-consuming, many students describe this part to be the most monotonous. However, it is part of the process and perseverance shows commitment to the plan:

"I felt stressed and exhausted listening to the tapes to write every single, sometimes very unstructured sentences down." (99:2)

"Another example is the way how to code data. This was for me a new process, it took a lot of time code the data because it is an iterative process where revising the codes is normal." (132:4)

"I have learned that coding is a very intensive process. I took me a lot of time to transcribe the interviews and code them afterwards. I have recoded the text fragments several times, because I thought a different code was more meaningful to this fragment." (56:4)

ENTHUSIASM

Many students were enthusiastic about conducting the research project about a topic of their personal interest. This seems to have helped them with being more engaged in conducting the research as they are curious and personally involved in finding out about the results. Enthusiasm and passion about the topic can be an important drive for the students for getting things done:

"The subjects arouse my interest, so I really enjoyed being able to interview entrepreneurs about it. A different approach has given me new perspectives on the subjects." (15:3)

"The fact that we could choose our own topic and also our own interviews gave us the room to learn something within our own field of interest. This made me way more motivated to find the answer of the research topic, which helped to raise the quality of the end product." (54:6)

Next to that, even though some students expressed slight anxiety about the interview situation, partly with unknown people and entrepreneurs, many of them expressed experiencing a pleasant conversation with their interview partner:

"During the interview with the participants, I had a lot of fun. The interviewees were really friendly and answered the questions to my satisfaction." (135:6)

BEING ADAPTABLE

CHANGING YOUR APPROACH

Sometimes as you move along with your research, you find that the original approach, research question or theoretical framework does not fit anymore. Being able to adapt when things do not work out is a valuable skill:

"I am familiar with this approach, so it seemed the easiest method for me. In the end, this worked out, but I had to do a number of things differently and substantiate certain choices better or differently." (116:2)

"I had the feeling a little bit that we were thrown into the deep with the coding and analysis process, because in the lectures is not really shown or explained in detail how this works. Nevertheless, it was a good challenge for us to figure this out by ourselves." (46:1)

CHANGING CIRCUMSTANCES

Some students report that they ended up not being able to interview the people they initially planned on talking to. After finding new interviewees who worked in different roles, the initial research question did not fit and had to work out a new concept and change their research subject to fit the new interviewees topic of expertise:

"I also know someone who has worked as a mortgage advisor. Fortunately, they said yes when I asked if I could interview them. However, because of this, I had to adapt my subject to something interesting what they understand." (101:2)

"I had the contact of the examined consultancy company, and its working domain I found interesting. Nevertheless, a lot of creativity and adaption was needed to come up with a suitably research question for the frame of this research." (164:1)

"I had to scrape two of my original topics because in one case I could not find adequate respondents and in the other, the people I chose were not able to provide enough content/depth in their answers to base a report on." (104:1)

One student describes a situation in which the participant canceled their interview last minute. He was able to organize a new appointment for the interview, but as time is sacred, sometimes you cannot carry out everything as planned; therefore it is important to compromise:

"This also led to one of the interviews being conducted in the respondent's home, with his little two-year-old son running around. This was not really a problem as it was very fun but it did cause some small breaks during the interview. These are things you cannot really plan for and force you to be a bit flexible." (6:4)

STRUCTURING

In order to adequately conduct the assignment, some structuring is needed. When coding qualitative data, there is a lot of unstructured information available that can only be made sense of once it is narrowed down and structured, some students reportedly had difficulties with this, as it can take a long time to organize the data. However, it seems like many students ended up succeeding with the task at hand:

"The next challenge for me was creating and setting up the interview questions. The first questions were the most difficult once, because so many ideas went through my mind that I found myself a little bit lost. My ideas were not really structured but I helped myself with creating a draft version of the interview and trying to walk myself through it so that I can get a feeling of whether the order of the questions and the questions themselves match the research question that I want to answer. I have realized that in that process step it was very important to keep a structural way of thinking and to also identify the questions which might not lead me to an answer to my research question." (135:3)

"The second learning aspect which I can use in further research is structuring obtained data from either interviews or desk research. During this qualitative research, I obtained much information from the interviews but not all this information could be used for my research. During this research, I was able to obtain and structure the necessary parts from all the given information." (1:5)

STAKEHOLDER MANAGEMENT

Another skill that is very important for business is stakeholder management. Due to the experiential nature of the assignment the students had to do find participants which give sufficient information towards answering the research question. As the assignment was aimed at choosing and exploring related to Business Administration, many of the interviewees were businessmen and -women. The students therefore gained experience related to stakeholder management. Many students indicate that managing stakeholders can carry many inconveniences and problems with it which needed to be

dealt with. After all, the students asked something form the interviewee and therefore had to accommodate them:

> *"Another challenge I ran into was scheduling the interviews. I had made an appointment with my interviewees and was getting ready to get on the train to meet them at their office. I decided to check in with them one more time before getting on the train. Sure enough, one of the interviewees had an unexpected business trip and was not going to be at the office that day." (6:3); "I have asked if I could interview someone at the company where I did an internship during my previous study. However, she indicated that they did not want to answer my questions because it had to last half an hour because they were very busy." (101:1)*

Most students reflect on their experience and mention that they learned more about the difficulties of stakeholder management from these encounters:

> *"The conduction of interviews requires a good planning, as it is not uncommon that the business people cancel a meeting immediately before. In order to prevent time pressure, it is important to plan interviews quite early in the quarter. This is also a lesson I learned and I consider this as a valuable experience for conducting my research for the Master Thesis." (102:1)*

Further that the learning that the students indicate to have gained for their master thesis or other further research, dealing with stakeholders is something that is relevant for most students' future careers. Gaining an insight into the difficulties of this can help the students with gaining skills before entering the job market through experiential learning.

TIME MANAGEMENT

Several students report problems with time management. Often, people do not realize how long the process of interviewing, transcribing, coding, and writing down results can take. The learning experience becomes obvious mostly - but not limited to - the students who mention that they plan on conducting qualitative research for their master thesis. Many students mention that this assignment made them aware of how long the whole process can take and that it reminded the to start on time in the future.

> *"where I really need to improve myself before starting the master thesis, is time management and writing up results. It is always a challenge to plan every part of the report and to keep myself to it." (35:4)*

> *"With regard to time, this was also quite challenging, because the course only lasted for six weeks. This means that it took strict planning to find the right interviewees, to plan and conduct the interviews, to analyse the results and to finalize the report." (68:1)*

Evidently, there are also some students who were not able to adequately manage the time and therefore ended up feeling they missed out on essential parts of the assignment. Hopefully, it can be a lesson for the future to those students:

"Even after several warning over email, the lectures, and the final consultation session I still focused too much on the theory and too little on the actual process of doing Qualitative Research. In essence it is definitely not a bad thing to want to work out the theory as well as possible, but that was besides the point of this assignment." (147:4)

PLANNING

Planning is one of the codes that was found less frequently in the students' reflective accounts. It seems that this is a skill that the students either possess to begin with or do not. However, the individuals who reported that their planning skills did come in handy during the assignment indicate that they were still able to learn from this experience. With the help of this experience the students in question mention that practicing qualitative research methods is a way of conducting research that requires a lot of time and planning. Being aware of this helps to avoid problems in the future.

"I am someone who would rather start too early than too late, so I did not experience any problems with the deadline, but I would keep this experience in mind when making a schedule for the analysis of interviews in the future." (167:4)

"It was, together with the quantitative research methods course, an intensive period where a lot of information was provided and many assignments had to be done in a short time. But, a good planning and taking it seriously from the beginning has helped me a lot to go through the courses." (48:1)

CONCRETE EXPERIENCE

UNDERSTANDING PEOPLE

LISTENING SKILLS

As some of the students have not conducted an interview before, doing this for the first time carries some learnings with it. What is important to realize is that this differs from having a normal conversation in which both conversation-partners are involved equally. Being an interviewer requires better listening skills, probing and understanding when it is your time to talk:

"It made me realize it is not necessary to always respond or have something ready to say, but some people just want someone to listen and you sometimes just wait for someone to continue talking about what they were talking about instead of responding." (136:4)

"I have learned that it is important to remember the aspects the respondent is mentioning so I can come back at certain topics." (61:8)

NON-VERBAL SKILLS

Next to the listening skills many students report that they found it helpful to include non-verbal signals they picked up on into their style of conducting the interview. As non-verbal signals are considered to give valuable information, not only in the interviews but practicing reading these, especially when talking to strangers, benefits the students not only in everyday life but also in their later career:

> *"[Y]ou can see how respondents react to a question (non-verbal communication) and you can help them if they do not understand a question which provides you with the finest answers." (4:3)*

> *"When conducting qualitative research, it is very interesting to see how the respondents react. You can tell from their body language as well what they really think about the topic." (24:4)*

> *"I believe a qualitative research will give you deeper insights. Mainly because you can ask deeper questions, can explain the question if a respondent does not understand it and you hear a tone in their voice what can help you to interpret the answer. Besides, also non-verbal communication can help you with the interpretation." (61:1)*

EMPATHY

Lastly, one of the most important skill in understanding people and developing interpersonal skills is having empathy:

> *"Both variables included in my research question touch upon sensitive topics. Especially with the topic of learning, trust had to be built during the interviews and sensitivity had to be ensured. I sometimes asked myself how I would react or answer when being asked regarding such sensitive topics." (181:4)*

MAKING CHOICES

Next, the students are confronted with many choices during the process of conducting the research project. What is most important is that the students learn to make an informed decision and can argue why they choose for one option at the expense of another option, especially when both options seem favorable:

> *"When I started the assignment in the beginning, it was not easy to come up with a research topic. In the beginning I wanted to do something that would help me with my thesis, but in the end, I chose a topic in my own interest." (10:2)*

> *"My decision to conduct semi-structured interviews was made because of the structure that comes with it. This structure helped me through the interviews, in combination with paying attention to the answers given by the respondent and try to connect this to several insights. I*

thought of conducting unstructured interviews, but I did not have enough confidence in this method." (12:4)

SOLVING PROBLEMS

While planning and conducting the interviews and writing up the assignment, many students reported running into problems. What is crucial here and very important in the work field is that they do not only recognize that there is a problem but also analyze the situation and come up with solutions to solve the difficulties. Many students mentioned that they recognized a problem with specific interview questions or report on not getting the information they need in order to answer the research question.

"Within the interviews I learned that some questions need to be very specific in order to get the answers needed to answer the research questions, I experienced this especially in the first interview with the director. He knew where I wanted to go with the interview, but confronted me sometimes with the multi-interpretability of some of my questions. I adjusted the questions, which could be multi-interpretable for the second interview, to really focus on the scope of the interview." (162:3)

Apart from understanding and fixing their own mistakes, some students also ran into difficulties that are outside of their own control. However, having to fix these problems too can be a valuable lesson for the future:

"I used the recorder of my iPhone to record the interview. When the interview was done, I thanked the interviewee and saved the recording. When I checked the recording after the interview, it did not play the interview anymore. I could see the minutes of the interview (28:37), the size of the file (34,4 MB), but I could not replay my recording and therefore I could not transcribe and analyse the interview. I tried everything to restore the file, and after calling with Apple Support, it was clear to me that my file was beyond saving. Next to that, I wrote only down one quote during the interview, because I planned to use the transcription of the interview for the data analysis. Thus, I contacted the entrepreneur and explained the whole situation and was willing to do the interview again." (10:4)

TAKING ACTION

Starting with a new project, especially when you have never done anything like it before can be difficult. Thinking of a strategy on how to approach this can help with overcoming this feeling of not knowing where to start. Some of the students have a very clear plan of how the assignment should be conducted. Having prior knowledge seems to help with figuring out where to start:

"From the beginning on, I have tried to approach the organization, including the interviewees, professionally, as if I were a real consultant who was going to investigate their HR matters. This came to me naturally and I really enjoyed the first contact I had with [interviewee], regarding topics we both find interesting and valuable. She was more than willing to help me with my project." (80:1)

Further, as the students who did not conduct any qualitative research method before approach the assignment by just starting somewhere. As you start working on the project, even if you just make small steps, you will find your way of succeeding:

> *"I initially had difficulty deciding how to make a start. In the first phase, I was kind of strayed, so I remained in the exploratory phase for a while. However, this taught me that sometimes it is better to just start writing and that there is no need to find out everything in advance. The process was more useful than the preparation." (195:1)*

> *"I found that there is no other way to learn how to conduct this very challenging type of research than to do it yourself." (98:2)*

BEING CREATIVE

The students were asked to come up with a topic of interest, the only condition being that the research is related to Business Administration. This task was challenging to many students due to the paradox of choice. However, at the same time this gave the students the opportunity to be creative and explore their interest, if they preferred even in mind with their upcoming master thesis:

> *"I think it was nice to think about 'what can I do a mini research about?'. I'm usually not good at coming up with these questions, so it was good for me to break that feeling. I did spend a lot of time coming up with my own area of interest that I would like to study."* (169:1)

> *"Within this assignment it was nice to be provided with an open assignment, where I could really transfer my own interests into an academic research. I used my network connections to come up with an interesting field of study, which suffers from the corona crisis." (162:2)*

STEPPING OUTSIDE YOUR COMFORT ZONE

In order to learn and make process it is sometimes necessary to dive into unknown territory and take a step away from what is known to you:

> *"I found a lot of hardship in kicking of with a specific topic, as I know of myself that making choices is not my strong suit. This is why I find it very meaningful to encounter in such practical assignments, as my personal challenges are confronted for personal development." (72:3)*

Many students seem to be hesitant with interviewing. This assignment forced many of the students out of their zone of comfort, which, in the end comes with a lot of learning and process:

> *"Furthermore, [the assignment] also helped me to replenish my interviewing skills with regard to overcoming shyness and being a careful listener."* (67:2)

> *"an interview can be a bit uncomfortable when you do not really know the person, however you also learn personal skills in that process." (95:3)*

DEALING WITH SETBACKS

As the student had to plan, they were provided with guidance about the research method itself but are expected to be autonomous in planning and conducting the research. Due to this, it is always possible that something goes wrong in the process. It is an important skill to be able to deal with setbacks and come up with solutions to adapt to the situation. Many students report setbacks and describe ways in which they dealt with those:

> *"Another difficulty which was encountered during this research was the construction of the data analysis. It was difficult because the overview of all the data was lost multiple times which decreased the focus of this research. This difficulty was addressed by viewing multiple research designs that used a schematic overview of the data analysis." (1:10)*

Especially when other people are involved in your research as participants, as a researcher you are reliant on them. Learning to deal with uncertainties is a valuable lesson to learn as other people are not always predictable and outside of the researchers own influence, having a backup plan or being able to find an alternative solution is important:

> *"It also is very difficult to find employees of companies who want to participate in the research. First, I had a nice subject and I also had two possible participants from an organization, but at the end, they said that they had not enough time to participate. Therefore I needed to find other possible participants, but unfortunately with no luck. Then I decided to change my subject, so that I could interview students from the University, because I think it is very difficult to find employees who want to participate in this small research." (115:1)*

REFLECTIVE OBSERVATION

CHALLENGE

The most frequently reported patter were perceived challenges, with many students reporting coming across more than one challenge. Difficulties during the assignment already came up from the very beginning when the students had to find a fitting topic:

> *"Finding an appropriate and interesting topic from the entire field of Business Administration was already difficult for me that fits into the context of qualitative research but also fits to the scope of this assignment (mini research paper with maximum 2000 words)"* (3:2)

As many students have not had any prior experience with qualitative methods, the whole process of the assignment had to be figured out from start to beginning. During this process, many students ran into difficulties:

> *"Learning and understanding qualitative research was an interesting and useful experience, but applying it is a lot more difficult than expected. When analysing an already completed qualitative research, you can spot the strengths and weaknesses, using what you have learned. But it is hard to take a step back and review your own approach for the same things."* (147:1)

Further, many students came across difficulties that were related to finding and communicating with interview partners and conducting the interview itself:

> *"First, finding respondents and planning an interview on a relatively short notice was not easy. Due to busy schedules interviews could only be planned within one or two weeks before the deadline."* (13:1)

> *"In my opinion, conducting interviews can be difficult because I am normally an enthusiastic person who likes to go into discussion with somebody and share opinions. So my stumbling point in this case was to try to stay neuter and not bias the interviews."* (27:3)

REFLECTION ON MISTAKES

As the documents in question are reflective accounts, the main aim was for the students to reflect on their progress, the work they did and what went well so not so well. Reflection is an important step in the progress of learning. Therefore, this code is one of the most frequent ones as reported by students. While these reflections are very individualistic, there are common themes that can be found. Many students reflect on the way they conducted the interviews:

> *"I thought it would be easier to do an interview, and if I look back at it know, I would have prepared my questions in more detail and think it through a bit more." (58:2)*

> *"When I listen back to interview 1, there are some moments that I would have acted differently afterwards. I usually started with a closed question, to which a long answer came including the answer to the next open questions." (145:2)*

> *"Although it was a semi-structured interview, I tried to conduct interviews in a way that allowed them to speak freely instead of pushing them into a direction too much. I feel like I could have done this a bit better." (105:4)*

> *"While transcribing and reading the records, I mentioned that I sometimes ask suggestive questions. In the future, I will do my best to not ask suggestively, as I want to measure someone else's opinions, interpretations and meanings." (12:1)*

> *"the hardest part for me is not to be suggestive or biased during an interview. When I had my second interview, I noticed that I started asking suggestive questions based on answers I got during my first interview." (187:2)*

RECOGNIZING PROBLEMS

As discussed above, in any process you will run into difficulties. Being able to identify where it goes wrong is the first step towards solving problems. Many of the students can identify problems in the process of interviewing, analyzing, and writing down research. Especially when working with human

subjects not everything will go according to plan due to agency. Therefore, many students recognize general problems with relying on your interviewees:

> *"It also is very difficult to find employees of companies who want to participate in the research. First, I had a nice subject and I also had two possible participants from an organization, but at the end, they said that they had not enough time to participate." (115:1)*

> *"First of all, it was a challenge for me to choose a topic because I also had to find two persons that [were] willing to be interviewed about that particular topic." (7:1)*

As the students who took part in the course in the academic year 2019/2020 had to conduct all interviews over Skype, several new challenges came with these new circumstances. Many students mention that they perceived problems with conducting interviews over online meeting tools in general as this takes away from the communication and the lack of non-verbal cues makes it harder to build rapport:

> *"Conducting interviews with Skype was more difficult than doing this in real life. I noticed that it was more difficult to create an confidential atmosphere. This makes it for the interviewees harder to open talk about their personal situation. It was also one of the reasons why it takes relative long to go in depth during the interview." (125:3)*

> *"First of all, it was challenging to conduct an interview via online media, because attention had to be paid on different things than you normally do. For example, the missing information from body language and the multiple ways of interpretation. Social media could assure misinterpretations of the participant's statements." (177:1)*

Lastly, many students identified problems with the language barrier. They consider this to be a possible problem having influence on the reliability of the research. After identifying this problem, the students gain more knowledge to make choices about which language they want to conduct interviews in in the future:

> *"Because of the language barrier and strength of expression the interviews were held in Dutch. But before analysis I translated the transcripts to English, losing some of the nuances and figure of speech that were in the verbatim transcripts. This kind of defeated the purpose of conducting the interviews in Dutch." (48:3)*

CONFIDENCE ABOUT SKILLS

One important skill to have in work life is confidence about your skills. Many students reflect critically on their progress and shortcomings but also report on the skills they feel confident about. Being aware of your strengths is a valuable skill to have:

> *"I now know that I enjoy holding interviews and I think I am quite good at it. While listening to the answers of the respondents I already look a little bit at the next question(s) and try to naturally ask the subsequent question." (160:4)*

"I believe one of my strengths during the interviews is that I frequently summarized the answers of the respondents to clarify I had interpreted them correctly." (168:5)

"I experienced my interview skills are on a good level. I think I am a good listener and it is not difficult to me to provoke a bit or to ask more questions to get more detailed information." (184:4)

REFLECTION ON OWN SHORTCOMINGS

While being aware and confident about you own skills is important, realizing what the weak points are is the first step to improvement. Critically reflecting on your performance and your weaknesses is just as valuable. These are very individual but some of the shortcomings that were mentioned multiple times are as following:

"during the interviews I have had trouble with providing neutral responses to the respondent after I asked them a neutral question. I noticed that I was pushing the respondent to think in a particular way instead of providing his/her own opinion and thought. This is something that I have to practice for my Master thesis research." (4:6)

"I have the feeling I could have improved my coding but when I try to change something I have trouble." (180:6)

THE STUDENTS' LEARNING CYCLE

According to the students' reflective accounts the learning cycle for their experience with experiential qualitative methods could look as follows:

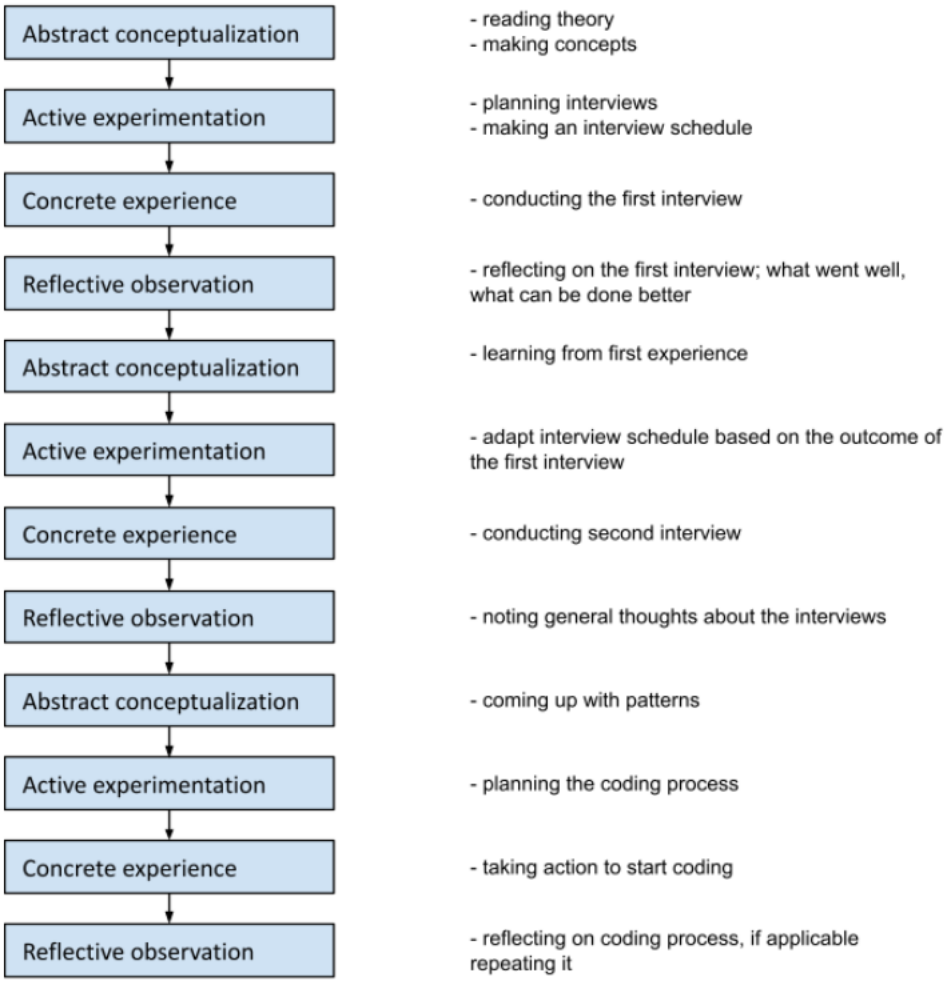

Figure 3. Concept of what the learning cycle could look like during the assignment.

Axial Coding

When cross-referencing the codes in each of the four different phases of the learning cycle, we can see which students reported to achieve learning within which step of the cycle (table 2).

Out of the 165 student's reflections, the analysis showed that 38 students have undergone all four phases of the learning cycle. 72 students went through three of the four steps of the cycle (45 of which were not found to have undergone Abstract Conceptualization). 44 and 11 students were found to only have reported experience in two and one steps of the learning cycle respectively. This shows that two thirds - with all or three out of the four steps in the learning cycle - have experienced a multifaceted learning experience. This does not imply that the students have gone through the full cycle but implies that the students have the resources that are needed to make the experiences leading to learning, especially because the assignment is conceptualized in a way for the students to undergo the learning cycle more than once (figure 3).

Table 2
Frequencies of the participants' learning styles

Learning Stages	Kolb's Learning style inventory	Frequency (n=165)
AC	Thinking	0
AE	Acting	0
CE	Experiencing	0
RO	Reflecting	11
AC - AE	Deciding	3
AC - CE	Balancing	0
AC - RO	Analyzing	11
AE - CE	Initiating	3
AE - RO	Balancing	15
CE - RO	Imagining	12
AC - AE - RO	Thinking	17
AC - AE - CE	Acting	5
AE - CE - RO	Experiencing	45
AC - CE - RO	Reflecting	5
AC - AE - CE - RO	Balancing	38

PATTERNS OF RELATIONSHIPS BETWEEN SKILLS

As we look at skills which are important for graduate's pursuance of a career, we would like to give insight into skills that we can observe to have relationships to other skills as reported by the student reflective accounts (figure 4).

As the ATLAS.ti co-occurrence table (see Appendix B) shows, skills that occur either very much or very little during our coding process are more likely to simultaneously occur more often with other skills. Most noteworthy, the skill of recognizing challenges simultaneously appears with more than half of the other skills, which can be assumed to be the case as almost all students reported at least once to come across some sort of challenge during their assignment.

Another skill that appeared frequently is reflection on mistakes. It seems that the students who reflect on their mistakes often seem to possess many of the other skills that we accounted for. These include being creative, conceptualizing, dealing with setbacks, planning, they are often able to reflect on their own shortcomings and able to step outside of their comfort zone. Furthermore, the students who can utilize their own resources report that they are often able to deal with setbacks, plan and understand abstract concepts. Those students who mention their future career and consider that the

skills they acquired while conducting the assignment are valuable in the job market show a higher co-occurrence with other skills, especially enthusiasm, familiarizing with new concepts, perseverance, understanding people and using available resources. These students seem to either have acquired or already possess more skills than students who do not consider their future career in their reflections. It is important to mention that "thinking about future career" is not a skill that is part of the learning cycle. This code was originally added to the analysis as the future orientation is fundamental to this research and was found to often occur with many skills. It could be that students who mention their present or future career are more aware of skills that are needed in the job market and therefore more frequently report on these. Students who reflected on and have developed skills related to planning often display that they are good at familiarizing with new concepts, reflecting on mistakes, managing priorities, and using available resources.

Lastly, as a student possesses any of the four skills reflections on mistakes, utilizing available resource, planning, and thinking about their future career, they are very likely to possess the other skills as well, as these are likely to occur simultaneously, too. The most noteworthy relationships that were found are displayed in the following.

Figure 4. Conceptualized model of the relationships between skills.

While the codes dealing with setbacks and understanding abstract concepts have many co-occurrences with other codes it is questionable how accurate these results are. The codes were found at a low frequency and one or two co-occurrences can already show up as an above-average proportion while these can just happen by chance. Therefore, these are not considered noteworthy and not further discussed.
Being adaptable, confidence about skills, critical thinking, making choices, solving problems, taking action, time management have zero or one notable co-occurrences with other codes and will not be elucidated further.

DISCUSSION

The overall purpose of this study is to explore the positive effects that studying qualitative research methods can have on graduate students in terms of the skills that can be acquired. By showing the benefits of teaching qualitative methods we aim at continuing the discussion of the underrepresentation of qualitative research in academia.
Many researchers regard quantitative research as more scientific and objective than qualitative research and therefore it is the preferred research method in many fields (Eyisi, 2016). Not only is qualitative research still very stigmatized and seen as inferior by certain researchers in management and business studies (Bluhm et al., 2011), but it also only makes up a fraction of the published studies in the top 20 management and business research journals (Runfola, Perna, Baraldi, & Gregori, 2017). In our study it showed that a majority of the participating master students have no or little previous qualitative research experience. However, especially teaching qualitative research to undergraduates and graduates can be valuable beyond the subject matter in terms of teaching problem-solving and other skills (Eyisi, 2016).
As discussed earlier in this paper, Cassell (2018) as well as Bedwell et al. (2014) conclude their research with the assumption that graduates often do not possess the interpersonal skills that are required by any future employer as University programs have little flexibility for teaching interpersonal skills, are not achieving the intended outcome or there are not enough opportunities for experiential practice. With this paper we want to emphasize the importance of their findings and suggest that it is worthwhile to consider whether teaching qualitative research methods should be taught to a larger part in the curriculum of undergraduates and graduate business students. Furthermore, I support the authors suggestion for small “bite-size practice chunks” of qualitative methods to improve interpersonal and other career-related skills.
For the future workforce, KPMG assigns importance to moving from individual talent management to focusing on the whole workforces’ capabilities (KPMG, 2020). Further the World Economic Forum is reporting on “critical thinking and analysis as well as problem-solving, and skills in self-management such as active learning, resilience, stress tolerance and flexibility” (World Economic Forum, 2020, p.5) to be the in-demand skills for the workforce in the next five years. These skills are very similar to the skills that we found during our investigation, namely critical thinking, solving problems, understanding abstract concepts as well as familiarizing with new concepts, perseverance and being adaptable.

This paper is partly based on the approach that Cassell (2018) took to shed light on the challenges that MSc students in Business Administration experience when practicing qualitative research methods and the implication this has for the development of interpersonal skills through these methods. The aim of this paper is to not only look at the perceived challenges but also listen to what

the students say about developing a skillset for their future career. From this, we can make conclusions about the role that studying qualitative research methods has in the development of career-oriented skills. We compare our findings to what skills are needed in the job market and therefore make the standards for potential future-employers based on the literature. In this way, we get an idea of what it is that qualitative research methods teach us beyond the subject.

Much of the previous research on developing career-related skills was considered in this paper. Especially the investigation by Cassell (2018) was used as a motivation for doing further research on the topic as she uses comparable methods. In the following we want to reflect on some similarities and differences between the study of Cassell (2018) and the paper at hand and especially consider the knowledge that this paper adds to the existing research.

Cassell (2018) captures students' perceived challenges while conducting qualitative research methods and the implications that follow from these or suggest development of managerial skills. Based on this, she looks at conclusions that can be drawn for methods of teaching qualitative research. Lastly, Cassell investigates which interpersonal skills can be developed in the process. Her paper is aimed at investigating managerial effectiveness and decision-making processes.

As the sample of our study is situated in a broader business-context, our aim is to look more generally at important career-related skills. Further, as we look at an experiential approach to teaching qualitative research methods, the theory to build the fundamentals for this research was selected to match the methods. Instead of identifying students challenges and extracting learning experiences from this we look directly at the learned skills as reported by the students. This approach has its advantages and disadvantages compared to Cassell but most importantly it enables us to specify the skills that are learned by the students more precisely. On top of that, identifying the skills as reported by students facilitates us to use a co-occurrence analysis and further investigate what skills are likely to occur paired.

Further, Kolb's theory of experiential learning is used as a fundament to our research. The skills we found to be developed while studying qualitative research methods are grouped into stages according to Kolb's theory.

This paper is an attempt to give a more practical application to Kolb's theory, by sorting real-life skills into the different stages of his framework. The newest version of the learning style inventory divides the four originally proposed constructs into nine new learning style typologies (Kolb, 2007). The typologies are as follows: initiating, experiencing, imagining, acting, balancing, reflecting, deciding, thinking, and analyzing (appendix C). This gives us the chance to not only describe behavior but also make differences between individuals.

Based on the skills we found and ascribed to a certain stage of learning we are able to group the students in categories of learners (see table 2). With the newest learning style inventory, Kolb prediction of the students learning style works best when it is either consisting of one stage of the cycle, two consecutive stages of a combination of all four stages. However, when considering dominance in two stages that lay on opposite sides of the learning cycle (AC – AE or AE – RO) the learning style is summed up as balancing, no matter the combination. Further, combinations of three stages (AC - AE – CE, AC - AE – RO, AC - CE – RO or AE - CE – RO) are sorted into the learning style that is dominant of the three. An example would be that on one hand, someone who is dominant in Concrete Experience will be sorted into the learning style "Experiencing", on the other hand, someone who is dominant in Active Experimentation, Concrete Experience and Reflective Observation will be sorted into the learning style "Experiencing" as well. This takes some of the granularity between different learners and makes differences indistinguishable. As we discovered that student's group in all different kinds of combination of the learning style inventory, we would

suggest adding more granularity to the nine stages to make differentiation between the learners' strengths observable.

Many students mentioned their degree of experience with qualitative research methods in their reflection. In total, more than 60% of the students indicate their experience which is split into three categories: "first qualitative experience", "some previous qualitative experience" and "previous qualitative experience". One important finding is that none of these three categories has any remarkable co-occurrences with any of the skills. On one hand, this could indicate that students who have previously experienced qualitative research methods do not differentiate in skills from students who have no previous experience. We assume that the students take away some skills for the future from previous learning of qualitative research methods as this is strongly indicated by previous research. Based on this, we want to suggest the interpretation that the three degrees of qualitative experiences work to ensure trustworthiness. Deducting from this, we can assume that the students report on their experience during the assignment they reflect on. At best, the acquisition of all reported skills happened during this specific encounter with qualitative research methods but even if these were possessed before, the assignment gave the students a chance to improve on their skills.

Next, we need to discuss that conducting interviews, followed by coding and analysis is used as sufficiently representative of qualitative research methods as a whole. Understandably, there are many more research techniques that are considered qualitative, but for the sake of limited resources interviewing was used for our investigation of qualitative research methods. Even though the sample size is sufficient, there are some codes that are not frequently mentioned. As we look for simultaneously occurring skills it can be difficult to tell whether these are significant or happen by chance as the occurrences are small. As mentioned above, for skills like dealing with setbacks, planning etc. the analysis is done with a very small sample size and findings might occur by chance. As this paper is aiming at capturing which skills the students learn we try to look past that and therefore report on every individual's experience, even if these can be rare or single cases.
Lastly, we have to rely on the self-reflections as they are reported by the students. First, these are very subjective and there is no way of telling whether the students' reflections of themselves reflect on the view that an outsider would have on their progress. As the assignments and reflections are graded it has to be considered that the students might not report too critically on themselves but rather display themselves in a more positive light to obtain a better grade. Further, 33 of the 198 reflections were excluded. The exclusion of these accounts was necessary in the light of our analysis as they could not provide us with any information. However, this means that we cannot comprehend whether these students did not learn anything during the course or did not manage to sufficiently describe their process. Nevertheless, we do believe that this is a relatively small percentage of the documents that were available to us, and we could therefore adequately answer the research question with the remaining 165 reflective accounts.

We opted for a qualitative research design due to the exploratory nature of the paper. The findings now point us towards new ways in which we can further explore the topic at hand. This paper is attempting to pave the way for future research on the usefulness of teaching qualitative research methods. Insightful findings that were made in this paper are the co-occurrences of skills. These can show skills that can often be found as patterns, paired together in students. It would be very valuable to continue this study by a larger sample in order to be able to see if the patterns that are reported on are repeatedly found as these conclusions are partly drawn based on the reporting of only a few

students. Next to that, modifying the methods to ensure trustworthiness could be done by adding the teacher's opinion on whether the students accounts reflect the truth adequately could be beneficial.

The findings we made carry valuable practical implications. We discovered that many of the skills that we found to be acquired through experientially learning about qualitative research methods match up with what companies and organizations are forecasting as valuable skills required by employers of the future workforce. The curriculum and qualitative research methods courses can be adjusted accordingly to further teach graduates the skills that are required by future employers. We hope that in the future, universities recognize the value that experientially introducing students to qualitative research methods can have and find a good mix of teaching qualitative and quantitative research methods. Further, patterns of skillsets can give us better insights into employee's abilities and help develop training programs based on the strengths to create a highly skilled workforce.
Furthermore, we want to note some practical implications based on the finding that less than a third of the students explicitly mentioned to have gained experience with qualitative research methods previous to the course in question. This indicates that at undergraduate level, there are many business students that have never conduct qualitative research. This is not only unfortunate due to all the skills that could have been gained through teaching a variety of research methods, but it also keeps up the divide between qualitative and quantitative research. Universities neglecting qualitative research methods in the curriculum uphold the underrepresentation of qualitative research methods we can see in the academic world.
What we hope for in the future is to combat the bias against qualitative research methods and elevate the advantages that teaching of these can have for students. The findings suggest that qualitative research methods, especially teaching these in an experiential manner are invaluable and we hope to make this clearer by continuing the research on this matter.

CONCLUSION

The purpose of this study is to shed light on the impact that teaching qualitative research methods can have on the development of career-related skills in students. Next to that we are aiming at seeing how the discovered skills fit into patterns and how these are sorted into current theories of learning.
We can shortly answer the research question "*What is the role of studying qualitative research methods in enabling career-oriented skills of university graduates?"* as follows: The role of studying qualitative research methods in gaining career-oriented skills is to provide the students with a holistic learning experience that helps with acquiring a variety of skills. Further, studying qualitative research methods broadens the students previous view and therefore exposes them to the ability to gain new and different skills. This effect becomes apparent in our research as experiential teaching methods are applied. However, this role cannot be discussed without talking about the skills that can be gained in the process of studying qualitative research methods.
To further elaborate on this, we found a total of 25 different skills that are acquired by graduates throughout the different steps of conducting a qualitative research project. Some of the most frequently reported skills include being able to recognize and deal with challenges, reflect on mistakes, recognize, and solve problems and being able to utilize the resources that are available to the student. Many of these skills match up with what scholars and economic organizations determine to be career-oriented skills (Bedwell et al., 2014; Cassel et al. 2009; Cotter & Cullen, 2012) and skills

that will become more relevant to companies in the next few years (World Economic Forum, 2020). Further, we found that especially students who are able to reflect on their mistakes, utilize the resources available to them, plan and think about their future career are very likely to possess other valuable skills such as managing priorities, dealing with setbacks, familiarizing with new concepts, reflection on shortcomings, creativity, being able to conceptualize, leaving your comfort zone, understanding abstract concepts, understanding people, perseverance and understanding people. We further found that many students report no or very little previous experience with qualitative research methods. This potentially points to problems of bias against qualitative research in academia and underrepresentation of related methods (Antwi & Hamza, 2015; Collier & Mahoney, 1996; Runfola et al., 2017). We discovered that in the light of experiential learning theory students go through four phases of learning, Abstract Conceptualization, Active Experimentation, Concrete Experience and Reflective Observation (Kolb 1984). Studying qualitative research methods in a practice-oriented way can provide the student with a holistic learning experience in which they cycle through all the phases of learning. These skills are further providing students with the capability they need to enter the job-market and ensure long-term success. Our results can therefore be beneficial when designing a curriculum for business students. Not only do we argue that it is important to teach qualitative research methods, but we would additionally argue in favor of a strongly practice oriented application.

A topic that potentially hold significant value for future research is the co-occurrence of skills. Larger scale research could find more relevant simultaneously occurring skills that we missed due to the smaller sample size. Additional insights into this could be valuable for developing skill trainings in university courses or jobs. For example, practical implications of this include better evaluation of learning types by HR for e.g., training purposes to develop a more skilled workforce.

Concluding, we hope to provide the reader with a good overview of the importance of practice oriented qualitative research methods courses and the many benefits these hold for students' future career and success.

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APPENDIX A

Being Adaptable: The students is able to adapt to changing circumstances.

Being Creative: The student applies his or her imagination in order to come up with creative ways of tackling problems.

Conceptualizing: the student is able to map concepts and theories. This is either self-reported or observable from analyzing the reflective account.

Confidence about Skills: The student critically reflects on his or her strengths.

Dealing with Setbacks: The student is being set back in his or her progress to continue with the assignment and figures out a way to solve the problem he or she is presented with.

Excluded: the reflective account had to be excluded from further coding and analysis.

Familiarizing with new Concepts: the student gets to know about concept that he or she has previously not been familiar with. These are either learned during the course or being self-taught as information or methods are essential for conducting the assignment.

First qualitative experience: the student has previously had no encounters with practicing qualitative research methods. This is either self-reported or observable from analyzing the reflective account.

Identifying Problems: The student recognizes a problem that is caused by environmental circumstances in a certain situation.

Making Choices: The student makes an informed decision for one choice at the expense of an alternative.

Managing Priorities: The student makes decisions regarding which part of the assignment his or her resources are being dedicated to.

Mentions career: the student connects experiences or skills he or she made and gained during the course to their future career.

Perseverance: The student demonstrates dedication and determination in order successfully complete the assignment.

Planning: The student lays out a plan beforehand of how to successfully conduct the assignment.

Previous qualitative experience: the student has previously had one or more encounters with practicing qualitative research methods closely related to how it was conducted during the assignment.

Reflection on Mistakes: The student reflects on the mistakes he or she perceives to have made in retrospect.

Solving Problems: The student finds a solution to a problem he or she is presented with during the assignment.

Some previous qualitative experience: the student has previously had one or more encounters with practicing qualitative research methods in some of the areas as conducted in the assignment. This could mean that the student reports previous experience with interviews, but not with transcribing and coding.

Stakeholder Management: The student effectively communicates with the stakeholders relevant to the assignment.

Stepping outside your Comfort Zone: The student steps outside of his or her comfort zone in order to progress with the assignment.

Structuring: The student demonstrates understanding of how to identify patters and structure the assignment accordingly.

Taking Action: The student is able to make the first step without postponing or procrastination.

Time Management: The student is able to divide their tasks sufficiently without running into time-pressure at a later stage.

Understanding Abstract Concepts: the student proves to understand concepts at an abstract level. This is either self-reported or observable from analyzing the reflective account.

Understanding People: The student is able to understand, interpret and react to what their interview partner says, means, implies with verbal or non-verbal communication.

Using available resources: The student is able to utilize the resources available to them in order to move forward with their assignment.

Valuable for future research: the student mentions that he or she perceives the learned skills and knowledge to be useful for future research projects.

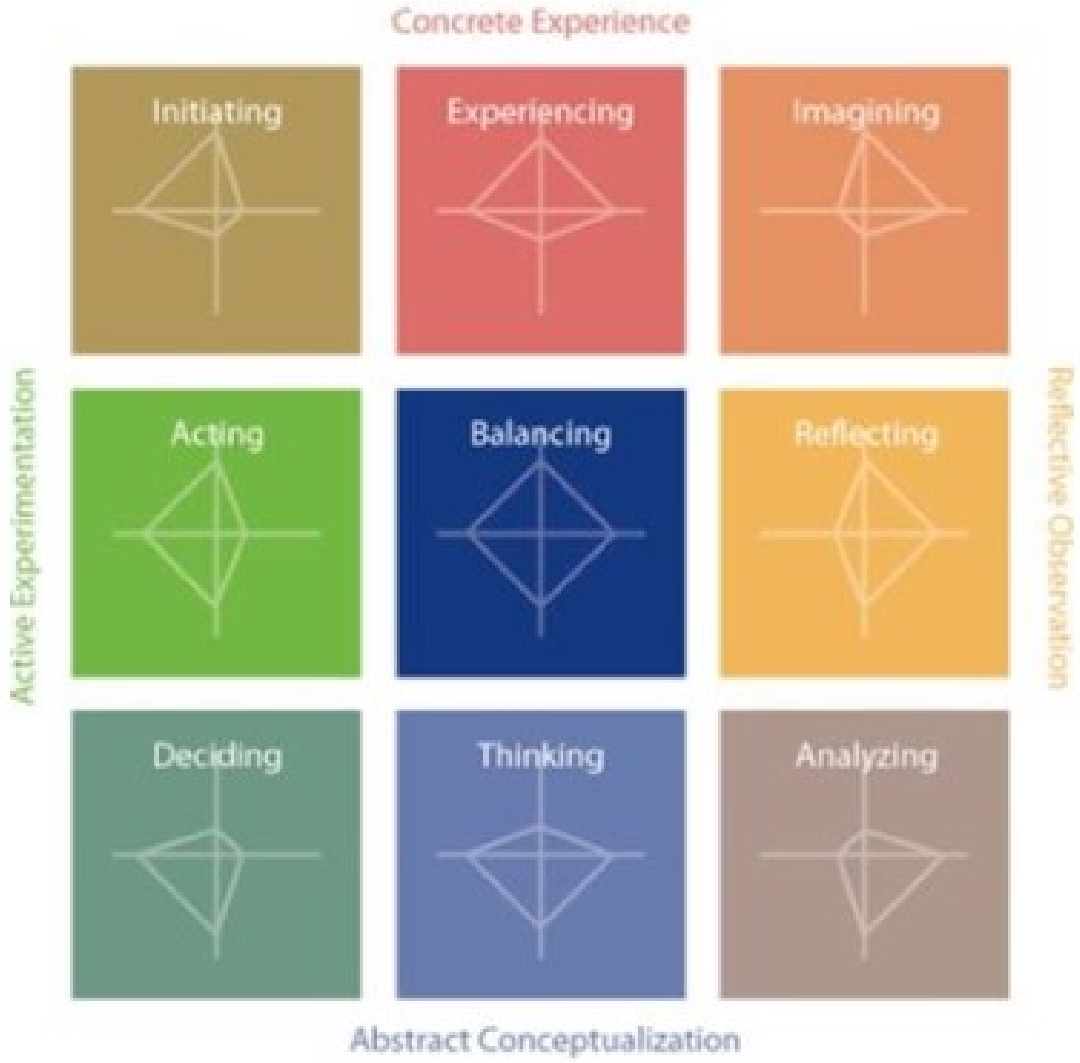
APPENDIX B

	being adapta... 35	being creative 20	challenge 196	conceptualiz... 17	confidence ab... 33	critical thinki... 23	dealing with... 5	doubting qua... 18	enthusiasm 47	excluded 0
being adaptable 35		11 (0,25)	52 (0,29)		5 (0,08)	8 (0,16)	1 (0,03)	3 (0,06)	10 (0,14)	
being creative 20	11 (0,25)		21 (0,11)	2 (0,06)	4 (0,08)	2 (0,05)			6 (0,10)	
challenge 196	52 (0,29)	21 (0,11)		19 (0,10)	47 (0,26)	24 (0,12)	8 (0,04)	20 (0,10)	53 (0,28)	
conceptualizing 17		2 (0,06)	19 (0,10)		1 (0,02)	2 (0,05)	1 (0,05)		5 (0,08)	
confidence about skills 33	5 (0,08)	4 (0,08)	47 (0,26)	1 (0,02)		4 (0,08)		2 (0,04)	11 (0,16)	
critical thinking 23	8 (0,16)	2 (0,05)	24 (0,12)	2 (0,05)	4 (0,08)			4 (0,11)	7 (0,11)	
dealing with setbacks 5	1 (0,03)		8 (0,04)	1 (0,05)					1 (0,02)	
doubting qualitative methods 18	3 (0,06)		20 (0,10)		2 (0,04)	4 (0,11)			3 (0,05)	
enthusiasm 47	10 (0,14)	6 (0,10)	53 (0,28)	5 (0,08)	11 (0,16)	7 (0,11)	1 (0,02)	3 (0,05)		
excluded 0										
familiarizing with new concepts 62	20 (0,26)	10 (0,14)	76 (0,42)	4 (0,05)	19 (0,25)	7 (0,09)	2 (0,03)	3 (0,04)	26 (0,31)	
first qualitative experience 34	10 (0,17)	3 (0,06)	44 (0,24)	4 (0,09)	5 (0,08)	6 (0,12)	1 (0,03)	3 (0,06)	12 (0,17)	
interesting 7	1 (0,02)		9 (0,05)		2 (0,05)	3 (0,11)			3 (0,06)	
little experience 36	5 (0,08)	3 (0,06)	42 (0,22)	3 (0,06)	4 (0,06)	5 (0,09)	1 (0,03)	2 (0,04)	8 (0,11)	
making choices 44	13 (0,20)	7 (0,12)	63 (0,36)	2 (0,03)	9 (0,13)	2 (0,03)		8 (0,15)	11 (0,14)	
mentions career 7	4 (0,11)	2 (0,08)	10 (0,05)		2 (0,05)	1 (0,03)			4 (0,08)	
perseverance 47	12 (0,17)	3 (0,05)	63 (0,35)	8 (0,14)	8 (0,11)	5 (0,08)	4 (0,08)	3 (0,05)	16 (0,21)	
planning 8	5 (0,13)		6 (0,03)		2 (0,05)	1 (0,03)		2 (0,08)	2 (0,04)	
previous expeience 28	6 (0,11)	4 (0,09)	30 (0,15)		9 (0,17)	1 (0,02)	1 (0,03)	3 (0,07)	8 (0,12)	
recognizes problem 71	9 (0,09)	8 (0,10)	97 (0,57)	7 (0,09)	13 (0,14)	10 (0,12)	5 (0,07)	7 (0,09)	13 (0,12)	
reflection on mistakes 137	15 (0,10)	10 (0,07)	166 (0,99)	12 (0,08)	42 (0,33)	15 (0,10)	5 (0,04)	9 (0,06)	24 (0,15)	
reflection on own shortcomings 20	3 (0,06)	1 (0,03)	31 (0,17)	1 (0,03)	3 (0,06)	5 (0,13)			6 (0,10)	
setting focus/managing priorities 49	13 (0,18)	5 (0,08)	68 (0,38)	6 (0,10)	9 (0,12)	6 (0,09)	3 (0,06)	5 (0,08)	17 (0,22)	
solving problems 27	8 (0,15)	4 (0,09)	34 (0,18)		8 (0,15)	3 (0,06)	1 (0,03)		9 (0,14)	
stakeholder management 30	18 (0,38)	8 (0,19)	30 (0,15)	2 (0,04)	5 (0,09)	4 (0,08)	2 (0,06)		5 (0,07)	
stepping outside your comfort zone 17	4 (0,08)	2 (0,06)	22 (0,12)	2 (0,06)	3 (0,06)	1 (0,03)	1 (0,05)	2 (0,06)	5 (0,08)	
structuring 31	5 (0,08)	5 (0,11)	30 (0,15)	6 (0,14)	6 (0,10)	3 (0,06)	3 (0,09)	4 (0,09)	12 (0,18)	
taking action 26	5 (0,09)	6 (0,15)	31 (0,16)	1 (0,02)	7 (0,13)	2 (0,04)			12 (0,20)	
time management 23	9 (0,18)	6 (0,16)	34 (0,18)	2 (0,05)	4 (0,08)	7 (0,18)	1 (0,04)	1 (0,03)	12 (0,21)	
understanding abstract concepts 11	2 (0,05)	2 (0,07)	6 (0,03)	2 (0,08)	6 (0,16)	3 (0,10)	1 (0,07)		2 (0,04)	
understanding people 44	16 (0,25)	10 (0,19)	49 (0,26)	6 (0,11)	14 (0,22)	5 (0,08)		2 (0,03)	14 (0,18)	
using available resources 69	23 (0,28)	16 (0,22)	89 (0,51)	4 (0,05)	24 (0,31)	7 (0,08)	2 (0,03)	2 (0,02)	16 (0,16)	
valuable for future research 70	14 (0,15)	9 (0,11)	79 (0,42)	8 (0,10)	18 (0,21)	11 (0,13)	1 (0,01)	10 (0,13)	20 (0,21)	

familiarizing... 62	first qualitat... 34	interesting 7	little experie... 36	making cho... 44	mentions c... 7	perseverance 47	planning 8	previous ex... 28	recognizes... 71	reflection o... 137	reflection o... 20
20 (0,26)	10 (0,17)	1 (0,02)	5 (0,08)	13 (0,20)	4 (0,11)	12 (0,17)	5 (0,13)	6 (0,11)	9 (0,09)	15 (0,10)	3 (0,06)
10 (0,14)	3 (0,06)		3 (0,06)	7 (0,12)	2 (0,08)	3 (0,05)		4 (0,09)	8 (0,10)	10 (0,07)	1 (0,03)
76 (0,42)	44 (0,24)	9 (0,05)	42 (0,22)	63 (0,36)	10 (0,05)	63 (0,35)	6 (0,03)	30 (0,15)	97 (0,57)	166 (0,99)	31 (0,17)
4 (0,05)	4 (0,09)		3 (0,06)	2 (0,03)		8 (0,14)			7 (0,09)	12 (0,08)	1 (0,03)
19 (0,25)	5 (0,08)	2 (0,05)	4 (0,06)	9 (0,13)	2 (0,05)	8 (0,11)	2 (0,05)	9 (0,17)	13 (0,14)	42 (0,33)	3 (0,06)
7 (0,09)	6 (0,12)	3 (0,11)	5 (0,09)	2 (0,03)	1 (0,03)	5 (0,08)	1 (0,03)	1 (0,02)	10 (0,12)	15 (0,10)	5 (0,13)
2 (0,03)	1 (0,03)		1 (0,03)			4 (0,08)		1 (0,03)	5 (0,07)	5 (0,04)	
3 (0,04)	3 (0,06)		2 (0,04)	8 (0,15)		3 (0,05)	2 (0,08)	3 (0,07)	7 (0,09)	9 (0,06)	
26 (0,31)	12 (0,17)	3 (0,06)	8 (0,11)	11 (0,14)	4 (0,08)	16 (0,21)	2 (0,04)	8 (0,12)	13 (0,12)	24 (0,15)	6 (0,10)
	24 (0,33)	5 (0,08)	17 (0,21)	11 (0,12)	2 (0,03)	16 (0,17)	7 (0,11)	6 (0,07)	24 (0,22)	35 (0,21)	9 (0,12)
24 (0,33)		1 (0,03)		9 (0,13)	1 (0,03)	10 (0,14)	2 (0,05)		14 (0,15)	19 (0,13)	1 (0,02)
5 (0,08)	1 (0,03)		2 (0,05)			3 (0,06)		1 (0,03)	3 (0,04)	6 (0,04)	2 (0,08)
17 (0,21)		2 (0,05)		8 (0,11)		11 (0,15)	2 (0,05)		13 (0,14)	31 (0,22)	4 (0,08)
11 (0,12)	9 (0,13)		8 (0,11)			15 (0,20)	1 (0,02)	9 (0,14)	17 (0,17)	39 (0,27)	3 (0,05)
2 (0,03)	1 (0,03)					2 (0,04)		1 (0,03)	1 (0,01)	2 (0,01)	
16 (0,17)	10 (0,14)	3 (0,06)	11 (0,15)	15 (0,20)	2 (0,04)		2 (0,04)	9 (0,14)	14 (0,13)	44 (0,31)	5 (0,08)
7 (0,11)	2 (0,05)		2 (0,05)	1 (0,02)		2 (0,04)		1 (0,03)		7 (0,05)	1 (0,04)
6 (0,07)		1 (0,03)		9 (0,14)	1 (0,03)	9 (0,14)	1 (0,03)		9 (0,10)	28 (0,20)	6 (0,14)
24 (0,22)	14 (0,15)	3 (0,04)	13 (0,14)	17 (0,17)	1 (0,01)	14 (0,13)		9 (0,10)		87 (0,72)	9 (0,11)
35 (0,21)	19 (0,13)	6 (0,04)	31 (0,22)	39 (0,27)	2 (0,01)	44 (0,31)	7 (0,05)	28 (0,20)	87 (0,72)		18 (0,13)
9 (0,12)	1 (0,02)	2 (0,08)	4 (0,08)	3 (0,05)		5 (0,08)	1 (0,04)	6 (0,14)	9 (0,11)	18 (0,13)	
21 (0,23)	7 (0,09)	4 (0,08)	14 (0,20)	17 (0,22)		18 (0,23)	6 (0,12)	12 (0,18)	17 (0,17)	31 (0,20)	10 (0,17)
16 (0,22)	5 (0,09)	1 (0,03)	7 (0,13)	6 (0,09)		7 (0,10)	2 (0,06)	6 (0,12)	11 (0,13)	27 (0,20)	2 (0,04)
17 (0,23)	5 (0,08)		6 (0,10)	9 (0,14)	4 (0,12)	13 (0,20)	1 (0,03)	7 (0,14)	10 (0,11)	15 (0,10)	3 (0,06)
10 (0,14)	3 (0,06)		2 (0,04)	5 (0,09)	1 (0,04)	7 (0,12)	1 (0,04)	4 (0,10)	13 (0,17)	13 (0,09)	5 (0,16)
17 (0,22)	9 (0,16)		7 (0,12)	10 (0,15)	2 (0,06)	13 (0,20)	5 (0,15)	3 (0,05)	9 (0,10)	27 (0,19)	2 (0,04)
15 (0,21)	4 (0,07)		5 (0,09)	8 (0,13)	5 (0,18)	8 (0,12)	5 (0,17)	3 (0,06)	10 (0,11)	23 (0,16)	1 (0,02)
15 (0,21)	7 (0,14)	2 (0,07)	3 (0,05)	6 (0,10)	1 (0,03)	10 (0,17)	2 (0,07)	3 (0,06)	7 (0,08)	17 (0,12)	4 (0,10)
6 (0,09)	1 (0,02)		2 (0,04)	1 (0,02)	1 (0,06)	3 (0,05)	2 (0,12)	3 (0,08)	2 (0,03)	10 (0,07)	3 (0,11)
8 (0,08)	7 (0,10)	1 (0,02)	7 (0,10)	14 (0,19)	3 (0,06)	10 (0,12)		12 (0,20)	10 (0,10)	42 (0,30)	4 (0,07)
42 (0,47)	11 (0,12)	3 (0,04)	16 (0,18)	17 (0,18)	3 (0,04)	18 (0,18)	4 (0,05)	15 (0,18)	19 (0,16)	47 (0,30)	5 (0,06)
25 (0,23)	16 (0,18)		13 (0,14)	16 (0,16)	4 (0,05)	14 (0,14)	4 (0,05)	14 (0,17)	27 (0,24)	56 (0,37)	1 (0,01)

setting focu... 49	solving pro... 27	stakeholder... 30	stepping ou... 17	structuring 31	taking action 26	time manag... 23	understandi... 11	understandi... 44	using availa... 69	valuable for... 70
13 (0,18)	8 (0,15)	18 (0,38)	4 (0,08)	5 (0,08)	5 (0,09)	9 (0,18)	2 (0,05)	16 (0,25)	23 (0,28)	14 (0,15)
5 (0,08)	4 (0,09)	8 (0,19)	2 (0,06)	5 (0,11)	6 (0,15)	6 (0,16)	2 (0,07)	10 (0,19)	16 (0,22)	9 (0,11)
68 (0,38)	34 (0,18)	30 (0,15)	22 (0,12)	30 (0,15)	31 (0,16)	34 (0,18)	6 (0,03)	49 (0,26)	89 (0,51)	79 (0,42)
6 (0,10)		2 (0,04)	2 (0,06)	6 (0,14)	1 (0,02)	2 (0,05)	2 (0,08)	6 (0,11)	4 (0,05)	8 (0,10)
9 (0,12)	8 (0,15)	5 (0,09)	3 (0,06)	6 (0,10)	7 (0,13)	4 (0,08)	6 (0,16)	14 (0,22)	24 (0,31)	18 (0,21)
6 (0,09)	3 (0,06)	4 (0,08)	1 (0,03)	3 (0,06)	2 (0,04)	7 (0,18)	3 (0,10)	5 (0,08)	7 (0,08)	11 (0,13)
3 (0,06)	1 (0,03)	2 (0,06)	1 (0,05)	3 (0,09)		1 (0,04)	1 (0,07)		2 (0,03)	1 (0,01)
5 (0,08)			2 (0,06)	4 (0,09)		1 (0,03)		2 (0,03)	2 (0,02)	10 (0,13)
17 (0,22)	9 (0,14)	5 (0,07)	5 (0,08)	12 (0,18)	12 (0,20)	12 (0,21)	2 (0,04)	14 (0,18)	16 (0,16)	20 (0,21)
21 (0,23)	16 (0,22)	17 (0,23)	10 (0,14)	17 (0,22)	15 (0,21)	15 (0,21)	6 (0,09)	8 (0,08)	42 (0,47)	25 (0,23)
7 (0,09)	5 (0,09)	5 (0,08)	3 (0,06)	9 (0,16)	4 (0,07)	7 (0,14)	1 (0,02)	7 (0,10)	11 (0,12)	16 (0,18)
4 (0,08)	1 (0,03)					2 (0,07)		1 (0,02)	3 (0,04)	
14 (0,20)	7 (0,13)	6 (0,10)	2 (0,04)	7 (0,12)	5 (0,09)	3 (0,05)	2 (0,04)	7 (0,10)	16 (0,18)	13 (0,14)
17 (0,22)	6 (0,09)	9 (0,14)	5 (0,09)	10 (0,15)	8 (0,13)	6 (0,10)	1 (0,02)	14 (0,19)	17 (0,18)	16 (0,16)
		4 (0,12)	1 (0,04)	2 (0,06)	5 (0,18)	1 (0,03)	1 (0,06)	3 (0,06)	3 (0,04)	4 (0,05)
18 (0,23)	7 (0,10)	13 (0,20)	7 (0,12)	13 (0,20)	8 (0,12)	10 (0,17)	3 (0,05)	10 (0,12)	18 (0,18)	14 (0,14)
6 (0,12)	2 (0,06)	1 (0,03)	1 (0,04)	5 (0,15)	5 (0,17)	2 (0,07)	2 (0,12)		4 (0,05)	4 (0,05)
12 (0,18)	6 (0,12)	7 (0,14)	4 (0,10)	3 (0,05)	3 (0,06)	3 (0,06)	3 (0,08)	12 (0,20)	15 (0,18)	14 (0,17)
17 (0,17)	11 (0,13)	10 (0,11)	13 (0,17)	9 (0,10)	10 (0,11)	7 (0,08)	2 (0,03)	10 (0,10)	19 (0,16)	27 (0,24)
31 (0,20)	27 (0,20)	15 (0,10)	13 (0,09)	27 (0,19)	23 (0,16)	17 (0,12)	10 (0,07)	42 (0,30)	47 (0,30)	56 (0,37)
10 (0,17)	2 (0,04)	3 (0,06)	5 (0,16)	2 (0,04)	1 (0,02)	4 (0,10)	3 (0,11)	4 (0,07)	5 (0,06)	1 (0,01)
	6 (0,09)	10 (0,14)	4 (0,06)	16 (0,25)	8 (0,12)	11 (0,18)	4 (0,07)	16 (0,21)	21 (0,22)	19 (0,19)
6 (0,09)		6 (0,12)	5 (0,13)	3 (0,05)	5 (0,10)	3 (0,06)	3 (0,09)	6 (0,09)	19 (0,25)	13 (0,15)
10 (0,14)	6 (0,12)		6 (0,15)	6 (0,11)	9 (0,19)	9 (0,20)	4 (0,11)	12 (0,19)	28 (0,39)	12 (0,14)
4 (0,06)	5 (0,13)	6 (0,15)		3 (0,07)	2 (0,05)	1 (0,03)	3 (0,12)	3 (0,05)	10 (0,13)	5 (0,06)
16 (0,25)	3 (0,05)	6 (0,11)	3 (0,07)		11 (0,24)	3 (0,06)	5 (0,14)	6 (0,09)	13 (0,15)	15 (0,17)
8 (0,12)	5 (0,10)	9 (0,19)	2 (0,05)	11 (0,24)		6 (0,14)	3 (0,09)	7 (0,11)	17 (0,22)	9 (0,10)
11 (0,18)	3 (0,06)	9 (0,20)	1 (0,03)	3 (0,06)	6 (0,14)		2 (0,06)	7 (0,12)	8 (0,10)	11 (0,13)
4 (0,07)	3 (0,09)	4 (0,11)	3 (0,12)	5 (0,14)	3 (0,09)	2 (0,06)		5 (0,10)	5 (0,07)	4 (0,05)
16 (0,21)	6 (0,09)	12 (0,19)	3 (0,05)	6 (0,09)	7 (0,11)	7 (0,12)	5 (0,10)		22 (0,24)	13 (0,13)
21 (0,22)	19 (0,25)	28 (0,39)	10 (0,13)	13 (0,15)	17 (0,22)	8 (0,10)	5 (0,07)	22 (0,24)		28 (0,25)
19 (0,19)	13 (0,15)	12 (0,14)	5 (0,06)	15 (0,17)	9 (0,10)	11 (0,13)	4 (0,05)	13 (0,13)	28 (0,25)	

APPENDIX C



Experience Based Learning Systems, LLC. (2013). *Kolb Learning Style Inventory (LSI)* [Image]. Retrieved from https://learningfromexperience.com/themes/kolb-learning-style-inventory-lsi/