



LUND UNIVERSITY
School of Economics and Management

**Characteristics and challenges associated with managing
and leading clever people: A case study of the Icelandic
Meteorological Office (IMO)**

by

Sigríður Hulda Árnadóttir and Tinna Jónsdóttir

31 May 2017

Master's Programme in Management

Supervisor: Stein Kleppestø

Abstract

Purpose: The purpose of this study was to explore the challenges that have been related to managing and leading clever people and the characteristics that are unique for them. This was done by reviewing the available literature and summarizing the main findings. The literature is scarce and inadequately researched. Therefore, the purpose of this study was to explore the main characteristics of the clever employees at the IMO and the challenges associated with managing and leading them. Furthermore, if the characteristics and challenges were the same as found in the literature, with a special focus on eight known challenges we identified. Finally, if the case study at the IMO would reveal any new characteristics or challenges, as it would be of value to this knowledge frame.

Research questions:

What are the main characteristics of clever employees at the IMO and the challenges that come with managing and leading them?

- Do the findings from the case study confirm or falsify the existing theory about the characteristics of clever people or the challenges that come with managing and leading them?
- Does this case study reveal new characteristics or challenges on managing and leading clever people?

Methodology: As the time only allowed for looking at a single organization, it was decided to do a case study. By adopting a deductive driven research approach, we could test the theory derived from the literature. The qualitative and quantitative methods allowed us to both test the theory and possibly add to it. Using a quantitative method, we could specifically ask about the relevance of the eight commonly known challenges associated with managing and leading clever individuals. These methods combined, provided us with the information we needed to answer our research questions.

Findings: The characteristics and the challenges associated with the clever employees at the IMO confirm the existing theory. Only one new challenge and two new characteristics were identified and due to the size of the study, they cannot be generalized. Only one challenge out of the eight commonly know challenges, was mentioned in the qualitative part of the study, even though the managers rated most of them as relevant in the quantitative part.

Limitations: Due to the limited time frame, only one organization was studied therefore, generalizability is limited. Furthermore, the novel concepts studied are socially constructed and can therefore be perceived differently.

Acknowledgements

First and foremost, we would like to thank the managers at the Icelandic Meteorological Office (IMO), who made this research project possible. We would like to give special thanks to the human resource manager, Borgar Ævar Axelsson, for giving us access to the managers at the IMO and his overall positivity towards the study.

We are grateful for the guidance and help we received from Lund University School of Economics and Management, especially from our supervisor Stein Kleppestø.

Finally, our family for their patience, support and believe in us.

Thank you. Tack. Takk fyrir.

Key words and definitions

Keywords: clever, knowledge, knowledge worker, talented individual, geek, challenges, managing, leading.

Table of content

Abstract.....	I
Acknowledgements	II
Key words and definitions.....	III
List of figures.....	V
1. Introduction.....	1
1.1 Background.....	1
1.2 Problem discussion	2
1.3 Purpose and Research Questions.....	3
2. Literature Review	4
2.1 Knowledge.....	4
2.2 Knowledge worker and talented individuals.....	5
2.2.1 Knowledge worker.....	5
2.2.2 Talented individuals.....	5
2.3 Clever people-characteristics	6
2.4 Managing and leading.....	7
2.5 Challenges with managing and leading clever people	7
3. Methodology	10
3.1 Research Philosophy.....	10
3.2 Research Approach.....	11
3.3 Research Design.....	11
3.3.1 Research Strategy.....	11
3.3.2 Research Choice.....	12
3.3.3 Time Horizon	12
3.4. Data Collection Method	13
3.4.1 Qualitative Data Collection Method	13
3.4.2 Quantitative Data Collection Method	15
3.5 Data Analysis.....	16
3.5.1 Qualitative Data Analysis.....	16
3.5.2 Quantitative Data Analysis.....	16
3.6 Data Quality	17
3.6.1 Qualitative Data Quality.....	17
3.6.2 Quantitative Data Quality.....	18
3.7 Limitations	19
4. Findings and analysis.....	19
4.1 Qualitative findings	19
4.1.1 Open question about general management challenges at the IMO.....	20
4.1.2 Clever individuals at the IMO.....	20

4.1.3 Characteristics of clever individuals.....	21
4.1.4 Challenges with managing clever individuals.....	23
4.1.5 Differences in managing clever individuals	24
4.2 Quantitative findings	25
5. Discussion	34
6. Conclusion	37
7. References.....	40
Appendix.....	43
Appendix A - Information sent out to potential participants	43
Appendix B - Interview questions and questionnaire	44

List of Tables

Table 1: Overview of research participants	14
--	----

List of Figures

Figure 1: That it is more challenging to manage and lead them than employees that do not fit the definition of clever	26
Figure 2: They have low respect for hierarchy	27
Figure 3: They are scornful about being controlled.....	28
Figure 4: They expect to be treated differently than other employees	28
Figure 5: Rules do not apply to them.....	30
Figure 6: They can be disrespectful	31
Figure 7: They value autonomy above everything	32
Figure 8: They lack loyalty to their organization.....	33

1. Introduction

1.1 Background

In the modern society the demand for educated and highly skilled people is increasing (Dobbs, Madgavkar, Barton, Labaye, Manyika, Roxburgh, Lund & Madhav, 2012). As the world is changing in the direction of knowledge being the greatest asset, the main challenge is to attract and keep the people who create value for the company (Goffee & Jones, 2009; McAfee & Brynjolfsson, 2014). Among those people are individuals who are identified as clever. They have the potential to create great value for the organization but according to Goffee and Jones (2009) they can also destroy it. But who are these clever individuals? They are defined in the following way: *Highly intelligent and highly talented individuals who contribute extensively more than other employees to what the organization does and are extremely valuable (Goffee & Jones, 2009; Glen, 2003). They have skills that are not easily replicated (Goffee & Jones, 2009).*

Clever individuals tend to have a big ego and some unique characteristics that sometimes affects their ability to work with others (Goffee and Jones, 2009). They often feel like they contribute more and can therefore follow their own rules (Goffee & Jones, 2009). Furthermore, they do not respond well to traditional management and leadership styles (Glen, 2003; Roche, 2007; Powell & Lubitsh, 2007). Consequently, many challenges seem to be linked to clever people. In their book, Goffee and Jones (2009) present a list of characteristics unique to clever individuals. The characteristics are closely entangled with the challenges (Goffee and Jones, 2009; Glen, 2003), making it difficult to examine one without the other.

The organization chosen for the case study: The Icelandic Meteorological Office

Iceland is a volcanic island with a small population of 338 349 habitants on the 1st of January 2017 (Statistics Iceland, 2017). Its geographical position and active volcanism and plate tectonics makes the country vulnerable to natural hazards, which requires extensive and active monitoring. The Icelandic Meteorological Office (IMO) is a public institute that operates under the auspices of the Ministry for the Environment and Natural Resources. The IMO employs staff of 130 people, of which 60 people work on research related activities. The main research area of the IMO is in earthquake and volcanic processes and hazards along with glacial studies, ice-volcano interaction and climate change. Furthermore, it also focuses on research in multiparameter geophysical monitoring to develop better forecasts of hazardous events. In 2009 the former Icelandic Meteorological Office (1920) merged with the the Icelandic Hydrological Survey (1948) and they are now responsible for monitoring natural hazards in Iceland and participating in international monitoring and research (The Icelandic Meteorological Office, 2017).

The IMO was chosen for the case study for the following reasons: The nature of the work done at

the IMO is very specialized, making the IMO vastly dependant on a highly skilled and educated workforce. By highly skilled and educated we mean that many of these people create extensively more amount of value for the IMO in terms of highly specialized work and contribution and their jobs cannot easily be replaced. It is therefore likely that among this workforce are individuals who fit the description of clever. The second reason was positivity towards the study from the Human Resource manager at the IMO when he was contacted and asked if they were willing to participate, but getting access to companies and employees can be difficult. Finally, three pre-study interviews that were conducted clearly revealed the relevance of the institute towards the research questions. That is why the IMO was considered to be highly relevant to study the supposed management challenges that come with managing and leading clever people. The case study focuses on grasping the managers perception towards these challenges, along with characteristics unique to clever individuals. That information will then be used to answer the research questions.

1.2 Problem discussion

The world is moving from capital being the greatest asset towards knowledge generating the most value (Dobbs et al, 2012). Geoffe and Jones (2009) claim that much of this value creation relies on few clever individuals that have the ability to produce profound value for their company compared to other employees. Despite the increasing demand and therefore number of clever people in the workplace (Dobbs et al, 2012), this is a subject that has not been thoroughly researched and especially the challenges associated with them. This became evident after an extensive literature search. The available literature is very scarce and consists mostly of books and non-peer reviewed articles. The main book on this subject, *Clever*, is although written by prestigious professors and is based on interviews they conducted (Goffee & Jones, 2009). In the book it is stated that clever employees need a different management tactic and leadership style (Goffee & Jones, 2009). However, the authors of the book concepts such as “traditional” management styles, without really explaining how they define them. They also claim that they did extensive research in international organizations in a wide range of industries (Goffee & Jones, 2009), but without giving any information on how they conducted their research. This further strengthens the importance to test the claims they have in the book, as well as what has been claimed by other authors.

Furthermore, there has been a discussion on the topic about the clever employee and his/her resistance to being managed or lead (Goffee & Jones, 2009; Glen, 2003) and his/her potential to create extensive value or even cause serious damage to a company or organization (Goffee & Jones, 2009). Unique characteristics of the clever individuals have also been discussed in the literature and cannot be left out as they are so closely entangled to the challenges (Goffee & Jones, 2009; Glen, 2003).

Other available literature on this subject is about clever people, geeks, knowledge workers and talented people. These concepts have similarities that partly overlap with the definition of clever and therefore it was decided to include them in the literature search. Detailed description of these concepts can be found in chapter 2.2 and 2.3. The literature focuses on the value and characteristics of clever individuals but also how many challenges they bring for their managers. These challenges have been claimed to possibly hinder the value and the performance the clever individuals can bring for their company (Goffee & Jones, 2009; Glen, 2003). As we found that the challenges and the characteristics stated to be unique to clever have been little researched and this subject is becoming increasingly more relevant, a case study would be valuable to test what is stated but inadequately researched in the literature. By using a combination of qualitative and quantitative method, it is possible to test these statements but also build to the existing theory (Saunders, Thornhill & Lewis, 2012).

1.3 Purpose and Research Questions

There is an increasing demand for educated and highly skilled people in modern society and in the literature it is claimed that they come with many challenges. That claim has not been tested, and a case study is therefore of great relevance to confirm and possibly add to the existing theory. The unique characteristics of these clever individuals are closely related to the challenges (Goffee & Jones, 2009; Glen, 2003) and consequently have to be studied as well. The opportunity to research this area is of personal interest as we have both worked within an organization that relies mainly on knowledge work and in our future careers as managers, we will most likely have to manage and lead this type of employees. It is therefore relevant, valuable and beneficial for this knowledge area, as well as for us.

We will explore the challenges that have been related to managing and leading clever people and the characteristics that are unique to them (Goffee & Jones, 2009; Glen, 2003). This will be done by reviewing the available literature and summarizing the main findings. As stated previously, the literature is scarce and inadequately researched. Therefore, the purpose of this study is to explore the main characteristics of the clever employees at the IMO and the challenges associated with managing and leading them. Furthermore, if the characteristics and challenges are the same as found in the literature, with a special focus on eight known challenges we have identified. Finally, if the case study at the IMO reveals any new characteristics or challenges, as it would be of value to this knowledge frame.

The purpose leads up to the following research question and two sub-questions:

What are the main characteristics of clever employees at the IMO and the challenges that come with managing and leading them?

- Do the findings from the case study confirm or falsify the existing theory about the characteristics of clever people or the challenges that come with managing and leading them?
- Does this case study reveal new characteristics or challenges on managing and leading clever people?

2. Literature Review

The aim of this chapter is to give an overview of the existing literature. Because of the nebulous concepts of clever, knowledge worker, talented and geek, the literature review is also intended to clarify and define those concepts in a more concrete way.

Literature search

The literature search was conducted by using three databases: Ebscohost, Web of Science and Google scholar. The search was performed with combinations of the following keywords: managing or leading, combined with clever, knowledge worker, intellectual capital, geek, talented, and human capital. The articles found were then scanned to see if they were about challenges or characteristics. Furthermore, we used snowballing search of the articles' reference lists, which led to the inclusion of further relevant publications.

To the author's best knowledge, based on the thorough literature search, little research has been done on the subject area and literature is very scarce. Therefore, the review draws on literature on knowledge, knowledge worker, talented individuals, geeks and clever people. This leads up to the main focus of this chapter and the study, the characteristics of clever people and in particular the challenges that come with managing and leading them.

2.1 Knowledge

“Knowledge is not an isolated or nice-to-have phenomenon; it is the essence of a myriad of jobs and the heart of modern national and corporate competitiveness” (Goffee & Jones, 2007, p. 10). In recent years there has been more and more focus on knowledge and its growing importance in business and organizations (Roche, 2007). Many have stated that the economy has shifted from being industrialized toward knowledge economy (Lewis, 2006; Whicker & Andrews, 2004; Cobert, 2005; Covey, 2004 & Drucker, 2003a). Others have stated that knowledge and knowledge workers are becoming one of the greatest strategic asset and learning how to lead them might be one of the most important skill (Roche, 2007). Especially given the fact that some believe that semi-skilled and unskilled jobs will disappear in the 21st century (Cobert, 2005; McAfee & Brynjolfsson, 2014).

2.2 Knowledge worker and talented individuals

As the definition of clever people is ambiguous and the literature is scarce, terms such as knowledge workers and talented individuals were used as well for the literature search. Defining those concepts is also of great relevance as it highlights the similarities with the definition of clever.

2.2.1 Knowledge worker

It has been argued that knowledge work and knowledge workers are key components when it comes to a company's competitive advantage (Asllani & Luthans, 2003). The term knowledge worker was first introduced by Drucker in 1959 and has since then been defined in many different ways (Roche, 2007; Drucker, 2003b). A knowledge worker is believed to be highly educated, self-motivated, require autonomy and self-control (Roche, 2007). Others also focus on the high level of education, adding the qualification and experience these workers have in their field (Bobadilla & Gilbert, 2017; Edgar, Geare & O'Kane, 2015). These are individuals that think for a living and what makes them different from others is their non-routine problem solving, which requires a combination of convergence, divergence and creative thinking (Bobadilla & Gilbert, 2017). Their job is about creating, gathering or disseminating knowledge (Edgar, Geare & O'Kane, 2015; Boda, Lorinez & Szlavik, 2008). Roche (2007) agrees with this last definition and he uses it to identify knowledge activities. According to him, a knowledge worker is someone who:

- Finds existing knowledge e.g. possesses intelligent analysis skill
- Creates new knowledge e.g. innovative and research work
- Packages knowledge e.g. publishes research and books
- Distributes knowledge e.g. lecturers e.t.c
- Applies knowledge e.g. accountants, scientists

The similarities between knowledge workers and clever people is simply that all clever people are knowledge workers, but not all knowledge workers are clever. The fundamental thing that the definition of knowledge workers is missing, is the skill that is not easily replicated (Goffee and Jones, 2009) and the ability to contribute extensively more than other employees to what the organization does and being extremely valuable (Goffee and Jones, 2009; Glen, 2003).

2.2.2 Talented individuals

Talented individuals can be found in many areas, they can be innovators, entrepreneurs or creative people that have a special talent for spotting and exploiting an opportunity (Powell & Lubitsh, 2007). They can be extraordinarily talented in one area, but average in others (Coulson-

Thomas, 2012). It is the extreme talent they have regarding their field of work that make them so valuable (Coulson-Thomas, 2012).

All clever people are talented in their own field (Goffee & Jones, 2009), but not all talented individuals can be defined as clever.

Chapter Summary

It is evident by reading this chapter, that all clever individuals are knowledge workers and talented individuals, but not all knowledge workers and talented individuals are clever. This makes the literature about talented individuals and knowledge workers applicable to clever individuals as well.

2.3 Clever people-characteristics

The following two books were used for the definition of clever people: *Clever, leading your smartest, most creative people* by Rob Goffee & Gareth Jones (2009) and *Leading geeks* by Paul Glen (2003). The definitions in the books overlap, where in *Leading geeks* Glen (2003) these individuals are described as as highly intelligent, introverted, hard to keep, independent, hard to find and extremely valuable. Furthermore, Glen (2003) claims that they are knowledge workers that specialize in creation, maintenance and support of technology. In *Clever*, Goffee and Jones (2009) describe clever as highly talented individuals that have the potential to create disproportionate amounts of value from the resources that the organization makes available to them. This is their official description but throughout the book, they describe other characteristics, such as how passionate they are about their work, their creativity and ability to think out of the box, their believe that they are always right and that they go their own way if they do not agree with the way others propose (Goffee & Jones, 2009). Also, that they are more declined to speak their mind than other employees (Goffee & Jones, 2009). As the definitions overlap, it was decided to create a new definition, generated from both books:

Highly intelligent and highly talented individuals who contribute extensively more than other employees to what the organization does and are extremely valuable (Goffee & Jones, 2009; Glen, 2003). They have skills that are not easily replicated (Goffee & Jones, 2009).

There are certain characteristics that clever individuals tend to have in common, for example that they are not impressed by corporate hierarchy, they feel like the company's rules do not apply to them, they are not easily led and do not respond well to traditional management and leadership styles (see chapter 2.4) (Goffee & Jones, 2009; Glen, 2003; Powell & Lubitsh, 2007). Furthermore, Goffee and Jones (2009) and Glen (2003) describe them as often being introverted and preferring to work alone. They can have job titles like programmer, project manager (Glen, 2003), doctor or lawyer (Goffee & Jones, 2009) and can be found in most organizations.

However, these characteristics are not unique to clever people but have been specially linked to them (Goffee & Jones, 2009; Glen, 2003; Powell & Lubitsh, 2007). Throughout this paper, the following will be used interchangeably: clever people, clever individuals and clever employees.

2.4 Managing and leading

Both Goffee and Jones (2009) and Glen (2003) talk about in their books that leading and managing clever people is difficult and different from doing so with other people. Therefore it is important to provide an insight into how these two concepts, leading and managing, are portrayed in the books. Management is little discussed in the literature, as the focus is mainly on leadership. It has although been stated that some the management principles that are being used today are the ones that were developed in and for the industrial era (Lewis, 2006; Covey, 2004; Oltra, 2005). We now live in a knowledge age and it is indicated that the management principle are becoming outdated and need to be updated accordingly (Lewis, 2006; Covey, 2004; Oltra, 2005).

Leadership for clever people requires an individual to provide both management and leadership at the same time, while handling the demands that come with it (Glen, 2003). If we look further into leadership, it is claimed that traditional leadership methods do not work with clever people, as they tend to have certain characteristics that affect the leader-follower dynamics (Glen, 2003). As discussed by Glen (2003), most books on leadership are based on the fundamental assumption that leadership is a relationship between leaders and followers and focuses on attributes of the leader, making the nature of the follower seem irrelevant. Not all followers are alike, they respond to leadership differently and clever people in particular (Glen, 2003). Power is the basis of many leadership approaches, but it is claimed to be useless when it comes to leading clever people, as they do not respond to it effectively (Glen, 2003; Goffee & Jones, 2009). Many scholars try to disentangle the concepts of leadership and management, while *Leading geeks* does not make a distinction between the two (Glen, 2003). The literature does however acknowledge that there are differences between the concepts, moreover stating that separating them in this context does not give any value (Glen, 2003). Since we found that the literature reviewed does not make distinct difference between managing and leading and it has been encouraged to see them together (Mintzberg, 2009), we will consider it to be intertwined, where one goes with the other.

2.5 Challenges with managing and leading clever people

The current frame of knowledge about the challenges with managing and leading clever people is scarce but in the last ten to fifteen years there has been some contribution to the subject, mainly from the two books previously mentioned and a few articles. The need for academic research is

evident (Roche, 2007). This chapter will include the challenges that have been associated with knowledge worker, talented individuals, geeks and clever individuals. Some of them will be repeated as the same challenges have often been associated with all these terms, and doing so highlights the resemblance of them. Furthermore, as mentioned before, these challenges are closely entangled with certain characteristics and it is thus unavoidable to repeat some of the characteristics described in chapter 2.3.

Clever people are claimed to resent traditional management styles and are in need of different approaches when it comes to leadership and management (Goffee & Jones, 2009; Glen, 2003; Powell & Lubitsh, 2007). Goffee and Jones (2009) claim that their research reveals that traditional leadership methods as “seen in many organizations” do not work when leading clever people, without referring in any kind of detail to what leadership style that is. However, they do mention that some leadership virtues seem to apply to clever people, such as excellent communication skills and authenticity (Goffee & Jones, 2009). But for the non-traditional management skills they indicate that they need guidance, mentoring and stroking of their egos (Goffee & Jones, 2009). One management skill that Goffee and Jones (2009) and Glen (2003) do not agree on, is motivation. Goffee and Jones (2009) do not think clever people need to be motivated, while Glen (2003) believes they do.

In leading geeks, Glen (2003) argues that despite all the different leadership theories they all boil down to the leader and the follower relationship. He states that leadership is a power relationship where the leader and the follower influence each other for their mutual benefit (Glen, 2003). Furthermore, he claims that traditional leadership styles do not work on geeks for three main reasons (Glen, 2003). First is that geeks are different from other employees and need different kind of “care” and “feeding” than others (Glen, 2003). Secondly, that the nature of the work they perform is different (Glen, 2003). Lastly, that the traditional way of leadership, which is power, is used to affect behaviour and is not efficient, since geek work is not delivered through behaviour but through thought and that is why they do not respond to power (Glen, 2003). Other authors have also pointed out that clever people do not respond well to traditional management tactics without defining exactly what those particular tactics are (Roche, 2007; Powell & Lubitsh, 2007).

Other challenges that have been observed by Goffee and Jones (2009) is that in addition to be hard to lead, clever individuals also tend to have low respect for hierarchy. They know their worth which makes them more secure about their position and unafraid to speak their mind and ignore rules (Goffee & Jones, 2009). Both Goffee and Jones (2009) and Glen (2003) describe geeks as being introverted and preferring to work alone. This can impact their ability to work in teams, which can be a challenge. Furthermore, they have the ability to produce profound value for their company or organization, but they also have the potential to destroy great value as well when their inflated egos view their value as much more significant than the value of others

(Goffee & Jones, 2009). What value it is that they can destroy is not explained by Goffee and Jones (2009), but we assume it is the same that they can create. Clever people do not always get it right and the stakes can be high (Goffee & Jones, 2009).

Glen (2003) claims that in addition to not responding to traditional management styles, geeks tend to resist authority, reject official hierarchy, know their worth and assume that office policies do not apply to them. Therefore, they can come across as disrespectful and condescending to other employees that can result in the loss of respect from their colleagues (Glen, 2003). Powell and Lubitsh (2007) describe talented people in the way that they know their worth and have loyalty to their own career rather than the organization. Furthermore, they are scornful to being controlled, do not value hierarchy, do not respond to traditional management approaches and have the ability to create enormous amount of value and destroy it as well (Powell & Lubitsh, 2007). Roche (2007) describes knowledge workers in the way that they have loyalty to their own work rather than the organization, they have little tolerance for hierarchy, prefer autonomy and resent traditional management styles. They know their worth and sometimes expect special treatment in return. Finally, knowledge workers tend to be highly educated, self reliant, self controlled and prefer meaning rather than extinct rewards (Roche, 2007).

When the literature is examined, the similarities in the characteristics of clever individuals and knowledge worker, talented people and geeks are so explicit that the reader gets the feeling that the description refers to the same individual, despite the different terminology. Disregarding the strong similarities, we acknowledge that even though all clever people are talented and a knowledge workers, not all talented and knowledge workers are clever. We can therefore say that literature about talented people and knowledge workers is applicable to clever people as well, but not vice versa. When the literature was analysed it was possible to draw together the descriptive characteristics and the main challenges related to managing and leading clever people.

1. That it is more challenging to manage and lead them than employees that do not fit the definition of clever (Glen, 2003; Powell & Lubitsh, 2007; Roche, 2007; Goffee & Jones, 2009)
2. They have low respect for hierarchy (Glen, 2003; Powell & Lubitsh, 2007; Roche, 2007; Goffee & Jones, 2009)
3. They are scornful about being controlled (Glen, 2003; Roche, 2007)
4. They expect to be treated differently than other employees (Glen, 2003; Roche, 2007)
5. Rules do not apply to them (Glen, 2003; Goffee & Jones, 2009)
6. They can be disrespectful (Glen, 2003)
7. They value autonomy above everything (Roche, 2007; Glen, 2003; Goffee & Jones, 2009)
8. They lack loyalty to their organization (Glen, 2003; Powell & Lubitsh, 2007; Roche, 2007)

It is difficult to generalise and say that all these challenges or characteristics are only applicable to clever people. But the literature suggests that at least one or more of these statements are linked to most clever people (Goffee and Jones, 2009). We are fully aware that these challenges and characteristics are not limited to clever people, but according to the literature they have been especially linked to them (Goffee and Jones, 2009; Glen, 2003; Roche, 2007; Powell & Lubitsh, 2007). We will use these eight statements as a basis of knowledge to compare the quantitative and qualitative data collected from the managers at the IMO. We are also aware that these eight statements are only a small fraction of the literature, and therefore it is only used as a basis. The findings will be compared to the entire literature review, not only these eight statements.

3. Methodology

This chapter gives an overview of the methodological reasoning, research design, research philosophy, data collection method and analysis that were used to answer the research questions.

3.1 Research Philosophy

Research philosophy deals with the nature and development of knowledge in a certain field (Saunders, Thornhill & Lewis, 2012). When designing a research method and strategy, the philosophical reasoning behind the chosen method and design must be coherent (Easterby-Smith, Thorpe & Jackson, 2015). It describes that an understanding and perception of the world strongly influences a choice of research philosophy and hence the overall research design.

Taking the research philosophy into account, this study takes a stand at the relativist ontological standpoint where it postulates that multiple realities exist. It means that truths are constructed and interpreted intersubjectively by each individual observer, including the researcher and can therefore be perceived in many ways (Easterby-Smith, Thorpe & Jackson, 2015). This means that many understandings exist and that they are not linked to social or situational context (Saunders, Thornhill & Lewis, 2012). This allows for many different understandings of the same subject that is not dependent on social or situational context (Saunders, Thornhill & Lewis, 2012).

In line with the fundamental philosophical positions most often practiced in management and business research, this study takes a constructionist epistemological standpoint (Easterby-Smith, Thorpe & Jackson, 2015). That means that many truths exist and that there are many different realities and therefore multiple perspectives need to be gathered through a mixture of qualitative and quantitative methods (Easterby-Smith, Thorpe & Jackson, 2015), as the study is dealing with highly abstract concepts.

3.2 Research Approach

This study was performed using a deductive approach to test statements found in the literature about the characteristics and challenges associated with managing and leading clever people. It was aimed to explore to what extent these statements are applicable at the IMO. The literature is used to develop a theoretical or conceptual framework to test the data (Saunders, Thornhill & Lewis, 2012). The literature was thoroughly examined to develop an understanding of the pre-existing theory or statements about managing and leading clever people and to develop topics to test the theory (Saunders, Thornhill & Lewis, 2012). A mixed method of both qualitative and quantitative research was selected. In order to explore the inner experience and perception of our participants, a qualitative research in the form of semi-structured interviews was chosen to examine if and then what challenges are present at the chosen organization (Corbin & Strauss, 2015). Furthermore, to examine the characteristics unique to the clever employees at the IMO. In the quantitative part of the study, the existing challenges were tested, by measuring their relevance in the given organization. That was done by asking the participants to rate the relevance of the challenges (See chapter 3.4.2). Both the qualitative and the quantitative data collected was intended to shed light on the statements found in the existing theory (Saunders, Thornhill & Lewis, 2012) and to possibly add new information.

3.3 Research Design

Since the definition of clever is a vague and an emerging concept, the study aimed at testing the statements found in the literature as well as trying to add to it. This was done in a single case study. Due to the constricted time frame of the study and the limited accessibility to organizations willing to participate, it was only possible to look closely at the perspective of managers in a single organization. However, even single case studies have proven to provide convincing tests of theory (Easterby-Smith, Thorpe & Jackson, 2015). The IMO was considered vastly appropriate for many reasons, such as the accessibility and the fact that several of their employees fit under the definition of clever. To confirm the suitability of the IMO, a small pre-study was conducted. It revealed many issues related to the research concepts. The pre-study consisted of open interviews with three managers where they were asked openly about management and leadership issues at the IMO. The pre-study was only meant to confirm the choice of the organization, not to add any data to the study.

3.3.1 Research Strategy

The research strategy is a case method approach with purposive sampling to generate insight of what challenges the managers at the IMO are faced with. The quantitative data collection will be

used to confirm or falsify the pre-existing statements of known characteristics of clever individuals and the challenges associated with managing and leading them, while the qualitative part will be used to search for emerging perspectives to add to the existing theory (Easterby-Smith, Thorpe & Jackson, 2015). This is valuable as research and literature about this topic is scarce. The conduction of the interviews was designed with this in mind, starting with an open question about the main challenges the managers face in their work, without associating it with clever. That is followed by open ended questions about the characteristics and main challenges associated with managing and leading clever employees. The interview ended with a quantitative questionnaire asking directly about the relevance of eight commonly known challenges with managing and leading clever people.

As this study was conducted using a deductive approach, the literature was used as a basis for the statements to be tested (Saunders, Thornhill & Lewis, 2012). Using a deductive approach has some advantages such as to device a framework and direct the data analysis. However, it has also been criticised, pointing out that it might be subjected to premature closure of the investigated theory and that the view of the participants might influence the theoretical construct. To avoid the research to be endangered in that way, it was decided to also incorporate an inductive approach when collecting and analysing the data. This allows for emerging perspectives to be added to the existing theory (Saunders, Thornhill & Lewis, 2012). The questions in the qualitative part of the study were open-ended, which allowed us to look for new perspectives.

3.3.2 Research Choice

When research philosophy and approach are taken into consideration, an approach of mixed method of qualitative and quantitative was selected as most suitable to answer the research questions at hand (Easterby-Smith, Thorpe & Jackson, 2015). We believe it is the most suitable approach to use as the qualitative method allows us to capture the perception and experience of the managers we interviewed, while in the quantitative part we could ask them directly how relevant they thought the eight selected challenges found in the literature are. This further allows exploring to what extent the challenges at the IMO are related to managing and leading clever individuals or something else.

3.3.3 Time Horizon

Considering that this study did not intend to observe change and due to the limited time frame given, as well as the fact that it rather aimed at looking into the perspective of different individuals with similar background (profession, expertise and position), a cross sectional approach was chosen. This method uses a short-term time perspective to explore a particular phenomenon at one point in time (Saunders, Thornhill & Lewis, 2012).

3.4. Data Collection Method

Recently there has been a growing interest in using a combination of both quantitative and qualitative methods when doing research (Easterby-Smith, Thorpe & Jackson, 2015). It can be argued that combining the methods within the same study increases the validity and generalizability of the results and the possible theoretical contribution (Easterby-Smith, Thorpe & Jackson, 2015). This way we can use the qualitative method to capture the interviewees' opinion and personal insights regarding managing and leading clever employees. By starting with an open question about general challenges the managers face, it allows us to see if the leadership and management challenges present at the IMO are mainly related to managing and leading these clever individuals or to something else. After that we narrowed the scope and asked specifically about challenges they associate with their clever employees. If the challenges are not the same in the general and the more specific questions, we can assume that the challenges really are related to the clever employees. At last it was used to reveal if the managers perception is in line with the existing theory or if it can add something new to it. The quantitative part explicitly explores if the managers agree with the common challenges found in the literature. Combining these two methods was therefore most suitable to answer the research questions the study set out to answer.

3.4.1 Qualitative Data Collection Method

Using qualitative research method allows the researcher to step into the participants' world and see it from their perspective (Corbin & Strauss, 2015). This method was chosen as it captures personal insights and opinions of the participants, which provides valuable information for the study.

Sampling

Purposive sampling of nearly all the managers, was used for the qualitative part of the study as it was clear which sample units were needed to test the theory (Easterby-Smith, Thorpe & Jackson, 2015). Since the study aimed to explore and identify the characteristics of clever employees at the IMO and the challenges the managers encounter when managing and leading them, the sample unit was all managers at the IMO. Given the nature of the work done at the IMO, we assumed that all managers were in charge of at least one clever employee and therefore a candidate for the study. An email was sent out where all the managers were asked to participate in the study (See Appendix A). 12 out of 15 managers accepted the invitation. A table providing more information about the chosen managers, along with specific information about the interviews can be found in Table 1.

Table 1: Overview of research participants

Name of participant*	Date of interview	Interview length
Interviewee 1	28.4.2017	22 minutes
Interviewee 2	28.4.2017	20 minutes
Interviewee 3	28.4.2017	13 minutes
Interviewee 4	28.4.2017	20 minutes
Interviewee 5	2.5.2017	18 minutes
Interviewee 6	2.5.2017	14 minutes
Interviewee 7	2.5.2017	11 minutes
Interviewee 8	2.5.2017	13 minutes
Interviewee 9	4.5.2017	11 minutes
Interviewee 10	4.5.2017	14 minutes
Interviewee 11	4.5.2017	15 minutes
Interviewee 12	4.5.2017	28 minutes

*Participants were given pseudonym to protect their anonymity

Semi-structured interviews

When doing qualitative research, it is common to use semi-structured interviews that are non-standardized (Saunders, Thornhill & Lewis, 2012). The interviews conducted for this study are semi-structured and based on a list of questions that have been prepared by using the available literature on the subject studied. This list of questions or topics (Appendix B) is used as a guide, making sure that the same ones are covered in all interviews and providing consistency (Corbin & Strauss, 2015). By using this method, the interviewee is free to add information, he or she feels is relevant and it also gives the interviewer room to ask additional questions to clarify or look further into a specific topic (Corbin & Strauss, 2015). Furthermore, this method can also be helpful if the interviewee is not talkative (Corbin & Strauss, 2015) as it allows the interviewer to use laddering up and down to get examples and gain further insight into the topic (Easterby-Smith, Thorpe & Jackson, 2015).

Interview conduction

It was considered to create an interview guide to send to the participants before the interviews were conducted, but we felt it might be too leading and could compromise the first question that was meant to capture what the managers felt was their main challenges, without relating it to clever people. Therefore, the participants did not get any specific information beforehand. It is believed to ensure impartial and uninfluenced response from the interviewees. They only got a brief description of the study, included in an e-mail from the human resource manager when they were asked to participate (Appendix A).

The interviews were held via Skype, all in Icelandic except one that was in English. Key sentences that were believed to confirm and strengthen our findings were translated to English as accurately as possible in order to preserve their meaning. While one was asking the questions, the other one took notes. This allowed for the one asking the questions to give her complete focus on the interviewee and to use laddering up and down to get further information. The interviews ranged from 11 to 28 minutes, for the mean time of roughly 17 minutes. They were all recorded, with consent from the interviewees.

3.4.2 Quantitative Data Collection Method

After each interview, the interviewer uses a questionnaire to ask about specific challenges that the literature suggests comes with managing and leading clever people. That is done at the end of the interview, after the managers have been asked to describe these challenges in their own words. Otherwise, it might influence how they answer the questions and give false results. As one part of the purpose of the study is to explore if the managers at the IMO are dealing with the same challenges as the literature suggests, asking directly about these identified challenges at the end of the interview, should be beneficial. It might be that the managers do relate to identified challenges, even though they did not mention them in the qualitative part of the study.

Sampling

The same sample of the same twelve managers that was used for the qualitative part of the study, was used for the quantitative part.

Questionnaire conduction

The questionnaire consists of eight statements about management challenges linked to clever people. The statements were collected from the literature review. See Appendix B.

After asking the semi-structured questions, the eight statements were read to the interviewees and they were asked to rate how relevant they thought the statements were from 0 to 5, based on their experience with managing and leading a clever person. 0 means that the manager finds the challenge not at all relevant, 1 slightly relevant, 2 relevant, 3 fairly relevant, 4 very relevant and 5 means that it is extremely relevant.

3.5 Data Analysis

When using a mixed-method approach, the data is usually analysed separately by using specific analysis for each method (Easterby-Smith, Thorpe & Jackson, 2015). The result of both analysis will be combined in the discussion chapter with the aim to enhance the credibility of the results (Easterby-Smith, Thorpe & Jackson, 2015).

3.5.1 Qualitative Data Analysis

Easterby-Smith, Thorpe and Jackson (2015) use the term framing when referring to the many ways used to make sense out of data or information. Before the data can be analysed, it has to be prepared and organized in a way that makes the analytical process easier (Easterby-Smith, Thorpe & Jackson, 2015). The preparation of the data for analysis is often considered to be the first analytical step (Easterby-Smith, Thorpe & Jackson, 2015). In this study, where the qualitative data is collected as audio recordings, the preparation usually involves transcribing the data into written text (Easterby-Smith, Thorpe & Jackson, 2015). As the interviews were conducted in Icelandic, we decided to only transcribe them to Icelandic.

Content analysis was used to draw systematic inferences from the data that has been structured by a set of concepts or ideas (Easterby-Smith, Thorpe & Jackson, 2015). That way, the data collected was examined to try to look for the presence, meaning and relationship of ideas or concepts found in pre-existing theory or the research question (Easterby-Smith, Thorpe & Jackson, 2015). This was done to test the claim, that managing and leading clever people is associated with certain challenges. After conducting all the interviews, we listened to the recordings again and transcribed them into Icelandic. We focused on finding key sentences that would be of value to have in the analysis, that would strengthen and confirm our findings.

3.5.2 Quantitative Data Analysis

The sample size is too small for the quantitative data to be analysed with data- or statistical analysis software. Therefore it was decided to analyse the data by creating a histogram, where the statistics of each challenge were presented. The eight challenges identified in the literature were stated and the manager asked to rate how much he or she related to that challenge, based on their experience managing and leading a clever individual. The rating was from finding the specific challenge not relevant at all (0), to extremely relevant (5).

3.6 Data Quality

3.6.1 Qualitative Data Quality

According to Corbin and Strauss (2015), there are a few conditions that are believed to enhance one's ability to produce good quality qualitative research. We chose the ones we believed were relevant for our study and kept these conditions in mind while conducting the study.

The first condition that fosters quality research is methodological consistency, which means to follow the particular method procedures that were decided upon in the beginning (Corbin & Strauss, 2015). We followed the methods we set out to use in the beginning, throughout the whole process to ensure consistency.

The clarity of the purpose is important and the aim of the study should be apparent from the start (Corbin & Strauss, 2015). We set out to make the purpose as clear as we could, with the research questions pinpointing the aim of the study. Furthermore, the deductive approach to the research provided a consistent framework for the study

The third condition is self-awareness, that the researcher must be aware of hers or his assumptions and biases (Corbin & Strauss, 2015). We followed the advice of Corbin and Strauss (2015), and wrote down our thoughts and observations during the data collection and analysis. That helped identify the influence it had on the research and vice versa (Corbin & Strauss, 2015).

Being trained in doing qualitative research is believed to make a major difference regarding the quality of the findings (Corbin & Strauss, 2015). In this case, we are not experienced but are aware that conducting a qualitative research is complex. Therefore, we did our best to educate ourselves on how to conduct a qualitative research, in order to make up for lack of experience. Additionally, some experience was gathered when a small pre-study was done.

The willingness of the researcher to work hard is important (Corbin & Strauss, 2015), and that is something that comes naturally for us. Qualitative research is time consuming and a lot of thought has to be put into it (Corbin & Strauss, 2015). This was clear from the start and it did not affect our enthusiasm. We knew that in order to get the data we needed to answer our research questions, we would have to do a qualitative study.

The last condition suggested by Corbin and Strauss (2015), is the desire to do research . We are generally interested in this subject and it was our desire to do this study to see if the challenges found in the literature, can also be found at the IMO and or if there appears to be a universal understanding towards the concepts of clever along with capturing new perspective and

experience.

Furthermore, trustworthiness and authenticity can be used as the primary criteria to assess the quality of qualitative data (Bryman & Bell, 2015). This study took authenticity into consideration, along with the four criteria used for trustworthiness; credibility, dependability, transferability and confirmability (Bryman & Bell, 2015).

Credibility refers to how others accept the research findings and acknowledging the existence of multiple social realities. By using a mixed-method approach of both qualitative and quantitative data collection methods to capture different dimensions of the same phenomenon (Bryman & Bell, 2015; Easterby-Smith, Thorpe & Jackson, 2015), we tried to maximize the credibility of this study. Additionally, we both examined the data collected and therefore cross-checked the interpretations for validity (Lewis & Ritchie, 2003).

Dependability means that transparent records of all the phases of the study were kept, ensuring that future researchers can repeat the method we used (Shenton, 2004). Moreover, we were two together conducting the study and we consulted in each other throughout the whole process. We also had a supervisor and a peer-group review all the steps taken.

Due to the fact that this study was done within a specific context and that only a group of managers from a single organization were studied, the transferability of the findings may be limited. It was therefore important to provide good description of the concepts, circumstances and the boundaries of the study.

Confirmability is the study's approach to objectivity (Bryman & Bell, 2015) and possible biases, which were tried to reduce by using a mixed-method approach (Shenton, 2004). We are aware of our subjectivity but we tried to ensure that the findings are resulted from the ideas and experiences from the interviewees and not our preferences (Shenton, 2004).

Finally, the authenticity describes to what extent the conduction and the evaluation of the collected data is authentic regarding the interviewees' experiences. This study included managers from the same organization, allowing for different viewpoints within the same organization. See further discussion in the Limitation chapter (chapter 3.7), regarding this point.

3.6.2 Quantitative Data Quality

In order to ensure the quality of the quantitative data, we did the following: we tried to have the relevance scale very clear, the challenges from the literature precise and made sure that interviewees knew that they were to give their answers based on their experience managing and leading clever individuals.

3.7 Limitations

Due to the limited time frame of the study and that only one organization was studied, generalizability is limited. It will be difficult to generalize the findings and say that what we found can be applied universally. In order to be able to do that, we would have to have a bigger sample of interviewees, a control group and extensively more time.

It has been pointed out that one of the main problem with qualitative research is the researcher's biases towards the interpretation of certain phenomenon (Bryman and Bell, 2015). In addition, the concepts of clever, challenge, leadership and managing are socially constructed and often hard to grasp and can therefore be perceived in many different ways. The state of replicability is limited due to the complex context and the fact that the dynamic and environment changes. It is therefore clear that any repetition of this study would not reveal the same results.

By using mixed methods, sceptics have argued that researchers might lack competence in conducting these different methods (Easterby-Smith, Thorpe & Jackson, 2015). But as stated before, we read as much as we could about conducting qualitative and quantitative research and stucked to the methods we set out with in the beginning. The main source of information about these different research methods were found in books by Easterby-Smith, Thorpe and Jackson (2015); Bryman and Bell (2015); Saunders, Thornhill and Lewis (2012); Corbin and Strauss (2015).

Chapter Summary

This chapter provided an overview of the methodology used for this study. By adopting a deductive driven research approach, we could test the theory derived from the literature. The qualitative method allowed us to both test the theory and to add something new. By also using a quantitative method, we could specifically ask about the relevance of the eight commonly known challenges associated with managing and leading clever individuals. These methods combined, provides us with the information we need to answer our research questions.

4. Findings and analysis

4.1 Qualitative findings

The findings from the four main interview questions that were focused on managing and leading clever individuals will be presented in this chapter. All the managers but one answered the questions from their experience managing and leading an employee they identified as clever. The

manager that did not, could not identify a clever individual among his employees, but identified his colleague as being clever and answered the questions using that perspective. One manager is a project manager and does not have subordinates, but still manages and leads employees in specific projects. That manager could identify clever individuals among those employees and answered with them in mind.

4.1.1 Open question about general management challenges at the IMO

In the beginning of each interview, the managers were asked about the main challenges that they encounter in their work. The challenges mentioned were mainly related to the daily organizational work that the managers perform. The main challenges that were mentioned in this part were productivity, employee satisfaction and holding on to valuable employees. Furthermore, several managers mentioned that keeping up morals and positivity among the employees was one of the main challenges they faced. Other challenges mentioned were time pressure related to the work done at the IMO, prioritizing, communication, keeping everyone up to date and informed and managing teamwork.

4.1.2 Clever individuals at the IMO

As previously discussed, due to the nature of work done at the IMO and the fact that we knew that many employees there fit the description of clever, the IMO was an ideal candidate for this case study. The interviews then further confirmed that we had chosen the right organization as the interviewees could all but one without hesitation identify one or more of their employees as clever, based on the given definition. *“Yes! There are obviously certain individuals that exceed others.”* (Interviewee 1). *“Yes, yes. I certainly can.”* (Interviewee 6). *“Yes! Several ones.”* (Interviewee 9). *“Yes, definitely. At least five that completely fit this description.”* (Interviewee 12).

It was not though as each and everyone could identify a handful of clever people. *“Yes, definitely! Several. But only several, because by its very nature it is like a handful of elite people that stand out. Maybe not even a handful, just three or four. You can quite easily identify these people.”* (Interviewee 4). Goffee and Jones (2009) do not really quantify the number or proportion of people in each organization that fit the definition of clever, just that it ranges from being many of them to just a handful. Therefore, we cannot say if the amount of clever people the managers could identify at the IMO is the same as in other organizations or not.

The manager who could not identify any of his employees as fitting the description of clever, Interviewee 3, could not do so as the nature of their work makes it easily replaceable. Identifying a clever individual among other employees working for the IMO, was although not a problem

and he answered the questions with that individual in mind.

4.1.3 Characteristics of clever individuals

The characteristics of clever individuals are closely intertwined with the challenges that come with leading and managing them. When the managers were asked to describe the characteristics that they feel are unique to the clever employees they had identified, the ones they described were similar to both the characteristics and the challenges found in the literature. That is why it is hard to separate the two, as some characteristics are also considered a challenge.

Four of the managers talked about the clever employees being very demanding and critical, both towards themselves and others. *"...they [the clever individuals] are often very critical and they are not shy about it and are very critical towards others ... They are critical and honest and they often do not think about the consequences of their words."* (Interviewee 12). *"...communication tends to be more difficult...they are extremely critical, which is good when solving problems but not when it is directed at their colleagues."* (Interviewee 8). *"They give you more feedback...and they don't just accept everything you say..."* (Interviewee 4). Glen (2003), briefly talks about them being critical but not towards whom or in what sense. While Goffee and Jones (2009) talk about in their book, that clever people are more declined than others to speak their mind.

Most of the managers agreed that the employees they identified as clever are all extremely passionate about their work, which is something that Goffee and Jones (2009) talk about as well. *"Dedication and passion. You can be clever, but without the dedication and passion, it does not matter and the cleverness cannot be utilized."* (Interviewee 1). This is what interviewee 4 had to say about this: *"They do not see their job as a paid employment, they see it as a chance to be creative, almost as if it was a hobby. They work longer, they take their problems home. They are constantly coming up with new ideas and solutions. Nothing is ever an obstacle."* That is another thing that many of the managers mentioned, that they are resilient as giving up is not an option and no obstacle is too big for them. One manager mentioned that without that passion and dedication, a clever individual would not reach full potential.

Goffee and Jones (2009) and especially Glen (2003) describe clever individuals as being introverted and preferring to work alone. That is also something that the managers at the IMO have experienced, that their clever employees are introverted and that some even lack social skills: *"... yes I recognize these individuals and they usually have that in common that they lack some social skills..."* (Interviewee 8). *"...Sometimes they prefer isolation and they do not want to attend meetings"* (Interviewee 4). They are however extremely creative: *"... they are much more independent and creative...they have a vision and know how everything fits together..."* (Interviewee 4). *"They think out of the box and come up with new solutions and ideas..."*(Interviewee 7). This creativity which shows in their ability to come up with new ideas

and solutions, is also discussed to some extent by Goffee and Jones (2009), Glen (2003) and Bobadilla and Gilbert (2017).

The clever employees were described as sometimes being difficult: *“They can be difficult, but they are difficult because they want to do things well.”* (Interviewee 1). When asked to elaborate more on this: *“They ask difficult questions and they have an opinion about things... Again, this is associated with their desire to do better and their dedication, asking these difficult questions and not letting you get away with any crap.”* (Interviewee 1). *“They are simply difficult. They are independent and creative individuals... You kind of have to dance around them, whether you like it or not.”* (Interviewee 9). They also tend to come across as arrogant, as they assume that they are always right and if they do not agree with you, they will do things their own way: *“They assume they are always right... If they do not agree with you, they will go their own way.”* (Interviewee 9). This is discussed by Roche (2007), as well as by Goffee and Jones (2009) in their book: *“...many clever people have a blind spot here born of their own conviction that their way is definitely the right way”* (Goffee & Jones, 2009, p. 63).

Some of the characteristics mentioned above, may seem negative but these employees are truly valuable and they are able to do more work than other employees. *“...they are extremely self-sacrificing and work way more than other employees. They also work much more than is expected from a regular employee... Sometimes I feel like their contribution equals three employees”* (Interviewee 12). *“...they have that incredible drive, it is like a light that never goes out and they never quit...”* (Interviewee 8). Both Goffee and Jones (2009) and Glen (2003) highlight how valuable these employees really are.

There were not many additional characteristics that were mentioned that could be added to the existing theory. There were although two additional findings, that were mentioned by several managers. Both of them could be related to what is found in the literature, but were never mentioned in those specific words. The first one was initiative, described in that way that they do not need motivation or instruction on how to do their job. *“You approach them in a totally different way. They do not need motivation and guidance like others and they take initiative on solving their own problems...”* (Interviewee 6). *“...they are much more capable to take care of all aspects of their work...”* (Interviewee 4). This is not mentioned in the literature. Goffee and Jones (2009) and Glen (2003), have contrasting views regarding motivation that could be linked to showing initiative. Glen (2003) believes that clever individuals need to be motivated, while Goffee and Jones (2009) do not. By that, Goffee and Jones (2009) indicate that they show initiative and know how to do their job and thus do not need to be motivated. Therefore, we can say that showing initiative is a new characteristic as it is not explicitly mentioned in the literature, although it is indicated by Goffee and Jones (2009) without being framed that way.

The second one is that the clever employees seem to lack the ability to see that others do not share their “talent” or are not as clever as they are: *...what distinguishes these employees is that they are very demanding of others as well and they cannot grasp the fact that not everyone is as talented as they are.*” (Interviewee 2). A possible interpretation is that this could be related to the claimed incompetence regarding social skills, which is mentioned by both Glen (2003) and Goffee and Jones (2009). Another interpretation could be that, their inflated egos view their value as much more significant than the value of others (Goffee & Jones, 2009).

Overall, the characteristics described were the same as found in the literature except for two, which are although somewhat related to what has been said before.

4.1.4 Challenges with managing clever individuals

Several challenges were identified in the interviews, mostly the same as found in the literature. As the challenges are often closely linked to the characteristics, many of them had already been mentioned when asked about the characteristics. This further strengthens the argument that it is difficult to separate these two. Thus, it is inevitable that some characteristics that were mentioned in the previous chapter, will be repeated in this one.

One of the main challenge that was mentioned most often was that the clever employees can be difficult because they put extreme pressure on themselves and others to deliver a good job. That is of course very valuable but they lack the ability to realize that not everyone shares their competence. *“Yes, these individuals put extreme pressure on themselves and others...”* (Interviewee 2). *“These individuals have difficulties in realizing that others have limitations.”* (Interviewee 6). This is a new finding, both regarding challenges associated with managing and leading clever employees and for characteristics. As discussed in the previous chapter (chapter 4.1.3), it can be interpreted as being associated with what was both discussed by Glen (2003) and Goffee and Jones (2009). However, that is only one interpretation and it is more regarding why the clever individuals act this way, not that they are this way. Consequently, we interpret this as a new finding.

As mentioned in the previous chapter (chapter 4.1.3), the clever individuals can be very critical and negative: *“... sometimes I feel my biggest challenge as a manager is to monitor that they do not spread too much negativity around them... They are very critical and that is of course good when you are solving problems but then they can get stuck in pointing out everything that is not good enough.”* (Interviewee 8). They have opinions and are not afraid to reveal them. *“They are not afraid to challenge your ideas or leadership and you always need to be prepared to take on such a challenge.”* (Interviewee 9). This is not a new finding, as it is discussed both by Goffee and Jones (2009) and Glen (2003).

Another challenge that was mentioned is that clever individuals tend to have difficulties working in a group: *“Sometimes they start acting and making decisions way ahead of others and then you need to guide them back. These individuals are not always the people that can see the bigger picture when it comes to group work.”* (Interviewee 5). This can hinder clever individuals’ ability to work in a group, meaning that they seem to lack the ability to identify themselves with others. It could either be related to their perceived inability to self-identify with others or due to the extreme pressure and demands that they put on their co-workers. Goffee and Jones (2009) talked about the difficulty the clever individuals have in seeing the big picture, that they are too focused on their part. Some of the managers often mentioned that the manager's job is to be a mediator and to settle different views. *“They give you feedback and are the best people to discuss things with, but they are challenging in the way that they do not just go along with your ideas.”* (Interviewee 4). One mentioned that if you want them to do things in a certain way, you have to get them to believe that it was their idea. This aligns with what Goffee and Jones (2009) discuss on their book clever: *“...clever people tend to require more explanation of your decisions and more persuasion than ordinary employees.”* (Goffee & Jones, 2009, p. 44).

One manager could not identify any challenges associated with managing and leading clever individuals. That manager said his role was more to make sure that the clever employees do not work too much and burn out. *“I have never had any troubles in managing them. ... I try not to step on their toes... There really have not been any challenges associated with them... I try to make sure that they do not work too much...”* (Interviewee 11). It is our understanding that this particular manager does not try to manage his clever employees in the sense of telling them what to do and how to do it. Thus, it is not a surprise if he has not encountered any challenges with managing them because that is not really what he is doing.

Even though the managers did not mention any of the eight challenges that were asked about in the quantitative part, the ones they did mention were mostly the same ones. That provides a better credibility.

4.1.5 Differences in managing clever individuals

The last semi-structured question was if the managers found it different to manage and lead clever individuals. All the managers agreed it was in fact different. Some interviewees stated that they found it in some ways easier to manage and lead clever individuals. *“These individuals are more likely to be able to take care of all aspects of their job, more independent and deliver better results.”* (Interviewee 4). *“What is different in managing these clever employees is that they know a lot more about their work than you do... so the main challenge is to get them to perform at their best and guide their collaboration with others”* (Interviewee 5). They are however more demanding and they ask difficult questions. You need to have them on board and you need to

spend time persuading them to follow you in the direction you want to go. *“They have more thought and more comments about their work.”* (Interviewee 4). They have a burning passion for what they do and they feel that their work is the most important and sometimes they push their idea at the cost of the larger context.

This tells us that the managers agree with what can be found in the literature, that it is in fact different to manage clever individuals than those who are not (Goffee & Jones, 2009; Glen, 2003; Powell & Lubitsh, 2007). Not that it is more difficult, rather that it is different as they cannot use the same methods on clever individuals as with other employees. That in itself can be a challenge.

4.2 Quantitative findings

Eight challenges associated with managing and leading clever individuals that were found in the literature, were stated at the end of each interview and the interviewees were asked to rate how relevant they thought the challenges were, based on their experience on managing and leading clever people. 0 means that the manager finds the challenge not at all relevant, 1 slightly relevant, 2 relevant, 3 fairly relevant, 4 very relevant and 5 means that it is extremely relevant.

The result of each challenge is displayed in a histogram and will be further discussed at the end of this chapter.

That it is more challenging to manage and lead them than employees that do not fit the definition of clever

Most of the managers agreed that it is more challenging to manage and lead clever employees than those that do not fit under the definition. Nearly all the managers said that the statement was very relevant or fairly relevant, while only one found it to be not at all relevant. That is the same manager that could not identify any challenges associated with managing and leading clever employees in the qualitative part of the study. How that manager answered other questions will be discussed further in chapter 5. In general, the managers found this statement relevant.

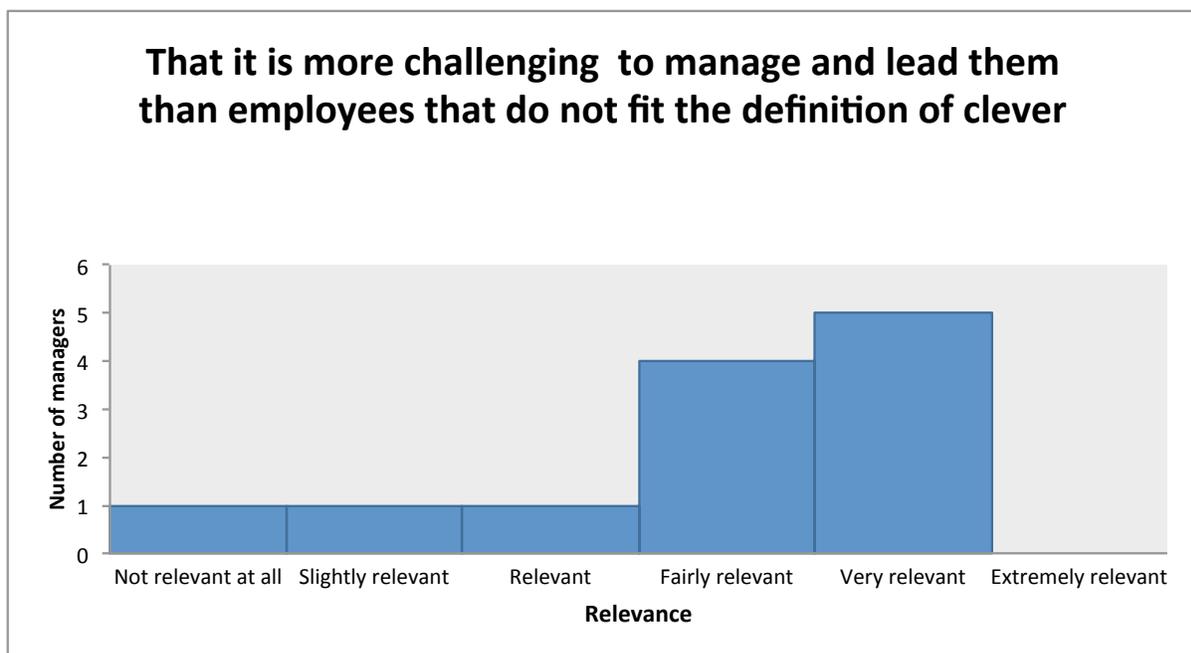


Figure 1

They have low respect for hierarchy

This is where most of the managers could agree on the relevance of all the statements. Eight managers in total found it fairly relevant that their clever employees have low respect for hierarchy and no one found the statement to be not at all relevant.

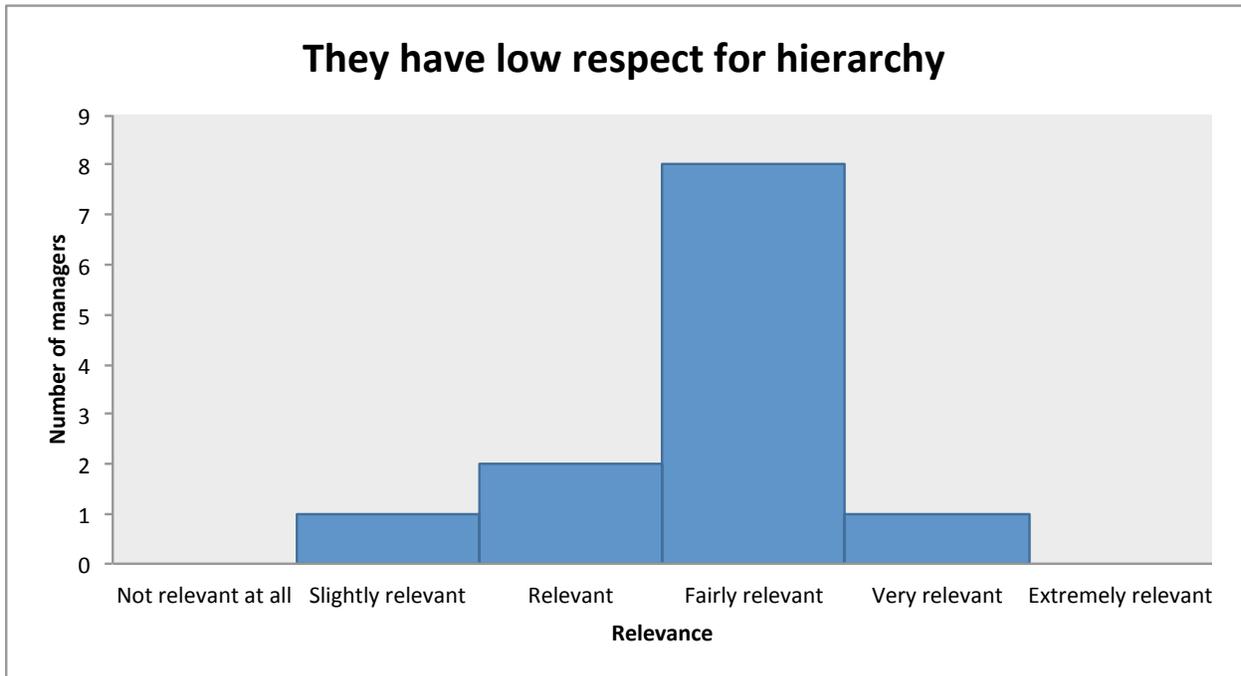


Figure 2

They are scornful about being controlled

This is something that most of the managers rated fairly to very relevant and one even extremely relevant. No one thought this statement was not relevant at all.

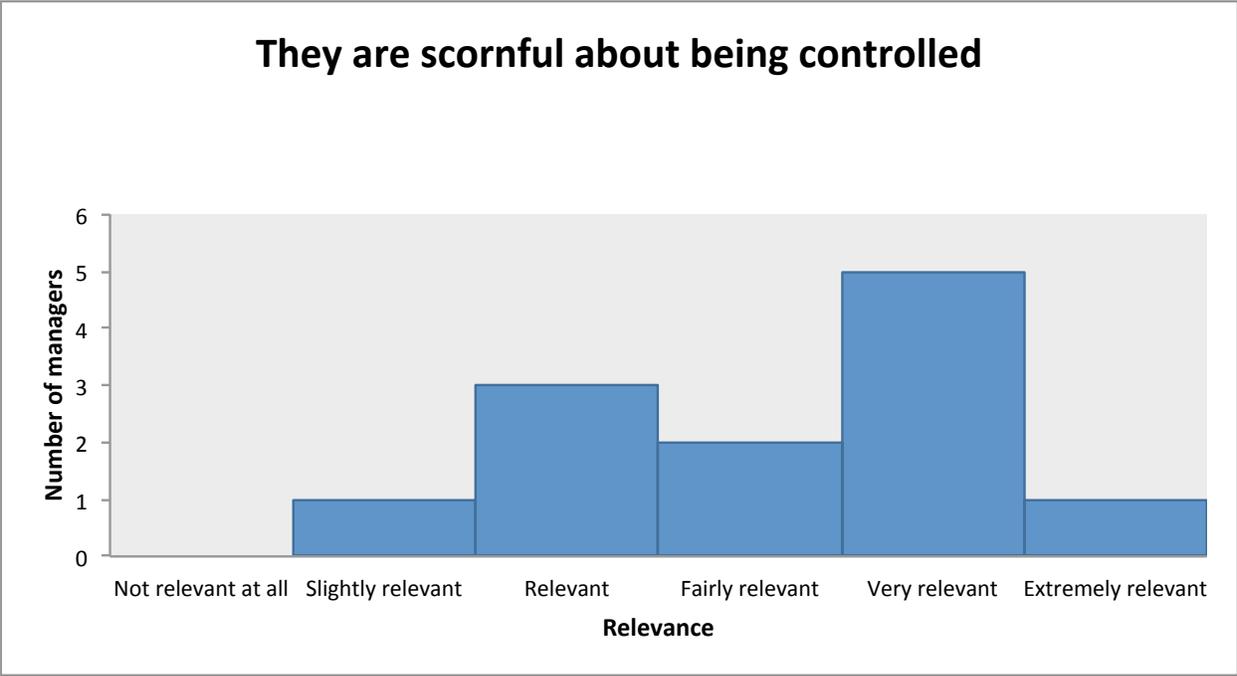


Figure 3

They expect to be treated differently than other employees

The managers rated this statement second least relevant of all the statements, as eight managers in total rated it slightly relevant or relevant. One even thought the statement was not relevant at all. Still, there was one manager that thought it was extremely relevant.



Figure 4

Rules do not apply to them

The relevance of this statement was evenly distributed. Half of the managers rated it from not relevant to relevant, while the other half found it more relevant and rated it from fairly relevant to extremely relevant.

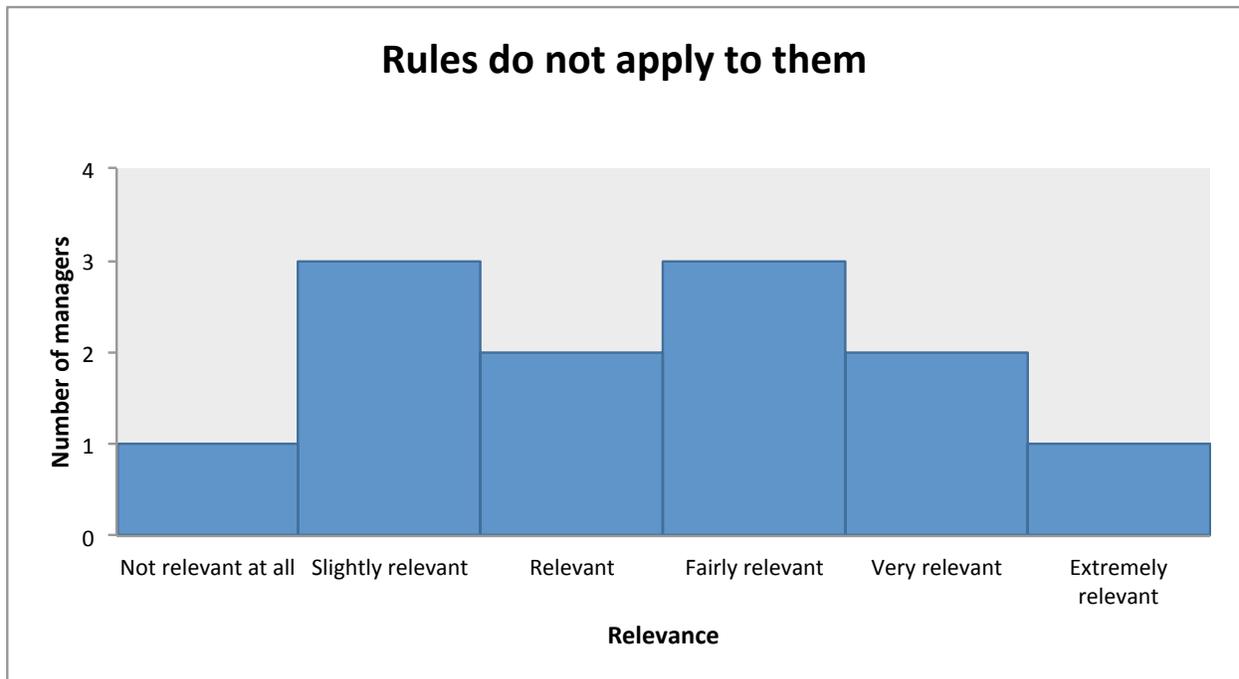


Figure 5

They can be disrespectful

None of the managers thought this statement was not at all relevant or extremely relevant. Five managers found it relevant and five found it very relevant.

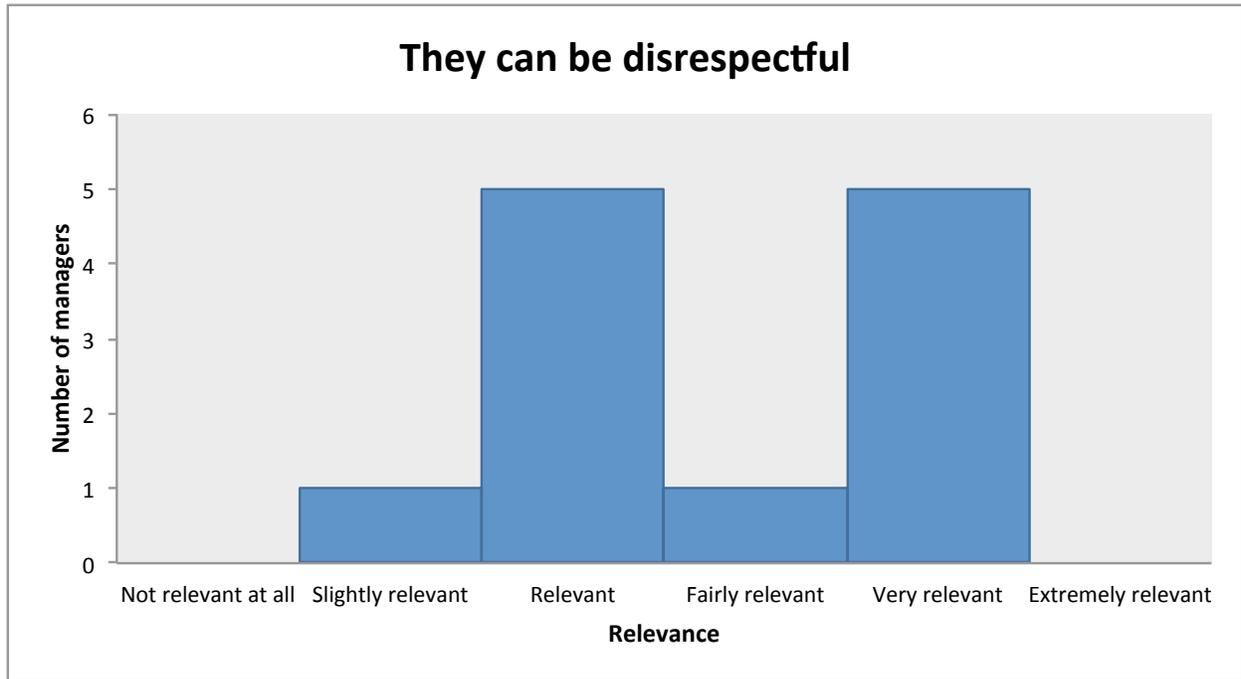


Figure 6

They value autonomy above everything

This challenge scored the highest out of all the challenges, with ten of the managers rating it as fairly to very relevant. One even said it was extremely relevant and no one thought it was not relevant at all or slightly relevant.

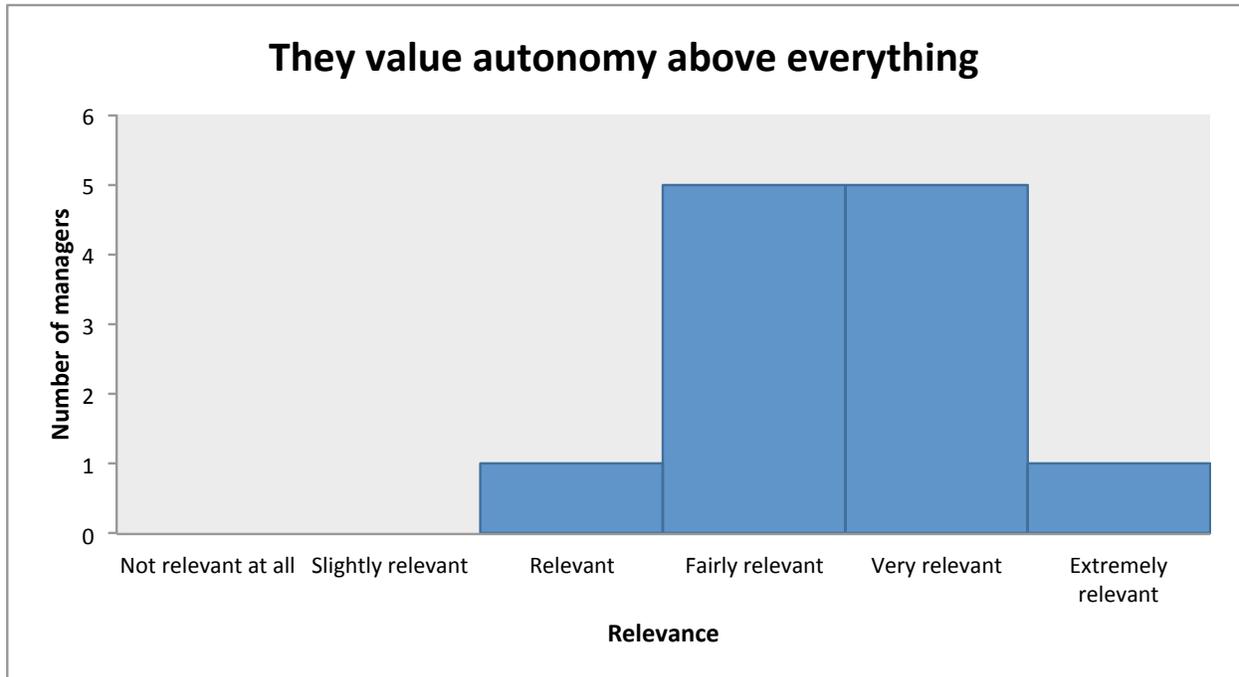


Figure 7

They lack loyalty to their organization

This statement was rated the least relevant of them all, with six managers rating it as slightly relevant and the other six as not at all relevant or relevant. This was the only statement that did not score above relevant (3).



Figure 8

Chapter summary

The managers found the following four challenges more relevant than not: That it is more challenging to manage and lead clever individuals than employees that do not fit the definition of clever; they have low respect for hierarchy; they are scornful about being controlled; they value autonomy over everything which rated as most relevant.

There were two statements that the managers did not seem to agree on. The first one was that the clever individuals feel like rules do not apply to them. Half of the managers rated it from 0-3 and the other half from 3-5. The other statement was about them being disrespectful, where half rated it from 1-2 and the other half 2-3.

The statement the managers rated as second least relevant was that they expect to be treated differently than other employees. The one that was rated least relevant and where no one rated it higher than relevant, was that they lack loyalty to their organization. The most and the least relevant statements will be further discussed in the next chapter (Chapter 5).

5. Discussion

We are fully aware that the challenges that come with managing and leading clever people are not unique to only those individuals and can also apply to other people. It was evident from the literature review that these challenges do however seem to have a stronger correlation to clever people. The clever people at the IMO were no exception. We came to that conclusion when comparing the general interview question to the ones more specific about clever. The first interview question was about general challenges the managers face. For the literature to be valid, the list of general challenges should be different from the one associated with clever employees, as the literature states that these challenges are not the same. The challenges mentioned in the general question were not the same as mentioned when asking the managers about challenges that come with managing and leading clever people, with one exception. That was the challenge of dealing with negativity by trying to keep a positive atmosphere. Looking past this one exception, this gives us a reason to believe that the challenges mentioned when asked about the clever employees are in fact special for the clever employees at the IMO and not applicable for those employees that do not fit the definition of clever. This further strengthens the validity of this study.

Qualitative findings

As we are dealing with socially constructed concepts that cannot really be measured, such as clever individuals, a lot depends on the manager's understanding of these concepts and the researcher's interpretation and biases. One thing that might affect the way the managers answer the questions, is their understanding of clever. As discussed previously (chapter 4.1.2), all the managers but one could without hesitation identify one or more of their employees as clever, based on the definition we gave them. That makes us believe that they did in fact base their understanding and answers on the definition. There was however, one manager that claimed since his subordinates were not highly specialised and that it was easy to replace their skills, he could not identify any of his subordinates as clever. He responded instead to the questions with his co-worker in mind, that he believed fit the definition of clever. This manager was the only one who could not identify any of his subordinates as clever.

The managers understanding and perception of a challenge can also be different from one to the other. Everything comes down to how the managers understand things and how we interpret their understandings. Based on the qualitative part of the study, the managers' attitude towards these challenges were overall very positive and that one challenge was in fact that the clever individuals simply need different approaches than others. Their response to the first question in the quantitative part, was however contradicting. There they were asked if it is more challenging to manage and lead clever employees and they rated it as fairly relevant or very relevant. This

does not necessarily need to be contradicting because even though they rated it as more challenging, their overall perception of these challenges seems to be positive, meaning that they do not perceive these challenges as difficult. How they answered in the qualitative part can be linked to the previous discussion (chapter 2.4 and chapter 4.1.5), that traditional management and leadership approaches seldom work with clever individuals. This might result in lack of resources for the managers when the “traditional” management methods fail them when managing and leading clever individuals. However, due to their positive attitude towards these challenges, the managers at the IMO do not necessarily perceive it as an obstacle as they realise that these employees need to be approached differently.

The need to approach them differently and that traditional management methods do not work, is directly linked to one theme that can be detected in the managers’ responses. It is that the managers often perceive their role to be a mediator when it comes to clever individuals opposed to having to manage other employees that need more direction about their work. Several managers mentioned that they feel the need to monitor and manage their clever employees interactions with other employees and that their main challenge was to keep a positive atmosphere in the workplace. Based on this, we perceive the role of the managers being somewhat more towards monitoring interactions the clever individuals have with other employees, as opposed to more of a mentoring role with others.

One of the research questions we set out to answer was if our findings would confirm or falsify the existing theory about the characteristics of clever people and the challenges that come with managing and leading them. Based on the findings from the qualitative part of the study, all but two characteristics and one challenge mentioned, can be found in the literature. We can thus say that our findings from doing a content analysis of the qualitative data, do confirm the literature. However, out of the eight challenges we specifically asked about in the quantitative part of the study, only one was mentioned in the qualitative part, that the clever individuals value their autonomy. One manager mentioned it in the way that they are very independent. It was also indicated by most of the managers when they talked about the clever people not wanting to attend meetings, having difficulties working in a group and that they do not need to be told how to do their job. One manager said that he does not need to manage his clever employees and as indicated by many, the managers’ role is more to be a buffer between the clever individuals and others, that the clever employees are so independent and competent that they can do their jobs without any guidance. The fact that only this challenge was mentioned before in the qualitative part, is also consistent to the fact that the managers then later rated it as most relevant of all the challenges. It is however surprising that only this one known challenge was mentioned before we got around to asking the managers to rate how relevant they thought they were. It is a limiting factor that we chose these eight challenges but we identified them as the ones that were most often mentioned or most discussed in the literature. As almost all the other challenges and characteristics mentioned by the managers can be found in the literature, our choice of

challenges can be seen as a limiting factor. Regardless, the result is that in this organization, these eight challenges are not the most relevant ones when it comes to managing and leading clever employees.

Another research question we set out to answer was if the case study at the IMO would reveal any new challenges or characteristics that were not present in the literature. Only one additional challenge was mentioned, that the clever individuals have a hard time realizing that not everyone shares their competence. This was furthermore mentioned as a new characteristic. They are demanding of others and put extreme pressure on their co-workers as they expect them to be as competent as they are and this can cause tension. This might be related to their inability to identify with others and that they perceive themselves to always be right. Another new characteristic that was identified was initiative, mentioned by almost all the managers. One manager described it in the way that they show initiative and have more comments and thoughts about their job and come up with more ideas. Another manager stated that they do not need external motivation or guidance like others and are more likely to be able to take care of all aspects of their job. We can therefore say that we did in fact find two new characteristics and one challenge associated with managing and leading clever employees at the IMO. But due to the limited time-frame and thus the small size of the study (only one organization), we realize that we cannot generalize the findings. But why were there so few new findings? It could be that managing clever individuals comes with mostly the same challenges and they share similar characteristics, regardless of the industry or the geographical location.

Quantitative findings

Due to the nature of the work that is done in the IMO, it is dependent on specialized and skilled workforce. Iceland is a volcanic island with a small population. The people that make up this workforce are highly specialized and that limits their options of organizations to work for. For example volcanologists and weather forecasters have very limited options compared to IT employees. Therefore, you could say that the IMO and these specialized employees are dependent on each other. It is although not the case with all departments at the IMO. The employees at the IT department can choose from different employers and the IMO cannot compete with the salaries others are offering. They do then try to choose IT people who have a special interest, dedication and passion to work for the IMO. This brings us to the challenge that was rated least relevant, that the clever individuals are not loyal to the organization. That could be because they have limited options of workplaces to choose from. Are they loyal to the organizations or is it loyalty to their field. These are both valid answers to why the managers believe that the clever employees are actually loyal. We can thus assume that loyalty is not an issue at the IMO.

Not being loyal was rated least relevant, but what did the managers consider to be the most relevant challenge? Out of the eight challenges that were asked about in the quantitative part of

the study, autonomy was rated the most relevant. That is in line with what is talked about in the literature, that clever individuals value their autonomy above everything else. This was also evident in the qualitative part of the study and actually the only one out of the eight that was mentioned in that part. Some managers talked about that their clever employees do not need to be managed. That is more their role to be a buffer between them and other employees and to make sure that they do not work too much and burn out.

One manager could not find any challenges associated with managing and leading his clever employees. That is a strong statement and contradicting to what is stated in the literature. We looked especially into how relevant this particular manager found the challenges in the quantitative part and if it was consistent to what he stated. This manager rated most of the challenges slightly relevant and one not relevant at all. However, he rated autonomy very relevant, which is in line with what he stated in the interviews, that the clever individuals do not need to be managed. We can therefore say that his response to the questions in the quantitative part were consistent to how he answered the questions in the qualitative part. As he said, he does not need to manage these individuals and thus it not surprising that he does not find any challenges associated with managing and leading them.

One of the managers mentioned that if it were not for the dedication and passion of the employees he identified as clever, he probably would have rated the eight challenges very or extremely relevant. He also claimed that passion and dedication also play a big part in the clever individual reaching its full potential. It is therefore important for the employee to find an organization that nourishes this passion and dedication.

6. Conclusion

This study aimed to confirm or falsify some common statements found in the literature about managing and leading clever employees. We did that because we found that these statements had not been researched adequately. We came up with one research question and two sub-questions, which we then attempted to answer by collecting data, using qualitative and quantitative research methods.

The first question set out to identify the main characteristics of clever employees at the IMO and the challenges that come with managing and leading them. The main characteristics of the clever employees at the IMO are the following: demanding, arrogant, critical, passionate, introverted, creative, difficult, independent, valuable and resilient. Moreover, they show initiative and they lack the ability to realize that not everyone shares their competence. This last thing was also identified as a challenge. Other challenges are that they put extreme pressure on themselves and others, they can be very critical and negative, are not afraid to reveal their opinion, challenge

your ideas and ask difficult questions. Another challenge is that they have difficulties with working in a group.

The first sub-question set out to confirm or falsify the existing theory, if in fact the challenges and characteristics of clever people found in the literature are valid for the IMO. The characteristics and challenges associated with clever individuals described in the interviews are coherent and align with the literature. Even though the managers at the IMO seem to be dealing with the same challenges as stated in the literature, they only mentioned one out of the eight known challenges that were tested in the quantitative part. But that does not change the fact that the challenges that they did mention, could all except for one confirm the literature and merely points out the these eight challenges that we chose seem to be less relevant at the IMO.

This confirmation of the literature, gives us a reason to believe that the characteristics and challenges associated with clever individuals have an universal attribute to it. This gives the impression that they seem to be the same, regardless of the organisation or location in the world. But we cannot generalize in that way as our study only focused on one organization, but we can say that they apply to the IMO.

The second sub-question we set out to answer, was if the case study at the IMO would reveal any new characteristics or challenges associated with managing and leading clever people. As we said before, the characteristics and challenges the managers at the IMO mentioned were mostly in line with the literature, with a minor exception. Two new characteristics were identified, that they show initiative and that they have a hard time realizing that not everyone shares their competence. This second characteristic was mentioned by the manager as a new challenge. This challenge can result in tension between the clever employees and other employees, when they demand performance from others that they cannot deliver. The challenge for the manager is thus to get the clever individuals to realize that others do not share their competence, forcing the manager act as a mediator between them and other employees. This can also be a challenge when it comes to teamwork. Again, it is difficult to generalize these new findings as previously discussed.

To conclude, after analysing the data collected in our interviews, we were able to confirm the existing theory. Furthermore, it was possible to add new characteristics and a challenge but without being able to generalize those findings. It is our overall perception that the managers at the IMO seem to have developed an understanding regarding clever individuals and that they need to be approached differently.

Research Limitations

During the conduct of this case study, several limitations were encountered. Due to the limited time frame and the fact that only one organization was studied, generalizability is an issue. If the

time had not been limited, we would have liked to add another organization to the study or chosen an organization with a bigger sample of managers. That way we would have been able to have a control group. Then we could have asked one group of managers about the general challenges they face with managing and leading their employees and the other the same, but with clever individuals in mind. As stated before, we tried to make up for this, by beginning the interviews with a general question.

Another limiting factor is that we chose the eight challenges from the literature, that we then tried to look for in the answers of the managers and then directly asked about them in the second part of the study. Even though we used a deductive approach to test the theory of what we perceived as the eight most common challenges found in the literature, we used the whole literature review as a basis to test the theory. Furthermore, we used an inductive approach to allow for new findings. We can therefore say that this limitation had a minor impact on the study.

The novel concepts studied are socially constructed and can therefore be perceived differently. Furthermore, the data collected from the interviews is also subjected to the researcher's interpretation. However, the study merely aimed to explore the perspective towards the concepts of clever and the management challenges related to clever individuals at the given organization.

Recommendation for future research

Due to the growing need for highly skilled and educated workforce in the modern society and the lack of research-based knowledge, the need for further research is imperative. As this is relatively unexplored research area, the opportunities are plenty. We suggest looking further into the challenges and including the perspective of the clever individuals. That way it could be possible to gain insight into the clever individual's perspective of being managed and lead. Then you could compare the contrasting views of the managers and the clever individuals, making it possible to come up with appropriate methods to manage and lead clever individuals.

7. References

- Asllani, A. & Luthans, F. (2003). What knowledge managers really do: an empirical and comparative analysis, *Journal of Knowledge Management*, vol. 7, no. 30, pp. 53-59.
- Bobadilla, N. & Gilbert, P. (2017). Managing scientific and technical experts in R&D: beyond tensions, conflicting logics and orders of worth, *R&D Management*, vol. 47, no. 2, pp. 223-235.
- Boda, G., Lorinez, J. & Szlavik, P. (2008). How to be more efficient in Managing Intellectual Capital: An overview of various techniques. *ICFAI Journal of Knowledge Management*, vol. 6, no. 5, pp. 61-79.
- Bryman, A. & Bell, E. (2015). *Business Research Methods*, 4th edn. Oxford: Oxford University Press.
- Cobert, R. A. (2005). 21st century jobs, *Economic Development Journal*, vol. 4, no. 4, pp. 34-39.
- Corbin, J. & Strauss, A. (2015). *Basics of qualitative research: techniques and procedures for developing grounded theory*, California: Sage Publication, Inc.
- Coulson-Thomas, C. (2012). Talent management and building high performance organisations, *Industrial and commercial training*, vol. 44, no. 7, pp. 429-436.
- Covey, S. (2004). *The 8th Habit – From Effectiveness to Greatness*, New York: Free Press.
- Dobbs, R., Madgavkar, A., Barton, D., Labaye, E., Manyika, J., Roxburgh, C., Lund, S. & Madhav, S. (2012). *The world at work: Jobs, pay, and skills for 3.5 billion people*, McKinsey Global Institute.
- Drucker, P. F. (2003a). *The Essential Drucker*, Harper Press: New York.
- Drucker, P. F. (2003b). *The new realities*, [e- book] New Brunswick and London: Transaction publishers. Available at: Google books: books.google.com [Accessed 20 April 2017].
- Easterby-Smith, M., Thorpe, R. & Jackson, P. R. (2015). *Management and business research*, 5th edn, London: Sage Publication, Inc.

Edgar, F., Geare, A. & O'Kane, P. (2015). The changing dynamic of leading knowledge workers: The importance of skilled front-line managers, *Employee Relations*, vol. 37, no. 4, pp. 487-503.

Glen, P. (2003). *Leading Geeks: How to Manage and Lead People who Deliver Technology*, San-Francisco: Jossey-Bass.

Goffee, R. & Jones, G. (2009). *Clever: Leading your smartest, most creative people*, Boston: Harvard Business Press.

Goffee, R. & Jones, G. (2007). Leading Clever People, *Harvard Business Review*, March edition, pp. 72-79.

Lewis, J. & Ritchie, J. (2003). *Qualitative Research Practice: A guide for social science students and researchers*, 2nd edn, London: Sage.

Lewis, N. (2006). Creating a new-age leader, *Training*, vol. 43, no.1, pp. 48.

McAfee, A. & Brynjolfsson, E. (2014). *The Second Machine Age. Work, Progress, and prosperity in time of brilliant technologies*, New York: WW Norton & Company.

Mintzberg, H. (2009). *Managing*, San Francisco: Berrett-Koehler Publishers, Inc.

Oltra, V. (2005). Knowledge management effectiveness factors: the role of HRM, *Journal of Knowledge Management*, vol. 19, pp. 70-86.

Powell, M. & Lubitsh, G. (2007). Courage in the Face of Extraordinary Talent, *Strategic HR Review*, vol. 6, no. 5, pp. 24-27.

Roche, M. (2007). Towards an understanding of leading knowledge work and the knowledge worker: What the literature tells us, *NZ Business Journal*, vol. 6, no. 1, pp. 31-44.

Saunders, M., Lewis, P. & Thornhill, A (2012). *Research methods for business students*, 6th edn, Harlow: Pearson Education Limited.

Shenton, A. (2004). Strategies for Ensuring Trustworthiness in Qualitative Research Projects, *Education for Information*, vol. 22, no. 2, pp. 63-75.

Statistics Iceland (2017). Population 1. January 2017. Available online at: <https://hagstofa.is/utgafur/frettasafn/mannfjoldi/mannfjoldi-1-januar-2016/> [Accessed 30 April 2017]

The Icelandic Meteorological Office (2017). Ársskýrsla 2016. Available online: http://www.vedur.is/media/vedurstofan-utgafa-2017/VI_Arsskyrsla_2016_vef.pdf [Accessed 25 February 2017]

Whicker, L. & Andrews, K. (2004). HRM in the knowledge economy: realising the potential, *Asia Pacific Journal of Human Resources*, vol. 42, no. 2, pp. 67-84.

Appendix

Appendix A - Information sent out to potential participants

We are two icelandic girls studying Masters in Management at Lund University. Sigríður Hulda Árnadóttir is a nurse and worked as a project manager for Actavis last four years. Tinna Jónsdóttir is a volcanologist and worked as a researcher at the Department of Earth Sciences from 2012.

Our Masters thesis aims to explore the main challenges that come with managing and leading educated and specialized human resource. With the increasing demand for educated and specialised workforce the purpose is to study if and then how it is different to manage and lead these individuals. Since research is scarce, a case study in this field would contribute a lot of value as the modern society is developing towards more demand for highly educated and specialised workforce. The goal is to captivate the managers' perception of working with, managing and leading such a workforce. It is our belief that the Icelandic Met Office holds the relevant resources for this study. The collection of data will be in the form of semi-structured interviews with top and middle managers at the IMO. Because the study only concerns one organization it is vital to gather as many participants as possible. Complete confidentiality and anonymity will be guaranteed and the content is handled confidentially. Furthermore, answers cannot be associated with individual participants. The interviews are estimated to range from 30-45 minutes and will be conducted and recorded through Skype. After the analysis the recordings will be destroyed.

It is our aim to provide insights into some of the main challenges towards managing and leading clever people that managers face in their daily work and we hope that the IMO and the academic community will benefit from this study.

Appendix B - Interview questions and questionnaire

General questions:

What are the challenges you face with managing and leading employees?

More specialized questions:

We are interested in exploring further a specific type of employees, which would fit the following description:

Highly intelligent and highly talented individuals who contribute extensively more than other employees to what the organization does and are extremely valuable (Goffee & Jones, 2009; Glen, 2003). They have skills that are not easily replicated (Goffee & Jones, 2009).

1. Do you recognize an individual among your employees that fits this description in one or more ways?
2. Can you describe the characteristics that you feel are unique for these individuals.
3. Can you describe the challenges you have with managing this/these employee/s?
4. Do you and if you do, feel it is different to manage these individuals, as compared to those that you feel do not fit the description of clever?

Questionnaire

We will end with a list of known challenges with managing and leading clever people. After each statement, you will be asked to rate on a scale of 0-5 how relevant you think the statement is, based on your experience of managing and leading clever people. 0 means that you find it not at all relevant, 1 slightly relevant, 2 relevant, 3 fairly relevant, 4 very relevant and 5 means that you find it extremely relevant.

1. That it is more challenging to manage and lead them than employees that do not fit the definition of clever
2. They have low respect for hierarchy
3. They are scornful about being controlled
4. They expect to be treated differently than other employees
5. Rules do not apply to them
6. They can be disrespectful
7. They value autonomy above everything
8. They lack loyalty to their organization