

Fit for work?

A quantitative study on the perceived effects of athletic business leaders

In line with a global trend in health consciousness, organizations are investing heavily into wellness. Also, business leaders are found to engage in physical activities more and more. It is argued that athletic interest is used in the construction of leaders' professional identities in business contexts. However, little research has been directed towards the perception of athletic business leaders. This thesis examines if followers perceive athletic business leaders differently compared to non-athletic business leaders in terms of implicit leadership characteristics and transformational quality. Additionally, the impact of gender on these effects is investigated. A two by two factorial between-subject video experiment, with 364 respondents, was used to assess followers' perceptions of athletic business leaders in Sweden. It was shown that business leaders, portraying themselves to be highly physically active, are perceived as less transformational as well as more tyrannical. When comparing male and female leaders, this negative effect was found to be significant only for female business leaders. Furthermore, the results indicate that the negative effect for female athletic business leaders is due to the perceptions of male respondents. The findings of this master thesis contribute towards the development of the construct athletic business leaders by providing a quantitative assessment of followers' perceptions in relation to established leadership theories. In addition, the gender differences highlight another complexity of gender inequality.

Key Words: athletic business leaders, leader perceptions, transformational leadership, implicit leadership theory, gender stereotypical leadership

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Definitions

Leader and follower	According to the definition of Northouse (2015, p.7): “ <i>The people who engage in leadership will be called leaders, and those toward whom leadership is directed will be called followers</i> ”. Further, by that definition, leaders are not above or better than followers and vice versa.
Business leader	Refers to the appointed and formal leadership of someone within an organization. For the experiment, business leaders are operationalized as CEOs. In the supporting literature for business leaders, both research about managers and leaders have been used interchangeable.
Athletic business leader	According to the definition of Johansson, Tienari and Valtonen (2017, p.1142) as leaders who have a “ <i>passionate preoccupation with health, fitness and sports</i> ” and communicate that preoccupation as an attempt to portray a perfect picture towards their followers. In this thesis, the definition was operationalized through CEOs talking about their results in Ironman competitions.
Ironman	A long distance triathlon known as one of the most challenging sports competitions. It consists of a 2.4 mile swim, a 112 mile bicycle ride and a 26.2 mile run that is raced without a break (Ironman, 2019).
Transformational leadership	The leadership style that looks at leaders’ ability to transform followers, by the definition of Bass (1990).
Transformational quality	Used in this thesis to refer to the combined score of the factors of transformational leadership, as operationalized by Awamleh and Gardner (1999), building on the questionnaire of Bass and Avolio (1995).
Implicit leadership theory	Leadership theory that argues for a set of cognitive characteristics, that followers implicitly use in their assessment whether a person is seen as a typical leader or not, as defined by Eden and Leviatan (1975).
Implicit leadership characteristics	Referring to leader typical characteristics defined by Epitropaki and Martin (2004). In this thesis, three characteristics will be assessed: two leader typical characteristics (<i>dedication</i> and <i>dynamism</i>) and one leader non-typical characteristic (<i>tyranny</i>).
Perception	By the definition of Oxford Dictionary (2019a): “ <i>the way in which something is regarded, understood, or interpreted</i> ”. Within this research, only perceptions of followers are assessed. More precisely, how followers perceive leaders’ transformational quality and implicit leadership characteristics.
Portrayal	By the definition of Oxford Dictionary (2019b): “ <i>A description of someone or something in a particular way, a representation</i> ”. Within this research, only the portrayal of leaders in their athleticism is assessed. The athletic portrayal is operationalized by leaders talking about their participations in Ironman competitions.

1. Introduction

The phenomenon of increasingly health conscious and physically active managers raises questions whether portraying athleticism in a business context is beneficial. The first section of the thesis provides a short background to the phenomenon while leading towards the purpose and research question. Additionally, the expected knowledge contributions and delimitations are presented.

Currently, the world is facing a trend of becoming increasingly health aware, both in regard to nutrition (Huen, 2018; Alestig, 2017) as well as exercising (WHO, 2018). Health consciousness has almost become a new religion, as argued in a recent newspaper article (Haag, 2017). Nonetheless, this new religion has found its way into the business world as well. Not that long ago, Henrik Bunge, the CEO of the Swedish sports brand Björn Borg, introduced a mandatory sports hour for all employees (Cederström & Thanem, 2018). Bunge, the self-titled “Head Coach” of Björn Borg, argues that his company is performing better than ever due to the effects of regular physical training. Although this example might seem extreme, this phenomenon is not only specific to Björn Borg. Health consciousness and exercising among business leaders is evident on a broader basis as well. According to a study conducted on close to 3000 Swedish managers, 77% claim to carry out physical activity multiple times a week and 95% argue that taking care of their physical health allows them to become a better manager (Hammarkrantz, 2016).

Other conducted studies demonstrate similar results. Being physically fit has shown relations to being mentally fit (Edwards, 2006; Wright, Cropanzano, Bonett & Diamond, 2009). As a result, a physically healthy employee is shown to be more productive (Harter, Schmidt & Keyes, 2003; Wright & Cropanzano, 2004). However, health consciousness and physical exercise portrayed in an organizational context also raise questions. Why do more and more leaders passionately discipline themselves in numerous aspects of their lives (Riach & Cutcher, 2014) and how is this strict regime of physical strain and performance perceived by followers? Is it perceived positively, or can it be too much of a good thing?

Further, leaders have been shown to use their athletic interest as a way of portraying themselves to be a perfect leader to their followers (Johansson, Tienari & Valtonen, 2017). Interestingly, gender is suggested to impact this portrayal. For example, it is argued that females tone down their femininity when portraying their athleticism. With athleticism, sports and leadership historically all being male dominated (Colley, Berman & Millingen, 2005), are male and female athletic business leaders perceived differently? Looking at the Swedish private sector, less than 30% of the managerial positions are held by females (Ekonomifakta, 2017) and only 9% of Swedish companies are led by a female CEO (Allbright, 2018). Is athletic portrayal another evidence of gender inequality in leadership?

1.1 Theoretical research gap

The phenomenon of athletic business leaders has gained interest in academia. Qualitative studies report an increased exposure to physical exercise in professional settings (Costas, Blagoev & Kärreman, 2016; Johansson, Tienari & Valtonen, 2017). Researchers claim that athletic business

leaders perform better (Knoppers, 2011) and report decreased stress levels (Waring & Waring, 2009). In a study on 20 athletic business leaders Johansson, Tienari and Valtonen (2017) coined the term “managerial athleticism”. In their study they argue that the fit, healthy and athletic body of a business leader plays a significant role when constructing their own professional identity. However, a quantitative study on the effects of athletic business leaders has not been conducted yet.

Furthermore, it is shown that a critical success factor in leadership theory are followers’ perceptions (Jackson, 2011; Otara, 2011). Leadership has received great attention from researchers worldwide and a wide variety of theoretical approaches have been developed to explain the complexities of the relationship between leaders and followers (Northouse, 2015). A common theory used to assess followers’ perceptions is implicit leadership theory, first defined by Eden and Leviatan (1975). The approach argues for a set of characteristics that followers implicitly use in their assessment of whether a person is perceived as a typical leader or not (Epitropaki & Martin, 2004). Yet, no study looked at followers’ perceptions of athletic business leaders and what effect the athletic portrayal has in a business context.

Continuing, Johansson, Tienari and Valtonen (2017) highlight the importance of athletic business leaders, trying to establish themselves as role-models. Being a role model is a quality found in transformational leadership theory (e.g. Burns 1978; Bass 1990; Bass 1985; Bass & Avolio, 1995; Avolio, Bass & Jung, 1999; Bass, Jung, Avolio & Berson, 2003). However, when looking at existing research within this field, mixed indications of whether athletic business leaders are perceived as transformational or not have been found. Therefore, whether leaders’ perceived transformational quality is positively or negatively impacted by athletic portrayal, is also yet to be established.

Lastly, sports has historically been dominated by males (Acker, 1990) and athleticism is argued to be associated with stereotypical male attributes (Colley, Berman, & Millingen 2005). In addition, research shows that typical leader characteristics are more closely related to stereotypical male attributes as well (e.g. Schein, 1973; Koenig, Eagly, Mitchell & Ristikari, 2011; Eagly & Karau, 2002; Offermann & Coats, 2018). The perceptions of leaders are thus not argued to be gender equal (Hogg & Knippenberg, 2003; Sandberg, 2013). However, the effects of gender in the context of athletic business leaders have not received attention in quantitative research so far.

1.2 Purpose of study

This thesis examines followers’ perceptions of athletic business leaders. The perceptions will be examined based on (i) how characteristic followers perceive leaders implicitly, (ii) how they judge the quality of their transformational leadership, and (iii) what impact the role of gender has in this context. In terms of implicit leadership characteristics, the study aims to capture the effect of portrayed athleticism on three implicit leadership characteristics (dedication, dynamism and tyranny) defined by Epitropaki and Martin (2004). In terms of transformational leadership, the study aims to capture the effect of portrayed athleticism on leaders’ perceived transformational quality as defined by Bass (1990). The role of gender has been highlighted by scholars in the context of athletic business leaders (Costas,

Blagoev & Kärreman, 2016; Johansson, Tienari & Valtonen, 2017) and will therefore serve as a ground for an additional set of hypotheses. Consequently, the purpose of this thesis is to answer the following research questions:

“Do followers perceive athletic business leaders differently than non-athletic business leaders in their implicit leadership characteristics, as well as transformational leadership quality? Does gender have an impact on these effects?”

1.3 Expected knowledge contribution

Even though leadership and perceptions of followers have received attention in research, new trends in society reveal unexplored areas relevant to scholars and practitioners. As no quantitative research about the perceptions of athletic business leaders has been found, this thesis aims to contribute to the theoretical development of the construct. Applying gender theory to the hypotheses serves to further fuel the discussions about the complexities of gender inequality in leadership. It exemplifies implicit practices and attributions towards leadership stereotypes, and how advantages are given to male leaders compared to female leaders. Summarized, perceptions of athletic business leaders serve as an opportunity to relate established leadership theory with an emerging phenomenon in society. Contributions to fill the research gap in perceptions of athletic business leaders, as well as gender effects in the context, are attempted to be made.

Furthermore, the findings of this experiment are expected to be relevant in a practical context. Athletic business leaders should be informed about how their portrayal affects the followers’ perceptions of their leadership. Additionally, differences in the perceptions of athletic business leaders, due to gender, should be considered by practitioners to guarantee objectivity in evaluations. Lastly, organizations investing into wellness or encouraging physical activity to enhance well-being and productivity, should be aware of the effects.

1.4 Delimitations

The investigation of the effects of athletic business leaders is delimited to the perceptions of followers. In the experiment conducted, followers evaluate abilities and qualities of a leader based on claims made in an introduction video. Potential effects of using a different type of medium than videos, are out of the scope of this thesis. A further delimitation is that the hypotheses on followers’ perceptions are tested on two leaders only. In an attempt to maximize possibilities for generalizations, these leaders and the script used in the videos were intentionally chosen on the basis of conducted pre-studies. For further information see section 3.5 *Preparations for main study*.

In the experiment, athletic business leaders talk about their active interest in sports and participating in Ironman competitions. The effects of the type of sport, as well as possible effects of varying intensity of physical exercise, are out of the scope of the experiment. Yet, Ironman competitions have been chosen intentionally to fit the definition of athletic business leaders. For further information see section 2.1.3. *Athletic business leaders*.

The leadership theories selected to examine the perceptions of followers are restricted to implicit leadership theory and transformational leadership. The scope of the study further limits these theories to specific streams and the operationalized constructs that will be discussed in section 2.1 *Theoretical ground*.

Lastly, the scope of this thesis is delimited to a Swedish business context. Culture has shown to affect theories used in this research (e.g. Lord, Foti & De Vader, 1984; House et al., 1999; Hartog et al., 1999; House, Javidan, Hanges & Dorfman, 2002). As a result, the sample used in this thesis is chosen to make inferences for the population of working professionals in Sweden.

1.5 Research outline

This thesis consists of six chapters. In section 1. *Introduction*, the problematization, purpose, expected knowledge contributions as well as the limitations of the study are conveyed. In the following section, 2. *Theory and hypotheses generation*, hypotheses and their theoretical support are developed based on adjacent research. In section 3. *Method*, the methodological research approach to test the hypotheses, together with a discussion of underlying perspectives and taken methodological paths, is outlined. The results of the conducted experiment are presented in section 4. *Analysis and results*. Section 5. *Discussion* considers the results of the experiment in relation to suggested hypotheses and outlined literature. Finally, theoretical contributions, managerial implications, and suggestions for further research are presented in section 6. *Conclusion*.

2. Theory and hypotheses generation

In this section, adjacent theory is presented. First, the theoretical ground is outlined, comprising the three areas of implicit leadership theory, transformational leadership and athletic business leaders. Second, the suggested effects and hypotheses between the three fields are presented and the hypotheses for the impact of gender are added.

2.1 Theoretical ground

Research on perceptions of leaders has a large theoretical ground of adjacent theories and streams (Northouse, 2015). Alabdulhadi, Schyns and Staudigl (2017) argue that two processes affect leadership perceptions: recognition-based processes and inferential processes. In recognition-based processes followers use schemas to define whether a person categorizes as a typical or a non-typical leader. Schemas are pre-existing cognitive models used to interpret incoming information about people and objects (Rosch, 1999). In other words, a follower perceives another person as a leader, if the person matches the schema that the follower holds of a typical leader. This process relates to many cognitive conceptualizations in everyday life and is not only used for the perceptions of leaders (Lord & Maher, 1990). In inferential processes, followers define a typical leader as a causal effect of the perceived success or failure of an organization. Thus, if an organization is successful, the leader of that organization will be perceived as a successful leader. The two processes are also suggested to be interrelated (Awamleh & Gardner, 1999). However, followers tend to rely more on direct recognition-based processes when perceiving and evaluating leaders (Awamleh & Gardner, 1999). Therefore, for the purpose of this study, only the recognition-based processes will be assessed.

Within the recognition-based processes, a common theory in use is implicit leadership theory, first introduced by Eden and Leviatan (1975). The implicit leadership theory explains how followers attribute characteristics towards schemas they built over time which then serve as a categorization of whom they perceive as more or less as a typical leader (e.g. Lord, Foti & De Vader, 1984; Offermann, Kennedy & Wirtz, 1994; Epitropaki & Martin, 2004; Quaquebeke, Graf & Eckloff, 2014). Researchers have found characteristics that people generally attribute with typical and non-typical leaders (e.g. Lord, Foti & De Vader, 1984; Epitropaki & Martin, 2004). These characteristics will be assessed in the experiment of this thesis.

However, this study does not only aim to investigate if athletic business leaders are perceived as more or less leader typical. It also aims to assess if athletic business leaders are perceived differently in the quality of their leadership. Looking at the measurement of how followers perceive leadership quality opens a wide range of theories that have tried to explain the complexities of leadership for more than 100 years (Northouse, 2015). For the purpose of this thesis, transformational leadership is used. Transformational leadership is the leadership style that looks at leaders' ability to transform followers (Bass, 1990). Since the 1980s, it has been one of the most popular leadership approaches and has had a central place in leadership research ever since (Avolio, Walumbwa & Weber, 2009; Northouse, 2015). Transformational leadership has further been understood as a synonym for superior leadership performance (Bass, 1990). Additionally, implicit leadership theory and transformational leadership have been found to be interrelated (Atwater & Yammarino, 1993; Martin & Epitropaki, 2001; Rahn,

Jawahar, Scrimshire & Stone, 2016; Hansbrough & Schyns, 2018). For example, the study by Rahn et al. (2016) found that a person who is perceived as a typical leader, is also perceived as more transformational as a result. Transformational leadership was therefore shown to be applicable for the purpose of this thesis.

Adding to these two interrelated fields of research, previous studies about athletic business leaders have been included into the theoretical foundation. However, research in followers' perceptions of athletic business leaders have not yet received a lot of attention (Johansson, Tienari & Valtonen, 2017). The collection of theory is therefore also expanded to other relevant streams of research: athletic identity and bodily appearance. Additionally, studies on the effects of performing sports as a leader on their self-perceived managerial performance have been used.

The following literature review will start with an overview of research in the fields implicit leadership theory, transformational leadership and athletic business leaders. First, the process of implicit leader categorization will be presented in section 2.1.1 *Implicit leadership theory*. The theory will be operationalized to allow for hypothesizing and investigating whether followers perceive a person as typical or non-typical leader. Second, section 2.1.2 *Transformational leadership*, establishes what a transformational leader is and how the theory is used in an assessment of perceived leadership quality. Third, section 2.1.3 *Athletic business leaders* will present the implications of portraying to be an athletic business leader. An overview of the presented fields and their interrelations can be found in *Figure 1*. The shaded areas represent the research gap targeted by the underlying research questions, "*Do followers perceive athletic business leaders differently than non-athletic business leaders in their implicit leadership characteristics, as well as transformational leadership quality? Does gender have an impact on these effects?*", as defined in section 1.2 *Purpose of study*. This thesis aims to test the impact of gender in relation to implicit leadership theory, transformational leadership and athletic business leaders. Therefore, the supporting gender literature will be presented in the development of the specific hypotheses for the impact of gender. All theory supporting the interrelations of the fields, thus leading to the hypotheses, will be presented in part 2.2 *Suggested effects and hypotheses*.

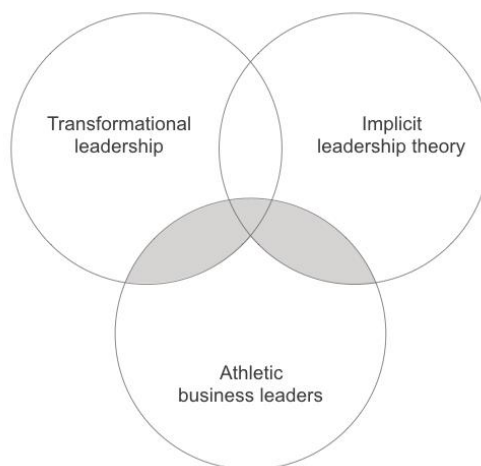


Figure 1 - Theoretical overview

2.1.1 Implicit leadership theory

Implicit leadership theory, also known as ILT, was introduced by Eden and Leviatan (1975). The researchers conducted a study on students with the aim of describing individuals' internal beliefs about and expectations of leaders. They found that people use certain traits and behaviors to

whether leaders are typical or non-typical leaders. As a consequence, they argue that whether a leader is seen as typical or not is dependent on an individual preconstructed subjective view of whom a leader is. Most recently, Offermann and Coats (2018, p.513) named this view "*implicit and naive conceptualizations people hold of leaders*".

Following Eden and Leviatan (1975), different aspects of the leader categorization process have been assessed. For example, Lord and Maher (1990) found that followers use leader schemas as a benchmark to categorize typical and non-typical leaders. The more a person fits into a leader typical schema, the more a person is seen and accepted as a leader. This implicit and rapid matching process of leader categorization has also been tested and confirmed in other studies (Nye & Forsyth, 1991; Epitropaki & Martin, 2004; Offermann & Coats, 2018). Consequently, implicit leadership theory understands leadership as a dynamic process (Alabdulhadi, Schyns & Staudigl, 2017). Leadership needs to be understood from the follower point of view, placing importance on followers' perceptions of leader behaviors, traits as well as produced outcomes (Lord & Maher, 1991).

Quaquebeke, Graf and Eckloff (2014) have identified two different approaches within implicit leadership theory. They distinguish between central tendency and ideal tendency. Central tendency looks at the general image of a leader and whether or not that leader is perceived as typical or non-typical (e.g. Lord, Foti & De Vader, 1984; Epitropaki & Martin, 2004; Tavares, Sobral, Goldszmidt & Araújo, 2018; Offermann & Coats, 2018). Followers here attribute characteristics as either leader-typical (matching their schema of a typical leader) or non-typical (matching their schema of a non-typical leader). In contrast, ideal tendency looks at leader schemas that categorize how a perfect leader should behave. Here, followers use a goal-oriented rather than a typical leader schema (e.g. Graf, Van Quaquebeke & Van Dick, 2011). In the experiment of this thesis, the central tendency is applied, as it is argued to be a better approach to judge leaders unknown to followers as well as when assessing gender (Quaquebeke, Graf & Eckloff, 2014).

Lord and colleagues (1984) conducted a study in order to further examine the structure of leadership categorization by asking undergraduate students in the United States of attributes they associate with typical leaders and non-typical leaders. A second group was asked to rate these attributes how leader-typical they rank. This resulted in a pool of 59 typical attributes (positively correlated attributes) and 26 non-typical attributes (negatively correlated attributes) of leader perceptions. The more the characteristics of a person correlated with these attributes, the more that person was perceived as a typical leader by followers. Ten years later, a similar study was conducted by Offermann, Kennedy and Wirtz (1994). Again, undergraduates were asked to name leader characteristics which resulted in a pool of 160 attributes, overlapping with the 59 found by Lord, Foti and De Vader (1984). As a result, 41 items describing eight different characteristics of leaders were found. Six were considered to be

typical: sensitivity, dedication, charisma, attractiveness, intelligence, and strength and two to be non-typical: tyranny and masculinity. Another ten years later, Epitropaki and Martin (2004) revisited the model with the aim of simplifying it, which resulted in 21 items defining six characteristics: sensitivity, intelligence, dedication and dynamism (typical) as well as tyranny and masculinity (non-typical). The characteristics applicable for this thesis (dedication, dynamism and tyranny) will further be explained in section 2.2 *Suggested effects and hypotheses*.

Scholars have further investigated these characteristics in organizational settings. Tavares, Sobral, Goldszmidt and Araújo (2018) looked into the relative importance of the six characteristics given by Epitropaki and Martin (2004) with the finding that tyranny and masculinity were not as important in comparison to the other four. Along with previous researchers, they also discussed whether masculinity should be seen as a typical or non-typical implicit leadership characteristic. In addition, Offermann and Coats (2018) analyzed the stability of implicit leadership characteristics over the past two decades. They confirmed the stability of the characteristics except for minor exceptions and added a new characteristic creativity. Yet, this thesis uses the operationalization of characteristics by Epitropaki and Martin (2004), as it turned out to be applicable for the type of experiment conducted as discussed in section 3.5.2 *Scales and Measures*.

Implicit leadership characteristics have been assessed in relation to a number of constructs. For example, followers that have a leader matching their schemas of a typical leader are found to have more organizational commitment and job satisfaction (Epitropaki & Martin, 2005a; Epitropaki & Martin, 2005b), experience higher subjective well-being, (Lord & Maher, 1990; Epitropaki & Martin, 2005b; Dinh et al., 2014) and a better acceptance of managerial decisions (Lord & Maher, 1991).

Further, it is important to note that implicit leadership theory is context dependent (Lord, Foti & De Vader, 1984; House et al., 1999; Hartog et al., 1999; House et al., 2002). For example, “project GLOBE” has investigated cultural differences in implicit leadership theory in 62 countries, using a team of more than 200 researchers since the beginning of the 1990s (Globe Project, 2019). The project found cultural differences how implicit leadership characteristics are related to effective leadership (House et al., 1999; Hartog et al., 1999; House et al., 2002). One of the studies was conducted on Swedish leaders (Holmberg & Åkerblom, 2006). It found that leader schemas are more participative and autonomous compared to other countries.

2.1.2 Transformational leadership

Transformational leadership takes into account the affective and charismatic dimensions of leaders which lead to a transformation of followers (Bass, 1990). It rose to popularity during the 1980s as an opposition to organizations that were managed with high amounts of control and low amounts of vision (Sinclair, 2007). Addressing these imbalances, it became the most frequently researched leadership theory during the following years (Avolio, Walumbwa & Weber, 2009; Northouse, 2015). One of the first researchers to separate leadership into the counterparts of transformational and transactional was Burns (1978). In relation to its counterpart transactional leadership, transformational

leadership is shown to motivate and inspire employees to give an extra effort and make an organization flourish (Bass, 1990). The outcome is argued to be organizational performance above expectations (Northouse, 2015).

Transformational leadership theory has been investigated for more than 30 years (e.g. Burns 1978; Bass 1985; Bennis & Nanus, 1985; Bass 1990; Bass & Avolio, 1995; Avolio, Bass & Jung, 1999; Bass, Jung, Avolio & Berson, 2003). An important tool in the research was and is the Multifactor Leadership Questionnaire (MLQ), first developed by Bass and Avolio (1995). It is argued to be the most widely used instrument to measure transformational quality in leaders (Kirkbride, 2006) and considered to be the best validated measurement (Özaralli, 2003). Next to transformational leadership, the MLQ also tests transactional and passive leadership styles (Bass & Avolio, 1995). Transformational leadership is distinguished into the four components *idealized influence*, *inspirational motivation*, *intellectual stimulation* and *individual consideration* (Bass, 1990).

Idealized influence is exercised by leaders that act as role models to their employees, both in an attributional and behavioral sense. Leaders provide followers with a sense of vision and mission. Leaders with idealized influence are appreciated by followers and receive a lot of trust. It was also defined as the most important component among the four (Atwater & Yammarino, 1993). *Inspirational motivation* describes leaders who inspire followers to become committed to take a part in an organization's shared vision. It is strongly related to the concept of team spirit. *Intellectual stimulation* refers to leaders' capacity of stimulating innovation and creativity among followers to make them feel challenged and autonomous. In relation to the other transformational components, it is considered more rational and non-emotional (Antonakis, 2012). *Individual consideration* describes leaders' capability to carefully listen to followers' individual needs. It also enables followers to be the best versions of themselves.

The MLQ has been revised to a shorter form, MLQ 5X, by Bass & Avolio (1995). Additionally, other scholars have used and combined the items to operationalize the measurement of transformational leadership quality to fit the purpose of their study. One example is Awamleh and Gardner (1999). Their factor analysis and item combinations showed to match the intentions of this thesis and will be used in the experiment.

Multiple studies show a significant correlation between transformational leadership and organizational unit effectiveness (Lowe, Kroeck & Sivasubramaniam, 1996; Bass, Jung, Avolio & Berson, 2003), positive employee engagement (Popli & Rizvi, 2016), job satisfaction and well-being (Martin & Epitropaki, 2001). However, there are also findings that transformational leadership fails to predict job performance (Judge & Piccolo, 2004). Critics of transformational leadership mention a lack of conceptual distinction of the concept (Van Knippenberg & Sitkin, 2013), low attention to contextual factors and little assessments of negative effects (Jackson & Parry, 2011). As a result, for the application of transformational leadership quality in this thesis, the concept should be understood in the context of its application to athletic business leaders and implicit leadership theories. Also, it is

not an assessment of the general quality of a leader but rather the specific transformational quality as defined by Bass (1990).

2.1.3 Athletic business leaders

The perceptions of athletic business leaders have yet received limited attention in research. The following literature review includes qualitative studies that look at athletic business leaders in an organizational context, also highlighting the role of gender. Costas, Blagoev and Kärreman (2016) showed that not only the fit body, but also the image of being sporty had an impact on self-assessed professionalism and autonomy of followers. Further, Johansson, Tienari and Valtonen (2017) conducted a study on managers passionate about sports, coining the term “managerial athleticism”. They show that bodily identities create a form of regulation of whom is supposed to be seen as a successful professional. These regulating norms play a role in evaluating leaders depending on their gender. A healthy, fit and athletic body plays a vital part in how managerial identities are construed in business contexts. Even though their study focuses on the physical appearances of managers, they also show that norms are conveyed vocally. The study concludes that managerial athleticism is evident in three practices: perfecting the body, advocating against non-fit bodies and becoming a role model.

An athletic business leader is defined as a business leader with a passionate preoccupation with fitness and health (Johansson, Tienari & Valtonen, 2017). They use the portrayal of their athleticism with the objective to receive positive effects in a professional business context. For example, leaders that exercise are seen as more productive (Harter, Schmidt & Keyes, 2003; Wright & Cropanzano, 2004). The leaders that undergo strain and pain in training are also able to perform like an athlete in a professional context (Johansson, Tienari & Valtonen, 2017). Costas, Blagoev and Kärreman (2016) argue for the same relation. An ambition to make someone’s body look fit and healthy is supposed to be related to professional ambition and discipline. In this thesis, athletic business leaders are operationalized as CEOs participating in Ironmans. Ironman is argued to be one of the most challenging sports competitions, comprising a 2.4 mile long swim, a 112 mile bicycle ride, and a 26.2 mile run raced without a break (Ironman, 2019). It fits the definition of going through strain and pain in training as well as ambition towards the own body. Also, Ironman is a sport that fits the connotations that Johansson, Tienari and Valtonen (2017) define as the source of bodily passion in management: competitiveness, strength, endurance, energy, achievement and performance. The implications for the type of sport chosen will be elaborated in section *5.1 General effects of portraying to be an athletic business leader*.

In order to operationalize athletic perception, inspiration from the field of athletic identity has been taken. Brewer, Van Raalte and Linder (1993) define athletic identity as the degree to which someone identifies with the role of an athlete. The self-assessed athletic identity can be measured using the Athletic Identity Measurement Scale (AIMS) reviewed by Brewer and Cornelius (2001). They also show the applicability of the scale to males and females as well as athletes and non-athletes. However, how athleticism is assessed in a business leader, hence someone else, has not been found in adjacent research.

Additional findings related to athletic business leaders are that excess weight is recommended to be avoided as it signifies unprofessionalism (Trethewey, 1999). Also, professionals have expressed that physical training helps them reduce stress (Waring & Waring, 2009) and they see it as a way of escaping frustrations in everyday life (Costas, Blagoev & Kärreman, 2016). In a study of Knoppers (2011) managers further expressed that they believe sports contributes to their skills as managers.

2.2 Suggested effects and hypotheses

Building on the theoretical ground presented in the previous section, supporting literature for the relations between the research fields will now be outlined. The hypotheses that will be tested in the study are developed on the basis of the supporting literature.

2.2.1 Athletic business leaders and transformational quality

Adjacent research indicates that portraying athleticism as a business leader could lead to more or less perceived transformational quality. The literature presented argues for both effects, and consequently the experiment of this thesis aims to shed light on the direction of the effect. In addition, gender of both leaders and followers is suggested to impact perceptions of athletic business leaders' transformational quality. Thus, supporting literature for all suggested effects will be outlined below.

Potential positive effects

Johansson, Tienari and Valtonen (2017) conclude that managerial athleticism, the passionate preoccupation with health, fitness and sports, involves leaders using their athletic portrayal to become role models. Being a role model is part of the definition of the transformational leadership dimension idealized influence (Bass, 1990). Managerial identities based on passionate preoccupation with the body are actively debated, and increasing attention is being paid to how health and fitness work as regulation in organizations through management techniques and as a form of self-control (Johansson, Tienari & Valtonen, 2017). Furthermore, conducting sports carries an array of associations that are valued in organizations such as competitiveness, strength, endurance, energy, achievement and performance (Johansson, Tienari & Valtonen, 2017). These associations, together with self-control can be attributed to Bass' (1990) description of inspirational motivation.

Next, higher athletic identification of self is shown to be positively correlated to competitiveness, goal orientation, and motives (Baysden, Brewer, Petitpas & Van Raalte, 1997). Also, a study has shown that professionals perceiving themselves as being sporty, report higher self-assessed professionalism and autonomy (Costas, Blagoev & Kärreman, 2016). Higher athletic identification of self is therefore shown to be related to characteristics important in a business context. Additionally, Atwater and Yammarino (1993) conducted a study in a military setting and found that leaders participating in athletic activities were rated as more transformational.

Further, research investigating attributes of athletes shows indications for a positive relationship between athleticism and transformational leadership. Looking into theory of personality traits, extraversion, emotional stability and responsibility (García-Naveira & Ruiz-Barquín, 2013) were found

to be higher for athletes. Extraversion is coherently found to also predict transformational quality in leaders (Judge & Bono, 2000; Zopiatis & Constanti, 2012). Adding to this, researchers looked into the attribute of “mental toughness” which is identified to be critical for well performing athletes (Jones, 2002). Mental toughness is similarly demonstrated to be an important attribute for leaders in demanding roles such as CEOs and is shown to be key for excellence in both, sports and business (Burnes & O'Donnell, 2011). The construct of mental toughness is defined as desire, self-belief and motivation (Jones, 2002). These attributes have shown to be relevant in defining transformational leadership quality, as well (Susilo, 2018).

Potential negative effects

However, not all theory argues for a positive effect of perceived athleticism on business leaders' transformational leadership qualities. As described earlier, theory of transformational leadership emphasizes the process of transforming followers (Bass, 1990; Northouse, 2015). Whether business leaders are able to transform or influence followers using their athletic portrayal is a question raised by Johansson, Tienari and Valtonen (2017). Moreover, transformational quality appeals to some followers more than to others and varies based on followers' personality (Hansbrough & Schnys, 2018). Following this argumentation, not all followers want to be transformed by athletic business leaders. Portraying athleticism would therefore lead to less perceived transformational quality.

The self-serving bias, i.e. the tendency to perceive oneself exceedingly favorable, is shown to be related to individuals performing in sports (De Michele, Gansneder & Solomon, 1998) and more specifically to those who participate in individual sports (Zaccaro, Peterson & Walker, 1987). Further, being self-centered is negatively related to transformational leadership as transformational leaders are shown to go above their self-interests for the good of the group (Avolio, Bass & Jung, 1999). This would infer a negative relationship of athletic business leaders and transformational leadership in the sense of individualized consideration of followers.

Research about transformational leadership, also in relation to sports, has mainly focused on positive effects (Arthur, Bastardo & Eklund, 2017). However, when assessing the perceptions of athletic business leaders as an early development of the construct, indications for possible negative effects should not be disregarded. Concluding, on the basis of the literature it is argued that portraying to be an athletic business leader could have positive and negative effects on the perceived transformational qualities. Therefore, it is hypothesized that portraying to be an athletic business leader has a general effect on perceived transformational quality and as a part of the study, an indication for the direction of the effect will be established.

H1: Portraying to be an *athletic business leader* has an effect on the perceived *transformational quality*.

Potential leader gender effects

Northouse (2015) categorizes explanations for gender gaps in leadership into three areas: different investments in human capital, prejudice and discrimination against female leaders as well as differences

in gender as such. Differences by investments in human capital, as opportunities for training and other experiences are not determined by followers' perceptions of leaders and are therefore out of the scope of this thesis. Only prejudice and discrimination against female leaders as well as gender differences as such will be investigated.

Research shows that expected behavior of females and males differ (Paris, Howell, Dorfman & Hanges, 2009). Expectations are automatically activated in response to gender stereotypes and can lead to biased judgements (Fiske, 1998; Kunda & Spencer, 2003). These gender stereotypes can be explained by different attributes that are either associated more with males or females (Deaux & Kite, 1993; Heilman, 2001). Stereotypical female attributes are communal characteristics such as sensitivity, warmth and concern for others. Stereotypical male attributes are agentic characteristics such as confidence, assertiveness and decisiveness (Deaux & Kite, 1993; Heilman, 2001).

This serves as an explanation why females are generally perceived as more transformational. The attributes associated with transformational leadership are closer related to females than males. Therefore, females are perceived as more transformational (Hackman, Hills, Furniss & Paterson, 1992; Eagly, Johannesen-Schmidt & Van Engen, 2003; Northouse, 2015). It is also shown that females, who lead in a masculine manner, i.e. comply more to male stereotypes, are devalued in leader evaluations (Eagly, Makhijani & Klonsky, 1992; Eagly, Karau & Makhijani, 1995). Adding to this, sports have also been found to be stereotypically male (Colley, Berman & Millingen, 2005). One of the explanations why, is that sports has historically been dominated by men (Acker, 1990). Researchers also make a distinction between masculine and feminine sports, where sports focusing on strength or strong body contact are seen as masculine (Yi-Hsiu & Chen-Yueh, 2013). Extreme sports, such as Ironman, indicate masculine traits such as confidence, assertiveness and decisiveness (Deaux & Kite, 1993; Heilman, 2001), and are thus considered stereotypically male.

In conclusion, female business leaders portraying to be athletic in terms of Ironman participations, would be perceived as more masculine. In a leadership context, females that are perceived as more masculine are devalued in leader evaluations. Hence, portraying to be an athletic business leader should have a more negative effect for female leaders. As a result, the following hypothesis is suggested:

H2: The effect of portraying to be an *athletic business leader* on transformational quality is more negative for *female business leaders*, than for *male business leaders*.

Potential follower gender effects

When assessing followers' perceptions of female leaders compared to male leaders, it is shown that the gender of the assessor has an impact on the rating (Eagly, Karau & Makhijani, 1995). One explanation for this effect are cognitive biases. The cognitive bias of similarity and liking causes people to like others similar to themselves (Cialdini, 2007). Similarity in that context can for example mean belonging to the same group of social identity. The impact of similar social identity in the perception of leaders has been investigated by multiple scholars (e.g. Hogg, 2001; Hogg & Knippenberg, 2003;

Ellemers, De Gilder & Haslam, 2004). For example, Hogg and Knippenberg (2003) found that the social identity of a follower is relevant for whom they perceive as a transformational leader. Followers are also shown to favorably rate leaders that have the same gender. In a sample of predominantly male followers, male leaders are favored in their leadership rating (Eagly, Makhijani & Klonsky, 1992; Eagly, Karau & Makhijani, 1995; Duehr & Bono, 2006). In a sample of predominantly female followers, female leaders are assessed to be more effective (Paustian-Underdahl, Walker & Woehr, 2014).

The previous hypothesis (H2) suggests that female athletic business leaders are rated more negative compared to male athletic business leaders. On the basis of the literature presented in this section, this effect is hypothesized to be moderated by follower gender. Male followers are hypothesized to rate female leaders significantly worse in perceived transformational quality. As a result, the following hypothesis is suggested:

H3: The effect of portraying to be an *athletic business leader* on *transformational quality* is more negative for *female business leaders*, than for *male business leaders*, due to the perception of *male followers*.

2.2.2 Athletic business leaders and implicit leadership characteristics

From the review of adjacent research, portraying athleticism as a leader is hypothesized to relate to three of the six implicit leadership characteristics (dedication, dynamism and tyranny) defined by Epitropaki and Martin (2004). The other three characteristics (masculinity, intelligence and sensitivity) are excluded from the scope of this study for multiple reasons.

As presented earlier, masculinity shows relevance in the relation to perceived athleticism, as sports has been associated with predominantly masculine traits (Colley, Berman & Millingen, 2005; Yi-Hsiu & Chen-Yueh, 2013). However, several researchers conclude that masculinity is inappropriate to be used as an implicit leadership characteristic (e.g. Topakas, 2011; Tavares, Sobral, Goldszmidt & Araújo, 2018). It is found to not be applicable to many contexts implicit leadership characteristics are tested in and there are mixed results whether it is a typical or non-typical characteristic (e.g. Schyns & Schilling, 2011; Tavares, Sobral, Goldszmidt & Araújo, 2018). Further, in the operationalization of Epitropaki and Martin (2004) on the basis of being “male” and “masculine” is argued to be confusing for respondents when the assessing females. The other two excluded implicit leadership characteristics (intelligence and sensitivity) did not show sufficient indications in existing literature to be related to athletic business leaders.

Following, the suggested effects of athletic portrayal on the implicit leadership characteristics dedication, dynamism (typical) and tyranny (non-typical) will be presented. Indications of both negative and positive effects of athletic portrayal have been found in existing literature. Thus, athletic portrayal could result in the leader being seen as more or less leader typical. After these suggested effects are presented, the suggested impact of leader gender will be outlined.

Potential positive effects

Dedication (typical characteristic) is operationalized into the sub-characteristics motivated, dedicated and hard-working (Epitropaki & Martin, 2004). In a professional context, an ambition towards the own body is suggested to be related to professional ambition and professional discipline (Costas, Blagoev & Kärreman, 2016), both sub-characteristics of motivation. Dedication as such, has been found to be positively correlated to the personality trait conscientiousness (Dudley, Orvis, Lebiecki & Cortina, 2006). Further, conscientiousness, the desire of doing tasks well and thoroughly, is shown to be the main predictor of performance within sports (Teshome, Mengistu & Beker, 2015).

Dynamism (typical characteristic) is operationalized into the sub-characteristics of being bold, dynamic, strong, energetic and charismatic (Epitropaki & Martin, 2004). Connotations that athletic portrayal in a business context carry are suggested to be strength and energy (Johansson, Tienari & Valtonen, 2017). Additionally, the sub-characteristic of being strong could be further connected to the perceptions of endurance athletes as well, as they are shown to be mentally strong (Jones, 2002).

Potential negative effects

Tyranny (non-typical characteristic) is operationalized into the sub-characteristics of being domineering, pushy, dominant, manipulative, conceited, selfish and loud (Epitropaki & Martin, 2004). Being conceited, or having an unshakeable self-belief, is a characteristic found in performing athletes as a factor in the assessment of their mental strength (Jones, 2002). Furthermore, being selfish is a characteristic suggested in the relation to triathletes and Ironman competitors, as the sport requires a lot of commitment and training, that leaves less time for other parts in life. Lastly, in the early development of implicit leadership characteristics Lord, Foti and De Vader (1984) tested if attributes are seen as leader typical or non-typical. They found that being “sports-minded” is assessed as a non-typical leader characteristic.

Due to the indications for the effect of athletic portrayal in both directions (being perceived as more or less leader typical) in the existing literature, a general effect is hypothesized, and the suggested direction will be established as a part of the experiment. It should be noted that the effect to be perceived as a more typical leader would be strongest if the typical characteristics (dedication and dynamism) are strengthened and the non-typical characteristic (tyranny) is weakened. Consequently, the effect to be perceived as less of a typical leader would be strongest if the typical characteristics (dedication and dynamism) are weakened and the non-typical characteristic (tyranny) is strengthened. As a result, the following hypothesis is suggested:

H4: Portraying to be an *athletic business leader* has an effect on the perceived *implicit leadership characteristics* in terms of (H4a) dedication, (H4b) dynamism and (H4c) tyranny.

Potential leader gender effects

“Think leader, think male.” This phenomenon of attributing leader stereotypes closer to males than females was initiated by Schein (1973). He argues that followers implicitly associate leader

characteristics closer to males. Looking at the phenomenon more specifically, Eagly and Karau (2002) developed the role congruity model. The model explains that the perceived incongruity between gender roles leads to prejudice on two levels. First, by perceiving women less favorable than men as leaders. Secondly, by evaluating behaviors of leaders less favorable when performed by a woman, also demonstrated by Duehr and Bono (2006).

Expanding on the first prejudice of perceptions, a literature review by Koenig, Mitchell, Eagly and Ristikari (2011) analyzed 69 articles demonstrating masculinity of leader stereotypes. As a part of their review, they also explain the mismatch in the role congruity model with female stereotypes being incongruent with implicit leadership characteristics, using the same literature applied in this study (e.g. Lord & Maher, 1991; Offermann, Kennedy & Wirtz, 1994; Epitropaki & Martin, 2004). Offermann and Coats (2018) suggest that even though implicit leadership characteristics have become more neutral, gender still has an impact. Further, they show that the non-typical characteristic tyranny is closer related to the masculine traits.

As argued before, sports are closer associated to male characteristics (Colley, Berman & Millingen, 2005). Johansson, Tienari and Valtonen (2017) argue that female business leaders need to tone down their female attributes to be able to portray the athletic dimension. Female leaders portraying their athleticism will therefore be seen as more masculine and consequently more tyrannical (Offermann & Coats, 2018). The effect of portraying athleticism as a business leader should therefore be more negative for female business leaders than male business leaders. Consequently, the following hypothesis is suggested:

H5: The effect of portraying to be an *athletic business leader* on perceived *implicit leadership characteristics*, in terms of (H5a) dedication, (H5b) dynamism and (H5c) tyranny, is more negative for *female business leaders*, than for *male business leaders*.

2.2.3 Implicit leadership characteristics and transformational leadership

A number of studies have already looked into the relationship of implicit leadership characteristics and transformational quality of leaders (e.g. Atwater & Yammarino, 1993; Martin & Epitropaki, 2001; Rahn et al., 2016; Hansbrough & Schyns, 2018). An early study conducted in a military setting by Atwater and Yammarino (1993) shows that followers rate leaders more transformational if these leaders match their concept of the ideal leader as well. Martin and Epitropaki (2001) found that the non-typical leadership characteristics were significantly correlated to transformational leadership. Another study by Rahn et al. (2016) assessed the effects of implicit leadership characteristics in relation to transformational leadership. Once again, a direct effect of implicit leadership characteristics on transformational leadership was found. Recently, Hansbrough and Schyns (2018) showed that the implicit leadership characteristic dedication mediated the relationship between the personality factor conscientiousness and transformational leadership. Consequently, in this study, it is expected that the relationship between the implicit leadership characteristics and transformational quality will be found as well. It is hypothesized that:

H6: Perceived *implicit leadership characteristics* in terms of (H6a) dedication, (H6b) dynamism and (H6c) tyranny explain a significant amount of the variance in perceived *transformational quality*.

On the basis of previous sections, a mediator effect of implicit leader characteristics on the relationship between portraying athleticism and transformational quality is suggested. In the development of H1, theoretical ground for the relationship of portraying athleticism on transformational leadership is found. In the development of H4, the suggested effects for athletic portrayal on implicit leadership characteristics were outlined. In the development of H6 a relation between implicit leadership characteristics and transformational was suggested. If all three relationships (H1, H4 and H6) will be supported in the study, implicit leadership characteristics will be assessed as a mediator. In previous literature, the mediation of implicit leader characteristics on transformational leadership has been demonstrated on the basis of a personality trait (Hansbrough & Schyns, 2018). The last hypothesis of this study is suggested as the following:

H7: Perceived *implicit leadership characteristics* in terms of (H7a) dedication, (H7b) dynamism and (H7c) tyranny mediate the effect between portraying to be an athletic business leader and perceived *transformational quality*.

2.2.4 Summary of hypotheses

In conclusion, the hypotheses tested in this thesis can be summarized on the basis of the suggested effects between the three theoretical areas presented in the literature review. First, H1, H2 and H3 test the suggested effects between athletic business leaders and transformational quality. This includes the relationship as such (H1), the impact of leader gender on the relationship (H2) and the impact of follower gender on the relationship (H3). Second, H4 and H5 test the suggested effects between athletic business leaders and implicit leadership characteristics. This includes the relationship as such (H4) and the impact of leader gender on the relationship (H5). Third, H6 and H7 test the relationship between implicit leadership characteristics and transformational leadership quality. Here, H6 investigates the relationship as such and H7 tests implicit leadership characteristics as a mediator. All the hypotheses can be reviewed in *Table 1* below.

Table 1 - Summary of hypotheses

<i>Suggested relation between athletic business leaders and transformational quality</i>	
H1	Portraying to be an <i>athletic business leader</i> has an effect on the perceived <i>transformational quality</i> .
H2	The effect of portraying to be an <i>athletic business leader</i> on transformational quality is more negative for <i>female business leaders</i> , than for <i>male business leaders</i> .
H3	The effect of portraying to be an <i>athletic business leader</i> on <i>transformational quality</i> is more negative for <i>female business leaders</i> , than for <i>male business leaders</i> , due to the perception of <i>male followers</i> .
<i>Suggested relation between athletic business leaders and implicit leadership characteristics</i>	
H4	Portraying to be an <i>athletic business leader</i> has an effect on the perceived <i>implicit leadership characteristics</i> in terms of (H4a) dedication, (H4b) dynamism and (H4c) tyranny.
H5	The effect of portraying to be an <i>athletic business leader</i> on perceived <i>implicit leadership characteristics</i> , in terms of (H5a) dedication, (H5b) dynamism and (H5c) tyranny, is more negative for <i>female business leaders</i> , than for <i>male business leaders</i> .
<i>Suggested relation between implicit leadership characteristics and transformational leadership quality</i>	
H6	Perceived <i>implicit leadership characteristics</i> in terms of (H6a) dedication, (H6b) dynamism and (H6c) tyranny explain a significant amount of the variance in perceived <i>transformational quality</i> .
H7	Perceived <i>implicit leadership qualities</i> in terms of (H7a) dedication, (H7b) dynamism and (H7c) tyranny mediate the effect between portraying to be an athletic business leader and perceived <i>transformational quality</i> .

The hypotheses are further visually illustrated in *Figure 2* below. The heads of the arrows indicate the direction that the effect is hypothesized to have.

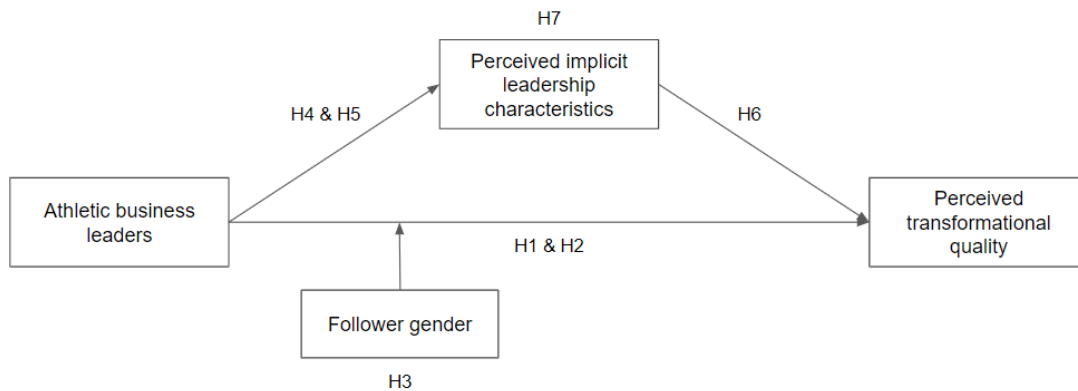


Figure 2 - Theoretical model

3. Method

The method section specifies the research approach as well as the research design of this thesis. First, the scientific research approach is presented. Thereafter, the theory collection and research design are outlined. The design and process of the undertaken pre-studies, including the development of the stimuli, as well as the main study is described. Then, the analytical process is presented and lastly a discussion of data quality is held.

3.1 Scientific research approach

In this thesis, a deductive research approach was utilized. On the basis of relevant and established theoretical domains, hypotheses were deducted and analyzed in an empirical study (Saunders, Lewis & Thornhill, 2009; Bryman & Bell, 2015). For the purpose of this study, the use of a deductive approach is appropriate in multiple aspects. Within the long tradition of leadership research deductive approaches have extensively been used throughout numerous contexts (Northouse, 2015). Due to the multitude of studies conducted, many theories and concepts were well established. Following the argumentation of Edmondson and McManus (2007), the mature field provided fruitful ground for focused hypotheses that would be able to find new relations between existing constructs. Taking a closer look at the relationships to be investigated, causality played an important role. Inferences about causal relationships of constructs can best be established by utilizing a deductive approach (Campbell & Stanley, 1957). Furthermore, initial investigations in the research gap “perceptions of athletic leaders” have been started qualitatively. After coining the term managerial athleticism, in a qualitative study, Johansson, Tienari and Valtonen (2017) call for more research attention. A deductive approach is able to further define the construct of athletic business leaders and put it into relation with well-established leadership research.

3.2 Theory collection

A collection of theory within the fields of leadership and athleticism marked the start of this thesis. Due to the limited studies on athletic leaders available, more concrete research streams in the areas of leadership perception, cognitive science, athletic identity and gender were explored. The experiment of this thesis aimed to find significant differences between people on the basis of their perceived characteristics. The finer these differences are, the more difficult the measurement is (Bryman & Bell, 2015). As a result, the theoretical model was in constant discussion during the process of theory collection. Consequently, the included hypotheses were adjusted and refined according to the literature reviewed to accurately relate to the chosen constructs. The majority of theory collection was done in online data-banks. Key-words used during the process included “*leadership perception*”, “*implicit leadership*”, “*effective leadership*”, “*transformational leadership*”, “*athletic leaders*”, “*athletic business leaders*”, “*athleticism*” and “*athletic identity*”.

3.3 Research design

The research design of this thesis comprises two pre-studies and one main study. The pre-studies were conducted as a preparation for the main study and are described in section 3.4 *Preparations for main study*. In the main study, theoretically derived hypotheses were tested in a two by two factorial between-subject research design (Berger, Maurer & Celli, 2018). The purpose of this study is to investigate the

effect of athletic business leaders on followers' perceptions. The experiment is designed to assess athletic business leaders using CEOs and followers' perceptions of these leaders using respondents. Therefore, in section 3. *Method* and in section 4. *Analysis* followers will be referred to as respondents and leaders as CEOs.

Data was collected through an online questionnaire where respondents were randomly assigned to one treatment group and stimulus only. One of the main advantages of an experimental design lies within the generalization of findings to the population (Bryman & Bell, 2015). The experimental design makes it possible to study implicit cognitive processes and was therefore an appropriate study design when assessing implicit leadership characteristics. The factorial between-subject nature of the experiment further allowed to establish cause and effect relationships, rather than looking at correlations only (Bryman & Bell, 2015). Next to the analytical strength of the experimental design, it was also appropriate in the application to the theory chosen. When looking at perceptions of leaders, both individual differences in leaders as well as followers are important to be considered (Bryman, 1992; Hansbrough, Lord & Schyns, 2015; Alabdulhadi, Schyns & Staudigl, 2017). At the same time, the research design also served the purpose of examining the role of gender for the chosen research topic (Olian, Schwab & Haberfeld, 1988).

Different possibilities for the manipulation of stimuli were discussed on the basis of the literature review. Three approaches to test perceptions of leaders in the applicable theory were (i) video assessments (e.g. Awamleh & Gardner, 1999; Newcombe & Ashkanasy, 2002; Martinko et al., 2017), (ii) a review of paper resumes (e.g. Nye & Forsyth, 1991) or (iii) real-life settings, where followers are asked to assess their leader on the basis of a questionnaire (e.g. Epitropaki & Martin, 2005a). A manipulation through videos was decided to fit the requirements of theoretical implications and the research design in multiple ways. First, it allowed the accumulation of a big number of respondents to the stimuli groups randomly and independently from each other. Studying leaders in a real-life working context would have provided more external validity for the experiment. However, the required control of biases to assure internal validity would have been more difficult to achieve. On the other hand, a review of leader resumes proposed limitations in external validity for the experiment. A video assessment of leaders was considered as the best compromise between internal and external validity. Furthermore, a video assessment was applicable to the theories used in this thesis. For example, the reaction time for followers to categorize and judge new leaders was satisfied with a short video (Lord, Foti & De Vader, 1984). Furthermore, the variation of the script used by actors in the videos was found to be responsible for changes in leadership perceptions (Lord, Foti & De Vader, 1984). Adding onto that, the preparatory work to assure quality, comparability and satisfactory stimuli variation of the videos, is described in the next section 3.4 *Preparations for main study*. Additionally, professors with expertise in deductive methodology, experimental design, leadership research and gender studies were consulted throughout different stages of the process. Above all, a rigorous execution of the research design aimed to prevent logical gaps, assure a high quality of data collection and to provide a solid basis for the argumentation in the analysis and discussion (Saunders, Lewis & Thornhill, 2009).

3.4 Preparations for main study

As preparation for the main study, two pre-studies were conducted. The first pre-study aimed to develop the videos used for the stimuli manipulation. The second pre-study aimed to validate the stimuli manipulation with a small sample.

3.4.1 First pre-study: video development

A first pre-study was conducted with two mock-up videos. One video showed an athletic female leader, the other one a non-athletic male leader. The aim was to test if the videos were perceived as appropriate for the purpose of the main experiment. More specifically, the first pre-study tested the perception of (i) the described video scenario, (ii) the script used by the actor, and (iii) the video setting. In the first pre-study the respondents answered a structured questionnaire with closed answers but were able to verbally explain their choices. All comments were collected with extensive notes and later structured for analysis. The participants were similar to, but not included in the main study ($n=31$, $m=14$, $f=17$, median age=24). The responses were collected between February 21st and February 22nd, 2019. According to the outcome of the questionnaire, in combination with the analysis of the comments, changes were made, and new videos were recorded for the second pre-study. The outcome and resulting changes of the first pre-study are described below.

Choice of scenario

The chosen scenario for the first pre-study was a video application for a leadership position. Rating a leader according to a resumé is a common method in leadership research (e.g. Nye & Forsyth, 1991). Further, applying for professional positions with a video was found to be an emerging tool and fits the purpose of assessing leadership abilities (Nguyen & Gatica-Perez, 2016). On a seven-point Likert scale the trustworthiness of applying with the shown mock-up videos for a leadership position was rated 5.93 ($SD_{\text{male-non-athletic}}=1.18$) and 5.81 ($SD_{\text{female-athletic}}=1.24$). However, the majority of the respondents (55%) stated concerns, that video applications are predominantly used for entry-level positions. They are not common for leadership positions that require more experience, as also mentioned by Nguyen and Gatica-Perez (2016). Hence, the scenario for the videos for the second pre-study was changed from application videos to CEO-introduction videos as that was argued to be a more suitable alternative regarding the seniority of the position.

Construction of script

The script written for the mock-up videos in the first pre-study was adapted and constructed from online application videos relevant to the context. The manipulation for perceived athleticism was made through a passage talking about leisure time activities. In the athletic version the leader mentioned extensive engagement in sports and physical activities in form of Ironman triathlons. The non-athletic leader did not mention sport activities. On a seven-point Likert scale the appropriateness of the content for leisure time activities in the athletic version was rated 6.40 ($SD=0.61$). No comments for improvements in the script were made. As a result, the manipulation for perceived athleticism using leisure time activities was taken forward to the second pre-study.

Video setting

The criteria for the video setting were chosen according to the findings of Nguyen and Gatica-Perez (2016). In their review of 939 English conversational video applications the average duration, suggested resolution, lighting and frame for a best-case scenario video was suggested. Hence, the mock-up videos for the first pre-study were two minutes in length and showed one person speaking in front of a plain white background with only chest and above showing. On a seven-point Likert scale, the professionalism of the two video settings rated 5.87 ($SD_{\text{male-non-athletic}}=1.39$) and 6.00 ($SD_{\text{female-athletic}}=1.37$). No further comments for improvements in the video settings were made. Thus, the professionalism of the video setting was found to be satisfactory for the second pre-study as well.

3.4.2 Stimuli development

For the research design of the second pre-study, four videos needed to be developed to test the athletic perception of leaders of both genders. The stimulus of athleticism was tested in the second pre-study to ensure satisfactory manipulation for the main study. The first video showed a male leader, introducing himself as a new CEO, mentioning athletic activity in his leisure time, as the treatment stimuli. The second video showed the same male leader without mentioning athletic leisure time activities, as the control stimuli. Except for the passage about leisure time activities, the scripts were identical. The third and fourth video followed the same concept with a female leader, resulting in a two by two factorial research design as illustrated in *Table 2*. The CEOs introduced themselves as Victor or Victoria Johnson, names that were as similar as possible and worked in a Swedish and English context.

Table 2 - Stimuli combinations for male and female CEO-introduction videos

	Athletic leader (treatment stimuli)	Non-athletic leader (control stimuli)
Victor Johnson	Male athletic CEO-introduction video	Male non-athletic CEO-introduction video
Victoria Johnson	Female athletic CEO-introduction video	Female non-athletic CEO-introduction video

As the scenario for the videos was changed to a CEO-introduction, a new script needed to be developed. The script was adapted from a professional CEO-introduction video of a medium-sized company (JLL, 2016). In order to find credible CEOs for the videos, people with a background in leadership, as well as an active interest in sports, were contacted within the researchers' professional network. In the end, six experienced leaders with an active sport interest were chosen, each of whom recorded two CEO-introduction videos. Due to the limited scope of this study, it was not possible to use all the videos in the experiment. Therefore, two leaders, one female and one male, were chosen based on the quality of the recorded videos. The resulting four videos were used in the second pre-study as well as the main study.

3.4.3 Second pre-study: stimuli validation

The aim of pre-study two was (i) to certify satisfactory manipulation of the stimuli (Perdue & Summers, 1986) and (ii) to ensure that the scales developed and used for the perceived athleticism of leaders were comprehensible as well as showed satisfying internal consistency (Berger, Maurer & Celli, 2018). For the second pre-study a convenience sample was contacted using Facebook messenger. The answers were collected through a link to the online survey-tool Qualtrics. The respondents were not included in the main study but were similar. A total of 58 people answered the questionnaire between March 6th and March 8th, 2019. However, two respondents were excluded from the sample as they failed to answer a control question correctly. As a result, 56 respondents ($n = 56$, $f = 33$, $m = 23$, median age = 25) qualified for the analysis resulting in 10-16 respondents per treatment group, as shown in *Table 3*.

The manipulation check for perceived athleticism of the CEOs was operationalized from the AIMS, that represents a self-evaluation score of athletic identity (Brewer, Van Raalte & Linder, 1993). The items were adapted to assess the perceived athleticism of others and can be found in section 3.5.2 *Scales and measures*. The second pre-study showed that CEOs were perceived as significantly more athletic in their athletic versions, than in their control versions ($M_{\text{athletic}}=4.70$, $M_{\text{control}}=3.24$, $p<0.001$). This significant difference was also found comparing each of the two leaders by themselves. Both, the mean of the perceived athleticism of the male leader ($M_{\text{male-athletic}}=4.83$, $M_{\text{male-control}}=3.70$, $p=0.032$) as well as the mean of the perceived athleticism of the female leader ($M_{\text{female-athletic}}=4.58$, $M_{\text{female-control}}=2.96$, $p<0.001$) were significantly higher for the manipulated versions compared to their respective control versions.

Table 3 - Manipulation check in the second pre-study

Group	Manipulation	N	Mean	St deviation	t	P
Male	Athletic	14	4.833	1.092	2.284	0.032*
	Control	10	3.700	1.337		
Female	Athletic	16	4.583	0.955	4.540	0.000***
	Control	16	2.958	1.067		
Total	Athletic	30	4.700	1.011	4.909	0.000***
	Control	26	3.244	1.209		

Significance level: * $p<0.05$, *** $p<0.001$

Furthermore, the internal consistency of the three-item scale for perceived athleticism was assessed. The scales showed Cronbach's alpha of 0.771 and were above the suggested criteria of 0.7 for acceptable internal consistency (Schmitt, 1996; Bryman & Bell, 2015). As a last part of the questionnaire, the respondents could comment on any ambiguity or improvements, which led to

minor changes in the descriptions leading into the different parts of the questionnaire. All scales and items were judged as clear.

3.5 Main study

3.5.1 Survey design

The experiment conducted in the main study was a between-subject research design that randomly assigned a respondent to one of the four videos developed throughout the pre-studies. Before the survey was distributed, through the online-survey tool Qualtrics, it was pilot tested on a small convenience sample (n=11) to once again assure clarity and understanding of all questions. Minor adjustments were made in the phrasing of task descriptions, item selection for control questions and order of blocks.

The final survey, to be found in *Appendix 2*, consisted of five question-blocks, where respondents were urged to answer structured questions with closed answers. In the beginning of the survey, respondents were introduced to the nature of the questionnaire and the requirement of watching a short video with sound. The video was described to be a CEO-introduction, recently published on the intranet of a company called Altered Group. Respondents were asked to pay attention, as questions about their perception of the CEO would be asked afterwards. Furthermore, anonymity of the collected responses and the sole purpose of data usage for this thesis was specified. Afterwards, the respondents were randomly assigned to one of the four stimuli videos. The following sections of questions were the same for all respondents. The first included general questions about the perception of the CEO and a control question if the respondent had seen the person in the video before. The second section consisted of the manipulation-check of perceived athleticism developed during the preparation for the main study. The third measured the perceived transformational quality which required good memory of the video in order to answer the frequency of specific leader statements and was therefore placed early on. The fourth included two control questions that checked the continued attention of respondents and the scales for measurement of implicit leadership characteristics. The fifth collected demographic information about the respondent and was added last, as it required less memory of the video.

In order to qualify as a valid response, a participant had to answer all control questions correctly as well as take longer than five minutes to complete the questionnaire to ensure sufficient attention to the questions and the CEO-introduction video. Further detail about the scientific questionnaires, scales and items, as well as measures for internal reliability for this study, can be found in the following section.

3.5.2 Scales and measures

Besides the measurement for perceived athleticism of others, items and scales from scientific questionnaires in leadership were used to assess the constructs in this thesis. Attention was paid to ensure that the questionnaires were validated in a context applicable to the experiment of this thesis.

The underlying aim was to ensure that the constructs measured would record high standards of reliability and validity. A discussion of data quality in this study can be found in section 3.7 *Data quality*. Even though the questionnaire was distributed in a Swedish context, it used English language. Translating it into Swedish posed two drawbacks. First, students or professionals with relevant working experience in Sweden, that do not speak Swedish, would have been excluded from answering the questionnaire. Second, the scales and measures of the questionnaire have not been validated in Swedish before. Also, Sweden is the country ranked highest in the world in English proficiency without having English as a native language (EF, 2018). Therefore, English was chosen as the preferred language of the questionnaire.

Perceived athleticism of others

Perceived athleticism of others was measured with three items adapted from the AIMS (Brewer, Van Raalte & Linder, 1993). The items were tested in the second pre-study and demonstrated significant differences in athletic perception of the CEOs in the videos as well as satisfying internal reliability. Consequently, a seven-point Likert scale ranging from “*strongly disagree*” to “*strongly agree*” tested how characteristic the statements “*I consider the CEO an athlete*”, “*The CEO has many goals related to sport*” and “*Sport is the most important part of the CEOs life*” were perceived. The three items were combined into an index variable showing once again acceptable internal reliability with Cronbach’s alpha of 0.79.

Transformational leadership

The questionnaire used in this study is an adapted version of the MLQ 5X (Bass & Avolio, 1995), as presented by Awamleh and Gardner (1999). In this thesis it was applied to test transformational leadership quality. The questionnaire of Awamleh and Gardner (1999) combines original MLQ items with two scales measuring leader charisma and effectiveness. However, a factor analysis argues for a high interrelation of the two scales. In this thesis, the items and scales were therefore combined to measure transformational quality on a single dimension. The respondents were asked to judge how frequently each statement fit the leader on a five-point Likert scale between “*Not at all*” to “*Frequently, if not always*”. Example items of the questionnaire are “*Instills pride in being associated with him/her*”, “*Talks about his/her most important values and beliefs*” and “*Talks optimistically about the future*”. The full survey can be found in *Appendix 3*. The internal reliability for the adapted MLQ in this thesis was reported with Cronbach's alpha of 0.91.

Implicit leadership theory

The chosen operationalization for the measurement of implicit leadership characteristics was the LCQ by Epitropaki and Martin (2004). The full questionnaire measures six factors on the basis of 21 items. However, as indicated in the theory section, not all six factors found theoretical support to be applied in the context. Consequently, only the 12 items for dedication, dynamism and tyranny were included in this study. The respondents rated how characteristic they perceived traits such as “*hard-working*”, “*energetic*” or “*selfish*” of the CEO seen in the video. The measurement for the traits was a nine-point Likert scale from “*not at all characteristic*” to “*extremely characteristic*”. Next to other questionnaires for implicit leadership characteristics available, the LCQ by Epitropaki and Martin (2004) had three main

benefits. First, it had been used throughout many studies in leadership and showed consistent results with a limited number of items (Offermann & Coats, 2018). Second, it is a simplified validation of Offermann, Kennedy, and Wirtz (1994), that has been extensively and rigorously executed with a sample of student and working professionals. Third, it showed relevant application in relation to athletic business leaders.

3.5.3 Data collection

Data was collected through the online survey-tool Qualtrics. Participants were able to access the questionnaire either through a link or a QR-code. Participants were recruited in a Swedish company comprised multiple subsidiaries within technology, design and communications with a total of 400 employees. Every employee received a link, making it a random sample. These respondents will be referred to as working professionals. Furthermore, students in Stockholm were able to answer the survey if they had working experience in Sweden. This requirement was checked with an additional control-question. Students were able to access the questionnaire through a link sent out in Facebook groups and through a QR-code given to students personally approached at multiple university campuses in Stockholm. All data for the main study was collected between March 18th and March 31st, 2019. The total number of participants that completed the questionnaire was 409, with a breakdown of 78 working professionals and 331 students.

Besides the access to one company, no further access to working professionals in a randomized way could be made available. Students with working experience in Sweden were (i) already exposed to the concept of business leadership in Sweden, (ii) will likely be working professionals in due time and (iii) were used, together with working professionals, in the development and validation the scientific questionnaires applied in this study. The data of the students showed a significant difference only in the perceived transformational quality compared to the data of the working professionals, as described in section 3.6.2 *Data checks*. All the other constructs were assessed equally between the groups.

3.6 Analysis of data

3.6.1. Preparation for analysis

The tool used for the statistical analysis in this thesis was IBM SPSS 25. The data collected through Qualtrics was directly imported into SPSS which allowed for omission of human error in this step. Before the analysis, invalid responses, as described below, were removed from the sample. Original variables were renamed to establish a basis for the continued analysis. As the constructs measured required the combination of multiple questionnaire items, variables had to be recoded into index-variables. These index-variables were created and calculated using SPSS. The new score of an index-variable was the arithmetic mean of the underlying variables of the construct.

3.6.2 Data checks

On the basis of control questions and the time taken to answer the survey, 45 respondents were excluded from the sample. The final sample consisted of 364 respondents, including 75 working

professionals and 289 students. The only unequal variance for the constructs between working professionals and students in Levene's test ($p < 0.05$) (Derrick, Ruck, Toher & White, 2018) was found in the assessment of the perceived transformational quality of the female leaders. The same was found in independent t-tests, that showed a significant difference ($p < 0.05$) between the groups, in their assessment of the female leader. All other constructs were assessed equally. That is also in line with the findings of Singer (1990) that did not find a difference in the assessment of implicit leadership characteristics by students and working professionals. As a result, the groups of students and working professionals were combined to one sample. However, the analyses regarding female transformational quality were also done for both groups individually and no contradicting results were found. The demographics of the final sample are illustrated in *Table 4* below.

Table 4 - Demographics of respondents in the main study

	Victor Johnson		Victoria Johnson		Total
	Male athletic	Male non-athletic	Female athletic	Female non-athletic	Total
Number of respondents	88	90	96	90	364
Gender (m/f/not specified)	42 / 45 / 1	29 / 60 / 1	37 / 58 / 1	44 / 46 / 0	152 / 209 / 3
Median age	24.5	24	24	24	24

In order to assure valid testing of the underlying hypotheses, the normal distribution of relevant variables was tested with the Kolmogorov-Smirnov test (Saunders, Lewis & Thornhill, 2009). For some videos the results of the test indicated that the rating of the implicit leadership characteristics were not normally distributed. Consequently, non-parametric tests were applied, but derived to the same conclusion as the parametric tests. Therefore, only the results of the parametric tests that were intended to be used on the indexes of the questionnaires, are shown in the analysis. Also, no problematic multicollinearity and heteroscedasticity were found between the constructs that could have impacted the analysis. All the tests of hypotheses were undertaken with a confidence interval of 95%. Tests included independent-sample t-tests, linear regression analysis, stepwise regression analysis, two-way ANOVA, moderation analysis and mediation analysis. For the mediation and moderation analysis the add-on Hayes PROCESS tool for SPSS was used (Hayes, 2012). Furthermore, no outliers were excluded from the data-set and all the relevant constructs were checked for internal reliability and can be found in *Appendix 3*.

3.7 Data quality

The following part entails a discussion about the quality of the collected data. Following the argumentation of Thorngate (1976) a social behavior study can only target two of three criteria: being generally transferrable, being simple by using few constructs, or being accurate in the prediction. On the basis of data collected in the experiment, this thesis measures few constructs with high accuracy

in predictions and has consequently more tradeoffs in generalizability. In the following sections, the data quality will be discussed based on reliability and validity criteria.

3.7.1 Reliability

Reliability measures to what amount the study results are consistent and therefore repeatable (Rosenthal & Rosnow, 1991). The study was executed in a rigorous way. The different steps were outlined in the previous section to allow replication of results with consistent findings (Bryman & Bell, 2015). Furthermore, internal reliability was assessed for all multi-scale items. The results of Cronbach's alphas between 0.760 and 0.910 was reported as satisfactory (Saunders, Lewis & Thornhill, 2009). Similar internal reliabilities were shown in previous studies that applied the items of the AIMS, the MLQ and the LCQ and are therefore also expected to be found in future studies.

3.7.2 Validity

The quality criteria validity assesses to which degree the data collected measures what it is supposed to measure (Rosenthal & Rosnow, 1991). There are many different assessments of validity, which are also interrelated. In this section, four of the most important measures researchers should consider (Drost, 2011) are discussed: construct validity, internal validity, external validity and ecological validity.

Construct Validity

Construct validity refers to the extent to which the intended constructs are accurately measured (Rosenthal & Rosnow, 1991). The study of this thesis uses well validated and commonly applied questionnaires of the constructs. For the measurement of perceived athleticism of the CEOs, the self-evaluation score AIMS developed by Brewer, Van Raalte and Linder (1993) was adopted to limit threats of construct validity. As no established measurement for perceived athleticism of others was found in adjacent research, the adapted construct was tested in a pre-study. Here, satisfactory manipulation of the intended construct was demonstrated. However, research on perceived athleticism should further validate these questions to ensure a precise measurement.

Internal Validity

Internal validity is established when the cause and effect relationships investigated in the study are not caused by chance (Rosenthal & Rosnow, 1991). The relation between a cause and an effect exists, if (i) the cause precedes the effect, (ii) the cause is related to the effect and (iii) no other explanation other than the cause explaining the effect can be found (Rosenthal & Rosnow, 1991). The between factorial nature of the experiment targets this relation (Bryman & Bell, 2015). It ensures that the effects measured in perceived leadership are caused by the manipulation of athleticism in business leaders. The only difference between the script of the athletic and the non-athletic CEOs is the additional passage about athleticism. Possible threats to statistical conclusion validity are low reliability of measures and random heterogeneity of respondents (Drost, 2011). These threats were mitigated by ensuring sufficient Cronbach's alpha values and non-significant differences between the assessments of students and working professionals.

External Validity

External validity refers to the degree of generalizability to other people and settings (Drost, 2011). Consequently, external validity is limited by potential differences between the perceptions of athletic business leaders in the experiment and real-world contexts. In the experiment of this thesis, two limitations for external validity can be identified. First, the manipulation of athleticism in business leaders was formed on the basis of CEO introduction videos. Even though introduction videos reflect a real-world example of perceiving leaders, there are many other contexts that athletic business leaders will be perceived in as well. Second, a self-completion questionnaire was used in order to test a high number of respondents. The respondents comprised not only working professionals in a business context, but also students with previous working experience. These limitations to external validity could have been minimized by conducting the experiment on followers' perceptions of actual athletic business leaders. This could have been done in business meetings or by using real performance evaluations instead of questionnaires. However, an assessment in a real-life working context would have been highly resource demanding and time-consuming. Also, it would have been more difficult to isolate the manipulation effect of athleticism in business leaders. Still, the experiment is argued to make valid generalizations to the population of working professionals in Sweden. Following the argumentation of Thorngate (1976) the underlying study sacrifices tradeoffs in generalizability to measure underlying constructs accurately with high internal validity.

Ecological Validity

Ecological validity tests the applicability of scientific results to everyday settings (Bryman & Bell, 2015). Even though a study might be externally valid, the ecological validity additionally ensures that findings are also meaningful in generalizations to the real world. The thesis aimed to make the CEO introduction videos as close as possible to reality. For example, in the beginning and the end of the videos a logo of a fictional company was added, and multiple videos were filmed to ensure good quality.

4. Analysis

This section outlines the analysis of the data collected. The data was tested on the basis of established hypotheses in the theoretical ground. First, a manipulation check for perceived athleticism was conducted to ensure satisfactory manipulation of the stimulus. Second, the hypotheses were tested and were summarized in the end of this chapter.

4.1 Manipulation check

The manipulation made for the perceived athleticism of leaders was assessed by independent sample t-tests. Just like in the second pre-study, the CEOs with the stimulus of portraying to be athletic were perceived as significantly more athletic than in their control videos ($M_{\text{athletic}}=4.39$, $M_{\text{control}}=3.13$, $p<0.001$). Furthermore, the manipulation was significant ($p<0.001$) for both CEOs respectively, as illustrated in Table 5.

Table 5 - Manipulation check for perceived athleticism

Group	Manipulation	N	Mean	St deviation	t	P
Male	Athletic	88	4.349	1.121	5.910	0.000***
	Control	90	3.348	1.137		
Female	Athletic	96	4.431	1.145	9.410	0.000***
	Control	90	2.904	1.068		
Total	Athletic	184	4.391	1.131	10.713	0.000***
	Control	180	3.126	1.122		

Significance level: *** $p<0.001$

4.2 Testing of hypotheses

4.2.1 The effect of business leader athleticism on transformational quality

Testing for H1

The first hypothesis theorized that portraying athleticism as a business leader would have an effect on the perceived transformational quality. The hypothesis was tested with an independent sample t-test. The overall effect, comparing both athletic videos to the non-athletic videos showed a negative significant difference in the perceived transformational quality. With Levene's test (Derrick, Ruck, Toher & White, 2018) showing group variances to be equal, as for all following independent t-tests ($p<0.05$), the analysis indicates that portraying athleticism as a business leader has a negative impact on the perceived transformational quality ($M_{\text{athletic}}=3.12$, $M_{\text{control}}=3.31$, $p=0.009$). The result is shown in Table 6.

Table 6 - Portraying athleticism and transformational quality

Group	Manipulation	N	Mean	St deviation	t	P
Total	Athletic	184	3.119	0.703	-2.548	0.009**
	Control	180	3.309	0.702		

Significance level: **p<0.01

H1: Portraying to be an *athletic business leader* has an effect on the perceived *transformational quality*.
SUPPORTED - NEGATIVE

Testing for H2

Following, the effect of portraying to be an athletic business leader on transformational quality was compared for female and male business leaders. Two independent t-tests were performed. The first tested the difference in the transformational perception between the male athletic and the non-athletic video. No significant difference could be found ($M_{\text{male-athletic}}=2.91$, $M_{\text{male-control}}=3.08$, $p=0.117$). The second independent t-test did the same analysis for the female videos and found a significant negative difference ($M_{\text{female-athletic}}=3.29$, $M_{\text{female-control}}=3.50$, $p=0.027$). Comparing the significant negative difference in the female videos to the non-significant difference in the male videos, showed support for the hypothesis. A summary of the result is given in Table 7. Splitting the total sample for female and male business leaders shows that the effect tested in the first hypothesis originates more from followers' perceptions of female business leaders. However, portraying athleticism as a male business leader also shows a trend for a negative impact in perceived transformational quality. Hence, the result of H2 was judged to not contradict the findings in H1.

Table 7 - Leader gender comparison of portraying athleticism on transformational quality

Group	Manipulation	N	Mean	St deviation	t	P
Male	Athletic	88	2.915	0.694	-1.573	0.117
	Control	90	3.082	0.724		
Female	Athletic	96	3.292	0.650	-2.225	0.027*
	Control	90	3.501	0.626		

Significance level: *p<0.05

H2: The effect of portraying to be an *athletic business leader* on transformational quality is more negative for *female business leaders*, than for *male business leaders*.
SUPPORTED

Testing for H3

The third hypothesis aimed to show that the effect of portraying to be athletic on transformational quality is more negative for female business leaders than for male business leaders due to the perception of male followers. In order to test the hypothesis, the differences in perceived transformational quality between the female videos was compared for male followers and female followers. A two-way ANOVA was performed where the interaction effect was not found significant ($F(1, 181)=0.289$, $p=0.145$, partial $\eta^2=0.012$, observed power=0.307). The interpretation of the analysis will be explained on the basis of the visualization in *Figure 3*.

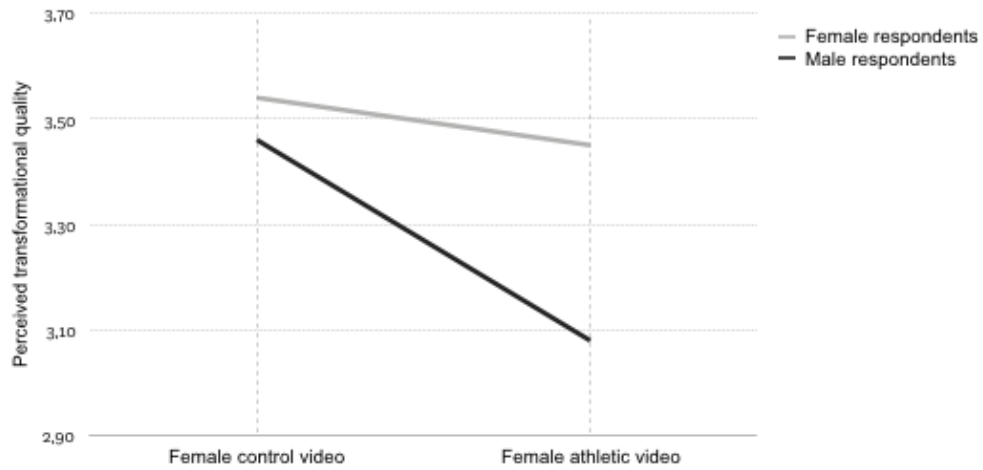


Figure 3 - The influence of follower gender

Even though an interaction effect in the two-way ANOVA could not be found, both main effects were significant. The first main effect showed that the assessment between the female non-athletic and the female athletic video were significantly different in perceived transformational quality when looking at respondents of both genders. This was also demonstrated on the basis of an independent t-test in H2. The second main effect showed a significant difference in the assessment of perceived transformational quality between male and female respondents on the basis of both female videos combined. In other words, male respondents rated the female videos significantly lower than female respondents did. However, combining both main effects, the negative effect of portraying to be a female athletic business leader shown in H2, could not be significantly attributed to male followers. However, looking at *Figure 3*, a trend for an interaction effect is visible, which is also reflected on the basis of a lower p-value for the interaction effect in *Table 8* below.

Table 8 - Result for the influence of follower gender in the two-way ANOVA

Source	Mean square	F	Sig.	Partial η^2	Observed power
Main effect - female video type	2.673	6.731	0.009**	0.036	0.733
Main effect - follower gender	2.113	5.319	0.022*	0.029	0.631
Interaction effect	0.850	2.140	0.145	0.012	0.307

Significance level: * $p < 0.05$, ** $p < 0.01$

With a visible trend on the basis of the two-way ANOVA, a second analysis was performed. This time, the difference in athleticism was not assessed as a comparison between the means in the female videos. It was rather measured through the metric scale of perceived athleticism, combining the athletic measurement in both videos as one independent variable. Follower gender was assessed as a moderator for the effect of perceived athleticism on perceived transformational quality. A moderating effect is apparent when the moderating variable (follower gender) has a significant influence on the relationship between the independent variable (perceived athleticism of female business leaders) and the dependent variable (transformational quality), as illustrated in *Figure 4*.

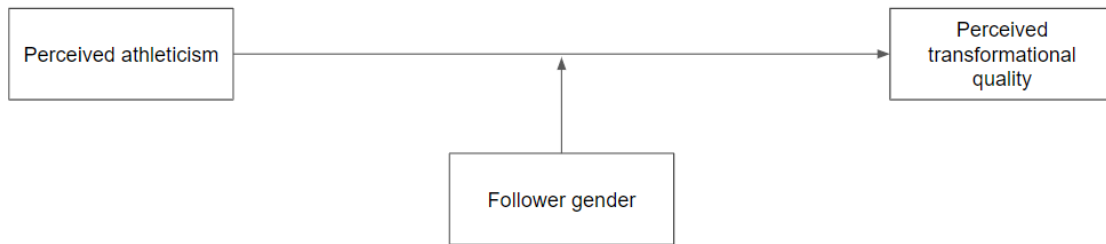


Figure 4 - Follower gender as a moderator

The analysis for the binary moderator follower gender was performed through the SPSS macro PROCESS. Here, the interaction effect for the moderation of follower gender was found significant ($c = -0.1825$, $p = 0.012$, $LLCI = 0.0405$, $ULCI = 0.3246$). The moderation effect of follower gender is visualized in *Figure 5* below.

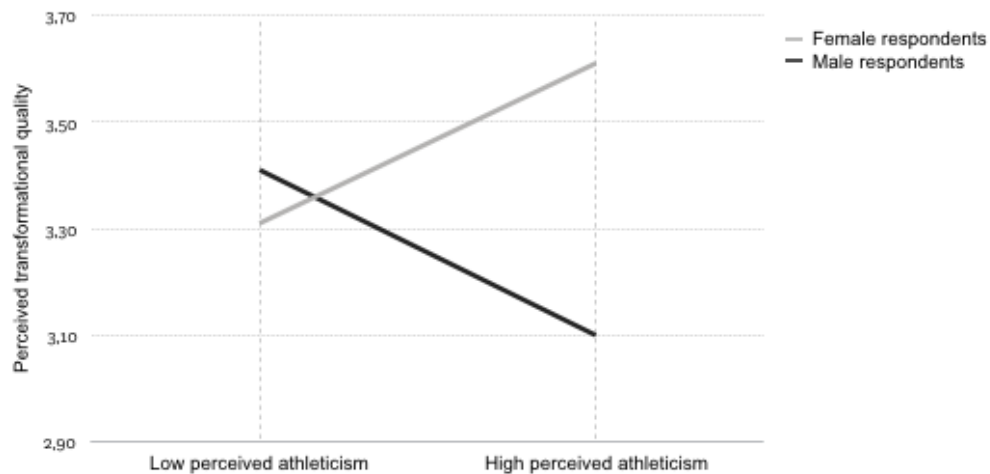


Figure 5 - The influence of follower gender as a moderating variable

When females athleticism is assessed as low, the perceived transformational quality is judged as about the same from male and female respondents. However, when athleticism in female business leaders is assessed as high, male respondents perceive transformational quality lower than female respondents. The result of the moderator analysis is shown in *Table 9* below.

Table 9 - Results for the analysis of follower gender as a moderator

Independent variable	Dependent variable	Moderation	Interaction effect			
			c	-0.183	p	0.012*
Perceived athleticism	Perceived transformational quality	Follower gender	SE	0.072	LLCI	0.041
			t	2.535	ULCI	0.325

Significance level: * $p < 0.05$

Summarized, the two-way ANOVA indicates a trend for an interaction effect between the female video types and follower gender. Additionally, the moderator analysis establishes follower gender as a moderator for the effect of perceived athleticism on perceived transformational quality. Looking at both analyses, the hypothesis is supported.

H3: The effect of portraying to be an *athletic business leader* on *transformational quality* is more negative for *female business leaders*, than for *male business leaders*, due to the perception of *male followers*.

SUPPORTED

4.2.2 The effect of business leader athleticism on implicit leadership characteristics

Testing for H4

The fourth hypothesis tested the effect of portraying to be an athletic leader on the implicit leadership characteristics (H4a) dedication, (H4b) dynamism and (H4c) tyranny. Again, three independent sample t-tests were conducted to analyze the effects. For the analysis, overall differences of implicit leadership characteristics between the athletic and the non-athletic videos were checked for significance. The comparison between both groups showed a significant difference for the implicit leadership characteristic tyranny. For dedication and dynamism, no significant differences could be found. Therefore, the overall hypothesis is partially supported. The results are summarized in *Table 10* and outlined in the key-points below.

Not supporting H4a: The result of the independent-sample t-test showed no significant difference in the perception of the implicit leadership characteristic dedication between the athletic videos and the non-athletic videos of the CEOs ($M_{\text{athletic}}=6.90$, $M_{\text{control}}=6.88$, $p=0.858$).

Not supporting H4b: The result of the independent-sample t-test showed no significant difference in the perception of the implicit leadership characteristic dynamism between the athletic videos and the non-athletic videos of the CEOs ($M_{\text{athletic}}=5.60$, $M_{\text{control}}=5.41$, $p=0.258$).

Supporting H4d: The result of the independent-sample t-test showed a significant difference in the perception of the implicit leadership characteristic tyranny between the athletic videos and the non-athletic videos of the CEOs ($M_{\text{athletic}}=5.02$, $M_{\text{control}}=4.49$, $p<0.001$).

Table 10 - Portraying athleticism and implicit characteristics

Dependent variable	Manipulation	N	Mean	St deviation	t	P
Dedication (H4a)	Athletic	184	6.900	1.456	0.179	0.858
	Control	180	6.877	1.534		
Dynamism (H4b)	Athletic	184	5.598	1.644	1.132	0.258
	Control	180	5.407	1.564		
Tyranny (H4c)	Athletic	184	5.015	1.543	3.234	0.000***
	Control	180	4.489	1.563		

Significance level: *** $p<0.001$

For a full support of the hypothesis, the typical characteristics dedication (H4a) and dynamism (H4b) should have shown a significant negative correlation as well. Portraying to be an athletic business leader only affected one of the three sub-hypotheses (H4c) significantly.

H4: Portraying to be an *athletic business leader* has an effect on the perceived *implicit leadership characteristics* in terms of (H4a) dedication, (H4b) dynamism and (H4c) tyranny.

PARTIALLY SUPPORTED - NEGATIVE

Testing for H5

Hypothesis five tested the effect of portraying to be an athletic business leader on the implicit leadership characteristics (H5a) dedication, (H5b) dynamism and (H5c) tyranny comparing male and female CEO-videos. Each sub-hypothesis expected a more negative manipulation effect for the female comparison. Independent t-tests were performed for each sub-hypothesis. The tests revealed that the only significant difference due to the athletic manipulation was found for the female CEO-videos in the implicit leadership characteristic tyranny. Consequently, the female athletic manipulation was perceived more negatively. As only one of the three implicit leadership characteristics was able to show a more negative perception for the female manipulation, the overall hypothesis was partially supported. The outcomes for each sub-hypothesis are outlined below, as well as illustrated in *Table 11*.

Not supporting H5a: The result of an independent-sample t-test showed no significant difference in the perception of the implicit leadership characteristic dedication in the athletic manipulation between the male videos ($M_{\text{male-athletic}}=6.52$, $M_{\text{male-control}}=6.58$, $p=0.815$), as well as no significant difference in the athletic manipulation between the female videos ($M_{\text{female-athletic}}=7.25$, $M_{\text{female-control}}=7.17$, $p=0.687$). As a result, the effect of being an athletic business leader on dedication is not perceived as more negative for female leaders than for male leaders.

Not supporting H5b: The result of an independent-sample t-test showed no significant difference in the perception of the implicit leadership characteristic dynamism in the athletic manipulation between the male videos ($M_{\text{male-athletic}}=4.98$, $M_{\text{male-control}}=4.85$, $p=0.595$), as well as no significant difference in the athletic manipulation between the female videos ($M_{\text{female-athletic}}=6.16$, $M_{\text{female-control}}=5.96$, $p=0.987$). As a result, the effect of being an athletic business leader on dynamism is not perceived as more negative for female leaders than for male leaders.

Supporting H5c: The result of an independent sample t-test showed no significant difference in the perception of the implicit leadership characteristic tyranny in the athletic manipulation between the male videos ($M_{\text{male-athletic}}=5.31$, $M_{\text{male-control}}=4.90$, $p=0.066$), but a significant difference in the athletic manipulation between the female videos ($M_{\text{female-athletic}}=4.74$, $M_{\text{female-control}}=4.08$, $p=0.004$). As a result, the effect of being an athletic business leader on tyranny is perceived as more negative for female leaders than for male leaders.

Table 11 - Leader gender comparison of portraying athleticism on implicit characteristics

Dependent variable	Group	Manipulation	N	Mean	St deviation	t	P
Dedication (H5a)	Male	Athletic	88	6.523	1.603	-0.234	0.815
		Control	90	6.578	1.539		
	Female	Athletic	96	7.247	1.215	0.403	0.687
		Control	90	7.167	1.480		
Dynamism (H5b)	Male	Athletic	88	4.981	1.806	0.532	0.595
		Control	90	4.852	1.415		
	Female	Athletic	96	6.163	1.245	0.987	0.325
		Control	90	5.963	1.515		
Tyranny (H5c)	Male	Athletic	88	5.314	1.466	1.849	0.066
		Control	90	4.898	1.535		
	Female	Athletic	96	4.741	1.568	2.948	0.004**
		Control	90	4.080	1.488		

Significance level: **p<0.01

For a full support of the hypothesis the typical characteristics dedication (H5a) and dynamism (H5b) should have shown a significant perception regarding female athletic business leaders as well. Portraying to be an athletic business leader was only significantly more negative for female athletic business leaders for one of the three sub-hypotheses (H5c). Splitting the total sample for female and male business leaders shows that the effect tested in the fourth hypothesis originates more from followers' perceptions of female business leaders. However, portraying athleticism as a male business leader also shows a trend for a negative impact in perceived tyranny. Hence, the result of H4c was judged to not contradict the findings in H5c.

H5: The effect of portraying to be an *athletic business leader* on perceived *implicit leadership characteristics*, in terms of (H5a) dedication, (H5b) dynamism and (H5c) tyranny, is more negative for *female business leaders*, than for *male business leaders*.

PARTIALLY SUPPORTED

4.2.3 The effect of implicit leadership characteristics on transformational quality

Testing for H6

The hypothesis that implicit leadership characteristics in terms of (H6a) dedication, (H6b) dynamism, and (H6c) tyranny have an effect on the perceived transformational quality was assessed through a stepwise regression analysis. Each implicit leadership characteristic formed an independent variable that was entered in a stepwise regression model towards the dependent variable perceived transformational quality. Each implicit leadership characteristic added a significant amount of explained variance in perceived transformational ability. Dedication explained the biggest amount of variance ($\Delta R^2=0.369$, $p<0.001$), afterwards dynamism was added to the model ($\Delta R^2=0.059$, $p<0.001$) and lastly tyranny ($\Delta R^2=0.020$, $p<0.001$) added a small percentage in variance explained. Overall, the stepwise regression model explained almost half of the variance in perceived transformational quality ($F(3, 360)=97.281$, $\Delta R^2=0.448$, $p<0.001$). As all the implicit leadership characteristics were significantly included in the model, all the sub-hypotheses and the overall hypothesis were supported. The summarized model can be found in the following *Table 12*.

Table 12 - The effect of leadership characteristics on transformational quality

Model	R ²	Change in R ²	Change in F	Sig. Change in F
Dedication	0.369	0.369	211.470	0.000***
Dedication, Dynamism	0.428	0.059	37.254	0.000***
Dedication, Dynamism, Tyranny	0.448	0.020	12.983	0.000***

Significance level: *** $p<0.001$

H6: Perceived *implicit leadership characteristics* in terms of (H6a) dedication, (H6b) dynamism and (H6c) tyranny explain a significant amount of the variance in perceived *transformational quality*.

SUPPORTED

Testing for H7

The last hypothesis proposed a mediating effect of the implicit leadership characteristics (H7a) dedication, (H7b) dynamism and (H7c) tyranny between the effect of portraying athleticism as a business leader on perceived transformational quality. If that would be the case, the independent variable, being an athletic business leader, would not directly (path C), but rather indirectly (path AB) affect transformational quality as illustrated in *Figure 6*. This means that first, being an athletic business leader would affect the implicit leadership characteristics (path A) and secondly, as a consequence, the resulting change in implicit leadership characteristics would affect the transformational quality (path B).

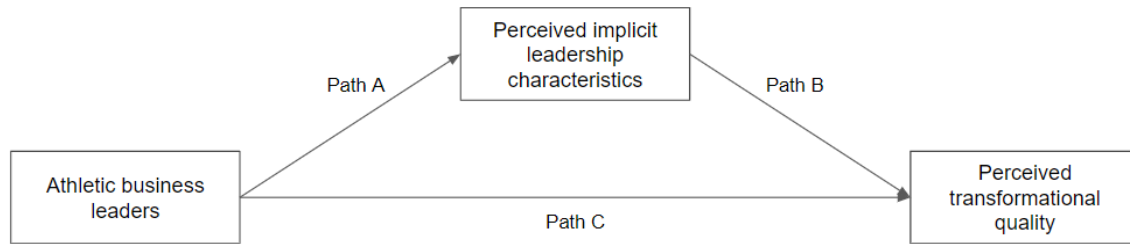


Figure 6 - Mediator analysis

For path A, in line with former independent t-tests, to be an athletic business leader was only able to explain a significant amount of variance in the implicit leadership characteristic tyranny ($R^2=0.036$, $p<0.001$). Consequently, the mediation analysis was performed for tyranny only. The existence of the mediation effect was tested with Hayes bootstrapping macro PROCESS (Hayes, 2012) for SPSS using 5000 bootstrap samples and a 95% confidence interval (Efron & Tibshirani, 1994). However, as illustrated in *Table 13*, no significance for a mediation effect of tyranny could be established. As a result, the hypothesis was not supported.

Table 13 - Result for the analysis of the implicit leader characteristic tyranny as a mediator

Independent variable	Dependent variable	Mediator		Direct effect (path C)		Indirect effect (path AB)
Athletic business leader	Perceived transformational quality	Tyranny	c	0.180	ab	0.000
			SE	0.074	SE	0.013
			t	2.405	LLCI	-0.028
			p	0.017*	LUCI	0.025

Significance level: * $p<0.05$

H7: Perceived *implicit leadership qualities* in terms of (H7a) dedication, (H7b) dynamism and (H7c) tyranny mediate the effect between portraying to be an athletic business leader and perceived *transformational quality*.

NOT SUPPORTED

4.2.4 Summary of hypotheses testing

The results are summarized in *Table 14* and a graphical representation of the findings of the analysis on the basis of the theoretical model is visualized in *Figure 7* below. Partially supported and not hypotheses are shown in grey, supported hypotheses in black.

Table 14 - Summary of results

<i>Suggested relation between athletic business leaders and transformational quality</i>		
H1	Portraying to be an <i>athletic business leader</i> has an effect on the perceived <i>transformational quality</i> .	SUPPORTED - NEGATIVE
H2	The effect of portraying to be an <i>athletic business leader</i> on transformational quality is more negative for <i>female business leaders</i> , than for <i>male business leaders</i> .	SUPPORTED
H3	The effect of portraying to be an <i>athletic business leader</i> on <i>transformational quality</i> is more negative for <i>female business leaders</i> , than for <i>male business leaders</i> , due to the perception of <i>male followers</i> .	SUPPORTED
<i>Suggested relation between athletic business leaders and implicit leadership characteristics</i>		
H4	Portraying to be an <i>athletic business leader</i> has an effect on the perceived <i>implicit leadership characteristics</i> in terms of (H4a) dedication, (H4b) dynamism and (H4c) tyranny.	PARTIALLY SUPPORTED - NEGATIVE
H5	The effect of portraying to be an <i>athletic business leader</i> on perceived <i>implicit leadership characteristics</i> , in terms of (H5a) dedication, (H5b) dynamism and (H5c) tyranny, is more negative for <i>female business leaders</i> , than for <i>male business leaders</i> .	PARTIALLY SUPPORTED
<i>Suggested relation between implicit leadership characteristics and transformational leadership quality</i>		
H6	Perceived <i>implicit leadership characteristics</i> in terms of (H6a) dedication, (H6b) dynamism and (H6c) tyranny explain a significant amount of the variance in perceived <i>transformational quality</i> .	SUPPORTED
H7	Perceived <i>implicit leadership qualities</i> in terms of (H7a) dedication, (H7b) dynamism and (H7c) tyranny mediate the effect between portraying to be an athletic business leader and perceived <i>transformational quality</i> .	NOT SUPPORTED

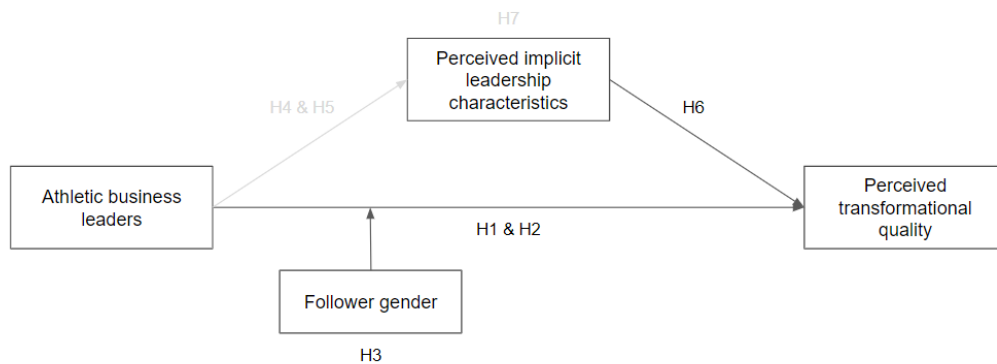


Figure 7 - Summary of results in the theoretical model

5. Discussion

In this section, the results presented in the previous chapter will be discussed and related to existing theory. This thesis tests the effects of athletic business leaders on perceived implicit leadership characteristics and perceived transformational quality, as well as the impact of gender on these effects. First, the perceptions of athletic business leaders in terms of implicit leadership characteristics and transformational quality will be discussed. Second, the impact of gender on these effects will be discussed.

5.1 Perceptions of athletic business leaders

Adjacent research argues for both positive and negative effects of portraying athleticism as a business leader. Therefore, as a part of the experiment, the direction of the effect was established. The results indicate that portrayal of athleticism as a business leader has a negative effect on both perceived transformational quality and implicit leadership characteristics. The findings for transformational quality and implicit leadership characteristics will be discussed individually below.

The negative effect of athletic business leaders on perceived transformational quality is in line with previous findings and contradictory to others. The expanded argumentation of Johansson, Tienari and Valtonen (2017), that athletic leaders use their portrayal of athleticism to act as role models and are thus seen as more transformational, was not supported. Neither was the suggested relations to the other dimensions of transformational leadership. Hansbrough and Schyns (2018) argue that transformational quality does not appeal to all followers in the same way. The result of this study could indicate that followers might not want to be transformed by athletic business leaders specifically.

Athletic business leaders were further seen as less leader typical, however only on the basis of the increased non-typical characteristic tyranny. The finding is in line with Lord Foti and DeVader (1984) that associate the attribute “sports-minded” as non-typical leader characteristic. As the relationship between portraying athleticism as a leader and implicit leadership characteristics was only partially supported, other positive or negative effects could not clearly be identified.

The athletic portrayal of business leaders is shown to affect leadership perceptions. Here, the operationalization on the basis of CEOs participating in Ironman competitions or what Johansson, Tienari and Valtonen (2017) define as “superhuman” and “perfecting one’s performance” can be discussed. A different operationalization in the type sport for the athletic portrayal could impact the perceptions of followers. For example, there could be different results based on the intensity a leader pursues their sport or whether or not the sport is practiced individually. It should also be mentioned that the manipulation of athleticism in business leaders originates from a script talking about Ironman competitions in a short CEO introduction video. Seeing a business leader performing sports instead of talking about it, might result in different effects. Talking about athleticism when given the chance to present themselves as a CEO could be the reason for the significant effect, as it highlights the importance of sports for the business leader. On the other hand, seeing a business leader actually perform sports could lead to different effects as well.

Further, as hypothesized, the effect of implicit leadership characteristics on transformational leadership quality was found. This confirms the results of previous researchers (e.g. Atwater & Yammarino, 1993; Martin & Epitropaki, 2001; Rahn et al., 2016; Hansbrough & Schyns, 2018). This thesis replicates the findings in a new setting of athletic business leaders. However, no mediating effect of implicit leadership characteristics could be established. Here, several possible explanations can be found. First, the effect of athletic portrayal on implicit leadership characteristics is only shown for tyranny and the effect of implicit leadership characteristics on transformational quality was mainly found due to dedication and dynamism. Second, the effect of athletic portrayal on implicit characteristics for tyranny might not have been strong enough to find a mediator. This supports the result of Tavares, Sobral, Goldszmidt and Araújo (2018), who found that the implicit leadership characteristic tyranny was considered relatively unimportant when assessing implicit leader schemas, in comparison to the other implicit leadership characteristics.

5.2 Gender impacts on perceptions of athletic business leaders

As stated above, the purpose of this experiment was to investigate the effects of athletic business leaders' portrayal also in relation to the impact of gender. All hypotheses based on the impact gender were supported. It can be concluded that the female gender has a negative impact on perceived leadership in athletic business leaders.

More specifically, the results indicate that female business leaders are perceived to have less transformational quality than male business leaders, when portraying to be athletic. It was also indicated that female leaders are perceived as less leader typical, compared to the male business leaders, when portraying to be athletic. This was found due to higher ratings in the non-typical leader characteristic tyranny. Therefore, the prejudice of perceiving females as less favorable in leadership roles, as demonstrated by Eagly and Karau (2002), is evident in athletic portrayal as business leaders as well.

The fact that females are perceived as less leader typical has been found in previous studies (Shein, 1973; Duehr & Bono, 2006; Koenig, Eagly, Mitchell & Ristikari, 2011). In this thesis, it was argued that female athletic business leaders were seen as less feminine when portraying to be athletic (Johansson, Tienari & Valtonen, 2017). This was found in a less leader typical perception of followers in the implicit leadership characteristic tyranny. Tyranny is associated closer with males than females (Offermann & Coats, 2018), and can therefore explain the effect. As Johansson, Tienari and Valtonen (2017) argue, female leaders need to decrease their feminine traits in order to portray themselves as athletic business leaders. Thus, when portraying to be an athletic business leader, females are perceived as more masculine. On the other hand, an increased perception of males in tyranny due to the athletic manipulation, is not recognized by followers. This can be explained by expectations in gender roles and stereotypes. Followers would expect male leaders to be masculine in their portrayal (Vogel, Wester, Heesacker & Madon, 2003). These arguments serve as possible explanations why the significant in tyranny was only found for female athletic business leaders.

This study shows that the negative effect on transformational quality, when portraying to be an athletic business leader, is only significant for the female CEO compared to the male CEO, supporting the suggested hypothesis. Adjacent theory has found that females are more transformational, in comparison to males (Hackman, Hills, Furniss & Paterson, 1992; Eagly, Johannesen-Schmidt & Van Engen, 2003; Northouse, 2015). Applying the same argumentation as above, in order to portray themselves as athletic business leaders, female leaders decrease their feminine traits and are seen as less transformational as a consequence. Female leaders that lead in a masculine manner receive negative ratings for their leadership, as demonstrated by previous researchers (e.g. Eagly, Makhijani & Klonsky, 1992; Eagly, Karau & Makhijani, 1995). The results of this thesis support this literature and add the dimension of athletic portrayal as a source of masculine leadership.

This finding also demonstrates prominent concepts in gender discussions such as the gender trap experienced by female professionals. As described by Johansson, Tienari and Valtonen (2017), female leaders use the athletic portrayal as a way to be part of a group of leaders, typically dominated by men. However, while expecting a positive result, the opposite is accomplished. First, in order for females to be seen as a typical leader, as well as an athletic leader, they need to behave in a masculine manner. Second, when they do behave in a more leader prototypical or masculine manner, they are devalued in the perception of their followers. This gender trap in business is discussed by both, scholars (e.g. Vanderbroeck, 2010; Sandberg, 2013) and business magazines (e.g. Cooper, 2013; Gluckman, 2018).

Going into detail, the negative effect on the perception of female athletic business leaders' transformational quality has been shown to result more from the perception of male followers. The experiment of this thesis shows that men disfavor female athletic business leaders in their perceptions. This finding is in line with earlier studies that highlight a more negative rating by male followers, when assessing female leaders acting in a masculine manner (Eagly, Makhijani & Klonsky, 1992; Eagly, Karau & Makhijani, 1995). The finding adds further complexity to the discussions of the gender trap. Females were not shown to rate the female leaders worse when portraying to be athletic. This implies that cognitive schemas are different between males and females.

Furthermore, the societal setting of the study can be discussed. The study was conducted in Sweden, only looking at perceptions of respondents with working experience in Sweden. Despite the fact that Sweden is the third most equal country in the world (World Economic Forum, 2018), gender effects were found. To conduct a similar study in a setting of a less gender equal country, may therefore result in bigger differences due to the impact of gender.

6. Conclusion

In this section, the main conclusions based on the discussion of the empirical results in the previous part are summarized. Further, the theoretical contributions and managerial implications of this thesis are presented. Lastly, the limitations of the conducted study are discussed and suggestions for future research are outlined.

The purpose of this study was to assess how followers perceive athletic business leaders. The aim was to contribute to the development of the construct athletic business leaders as well as relating it to the fields of transformational leadership, implicit leadership theory and gender. The experiment was constructed to provide answers to the research questions, presented in the first chapter: *“Do followers perceive athletic business leaders differently than non-athletic business leaders in their implicit leadership characteristics, as well as transformational leadership quality? Does gender have an impact on these effects?”*

The short answers to the research questions are: *“Yes, followers do perceive athletic business leaders differently in their implicit leadership characteristics, as well as transformational leadership quality, and yes, gender has an impact on these effects”*. The conclusion for each of the hypotheses, developed to answer the research questions, are outlined below.

Followers perceive athletic business leaders more negatively in their transformational quality (H1). This effect is stronger for female leaders (H2) which is indicated to be due to the perceptions of male followers (H3). Continuing, the negative effect of athletic business leaders has partially been found in implicit leadership characteristics as well. Followers perceive athletic business leaders higher in tyranny, and thus less leader typical (H4), and this effect is stronger for female leaders (H5). Further, the implicit leadership characteristics have shown to be strongly related to transformational quality (H6) but could not be identified to act as a mediator (H7). Summarizing, this study shows that athletic business leaders are indicated to be perceived as less leader typical as well as less transformational. This negative effect was stronger for female leaders, due to male follower ratings. An interpretation of these findings is that the phenomenon of athletic business leaders is another part of the complex gender inequalities in business.

6.1 Theoretical contributions

The results of this study add knowledge to the theoretical field in several dimensions. Since athletic business leaders have only been studied qualitatively previously, the contributions of this thesis add quantitative research to the development of the construct. In addition, this thesis nuances previous literature by investigating consequences of followers' perceptions when portraying athleticism as a business leader. Further, this thesis contributes to the research area of gender studies in leadership by adding another factor that impacts the gender biases of leadership. The experiment confirmed negative findings for females in a leadership context, adding the dimension of athletic portrayal. In addition, the effects of implicit leadership characteristics on transformational quality, that have been established by previous researchers, were found once again. Additionally, adjacent research has not connected the construct of athletic business leaders to transformational leadership and implicit leadership theory before.

According to the distinction of McInnis (2011), the summarized theoretical contributions of this thesis are threefold: explicating, envisioning, and relating. First, the added quantitative dimension of research broadens (explicates) the construct of athletic business leaders. Second, the findings for gender identify and highlight (envision) a new dimension of gender inequalities in leadership. Third, the findings connect (relate) the constructs of athletic business leaders, transformational leadership, implicit leadership and gender.

6.2 Practical implications

The findings of this study do not only contribute to research, but also indicate practical implications. Business leaders should be aware of the picture they portray and the potential consequences. One could assume that focusing on health in terms of physical activity is perceived positively in a business context. However, the findings of this study indicate that this does not always seem to be the case. More specifically, conveying an extreme view of athletic concern, like winning Ironman competitions, is shown to have negative implications. Taking the example of the health passionate Björn Borg CEO from the introduction, leaders should consider the impact of portraying their athletic interests on their image as a leader.

The result of this thesis shows that, even though two leaders use the same script, they are assessed differently. This has relevant implications for evaluations in professional settings such as performance evaluations or interview ratings. Practitioners should ensure that evaluations are conducted objectively and professionally. Ensuring objectivity can reach as far as equal treatment in the assessment of personal interests between males and females. Here, male leaders should pay particular attention as the difference in assessments was indicated to be due to the male respondents. Additionally, as mentioned in the introduction, more than 70% of the Swedish managers are male (Ekonomifakta, 2017). With their responsibility to take decisions for promotions, raising awareness about these types of findings is important. This study indicates that managers possibly perceive females portraying to be athletic as less leader typical as well as less transformational. Therefore, these findings argue to be aware of biased career progressions and to not further reinforce the gender traps currently experienced by females.

Furthermore, organizations should be aware of the effects that physical portrayal in their workforce has. Media argues that Swedish companies invest a total of 4 billion SEK each year in their employees wellness allowances (Alsén, 2017). In addition to the fact that employees have shown to not use the allowance (Alsén, 2017), this thesis shows that heavily portraying athleticism can have a negative effect on leader perceptions. It therefore can be too much of a good thing and organizations should strive to find the right amount and type of investments to benefit to employee well-being.

6.3 Limitations

This thesis and its experiment has limitations. First, the study design, next to the advantages outlined in the method section, also poses constraints. The experiment was designed to only test one type of

athletic portrayal. It compared talking about participations in Ironman competitions to the absence of that stimuli. As discussed earlier, the nature and type of sport, even though intentionally chosen, might have implications for the results. In addition, the experiment was, due to the scope of the study, limited to only test the effect on two leaders, one male and one female.

Further, the respondents based their perception purely on the short video in the questionnaire, without knowing the leader. It is shown that perceptions of leaders are formed quickly and having exposure to a leader for a short amount of time is a common method in leadership research (Lord, Foti & De Vader, 1984). However, the chosen medium of a video assessment could limit the extent to which followers' perceptions can be generalized to a wider context.

The chosen respondents were sampled from one company as well as from multiple universities in Stockholm. Thus, the generalizations to the population of working professionals in Sweden might be limited as the sample relies heavily on the Stockholm area. In addition, working professionals were sampled from one company. The culture of the company, as well as their employees exposure to the same leaders, might have an impact on the effects in the study. However, when comparing the working professionals to students, only minor differences in the perceptions of athletic business leaders were reported. This can be argued to mitigate the risks of having a homogeneous sample.

6.4 Future research

Since the theoretical field has not received a lot of attention in research, there are many possibilities to further contribute with new theory. Also, the results of this study suggest other investigations to be done in the future, to deepen the understanding of the perceived effects of athletic business leaders. Some suggestions presented below are using another stimulus, connecting other theories and testing in other contexts.

First, future researchers should consider testing whether the results of this study can be replicated for other types of athletic portrayal, by using different types and intensities of physical activity. It is possible that other results, due to the varying characteristics of for example individual and team sports, will emerge. Testing other types of athletic portrayal is suggested to also have implications for gender effects. In the theory section, a distinction between masculine and feminine sports has been made (Yi-Hsiu & Chen-Yueh, 2013). The sports competition used as a manipulation in this study, Ironman, already includes the word "man". Testing feminine sports could impact followers' perceptions differently and is therefore a suggestion for future researchers to consider.

Second, this study was delimited to test the effect of portraying athleticism as a business leader on perceived transformational quality and perceived implicit leadership characteristics. However, other leadership theories and streams might also be relevant. For example, researchers have already brought the fields of implicit leadership theory and transformational leadership in relation to leader-member exchange theories (e.g. Epitropaki & Martin, 2005b; Rahn et al., 2016). It should also be mentioned that the literature used in this thesis generalizes individual perceptions to derive to objective

assessments. One example is implicit leadership theory that defines a set of common leader-typical or non-typical characteristics on the basis of cognitive schemas. Researchers looking at the process of how cognitive schemas are created or change over time, due to individual perceptions, could expand the construct of athletic business leaders further. On the basis of other epistemological stances, emphasizing context dependent factors, these contributions can build on theoretical streams excluded in this study.

Finally, other contexts such as types of organizations or cultural dimensions may also be included in forthcoming studies. Leader schemas might differ due to organizational context and previous exposure to leaders and thus lead to different perceptions of athletic business leaders. For example, conducting a study within the company Björn Borg, that is driven by a physical training culture from the top, leader schemas might be more consistent with the extreme athletic portrayal. Further, implicit leadership and transformational quality are culture dependent (House et al., 1999; Hartog et al., 1999; House et al., 2002). Thus, investigating the effects of athletic business leaders in other countries would be beneficial. The fact that Sweden is seen one of the world's most equal countries (World Economic Forum, 2018), poses opportunities to study the impact of gender in the perceptions of athletic business leaders in less gender-equal countries as well.

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Appendix

Appendix 1 - Script for second pre-study and main study

Introduction (both)

Hello everyone, my name is Victor/Victoria Johnson!

- Starting next week I will be acting as the new CEO of Altered Group
- I wanted to take the opportunity to introduce myself in a short video.
- I joined Altered Group 11 years ago. One of the main reasons I stayed so long is that this company has great culture. Coming into the office, irrespective of where you are and seeing talented and motivated people in a collaborative environment, that is what makes my job fun for me.
- At the moment, I think our company is in great shape and this has been true for the past years. Yet, I also think every time has its own challenges. For the moment it is not a question which industry you are in. Every bigger company, somehow, will become a technology company.
- What that means for us is, we have to analyze all of our different services and look at what part can we turn into a digital service.
- That is the journey we are on at the moment, it is very exciting, and I want to take on those challenges and together with you shape a successful future for Altered Group.

Free-Time (stimuli video only)

- I have also been asked to share a little bit of my personal interests:
- So I would describe myself as a sports enthusiast, for example, I love to go running. Every morning I put on my running shoes and go for a longer run. I also won my first Ironman in my age group not that long ago.
- Outside of work I try to stay really active and challenge myself physically. For me this the perfect balance to a busy work-life and keeps me sharp throughout my day.

Ending (both)

- In everything I do, I try to put my best effort into it and I think with Altered Group we can strive towards creating a better world. And I know this sentence is used a lot. But, that does not make it wrong in itself.
- I am very much looking forward to my new role, and I hope that together with you we will keep Altered Group on its successful path into the coming years. Thank you very much!

Appendix 2 - Main study questionnaire

Thank you for taking your time to answer this survey. The survey will take about 7 minutes to complete. As a part of the survey you will need to watch a short video (with sound) before answering a few questions. The responses to the survey will be anonymous and only used for the means of this research.

Page break

You are now going to see a video that has been published on the intranet of a company called Altered Group. The aim of the video is to introduce their new CEO to the employees of the firm. After seeing the video you are going to answer a few questions on how you perceive the new CEO, so please pay attention and answer the questions intuitively.

Page break

Random video assignment to the four videos

Page break

Section 1

Have you seen the person in the video before?

Yes
No

What is your general perception of the CEO?

Do not like the CEO	Like the CEO
---------------------	--------------

What is your general impression of the CEO?

Negative impression	Positive impression
---------------------	---------------------

How much would you like the CEO to be your direct supervisor?

Would not like it	Would like it
-------------------	---------------

Page break

Section 2

How much would you agree with the following statements on a scale from "strongly disagree" to "strongly agree"?

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I consider the CEO an athlete							
The CEO has many goals related to sports							
Sport is the most important part of the CEO's life							

Page break

Section 3

Judge how frequently each statement fits the CEO you have just seen on a scale between "not at all" to "frequently, if not always"

	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
Talks about his/her most important values and beliefs					
Talks optimistically about the future					
Instills pride in being associated with him/her					
Talks enthusiastically about what is needed to be accomplished					
Specifies the importance of having a strong sense of					

purpose					
Displays a sense of power and confidence					
Articulates a compelling vision of the future					
Emphasizes the importance of having a collective sense of mission					
Expresses confidence that goals will be achieved					
Would be effective in representing you to higher authorities					
Goes beyond his/her self-interest for the good of the group					
Acts in ways that builds your trust					
Considers the moral and ethical consequences of his/her decisions					
Would be effective in meeting your job-related needs					
Is effective in meeting organizational requirements					
Overall, leads a group that is effective					

Page break

Block 4

2 4 8 16 ? 64

Write the number you think is missing in the sequence above.

? =

--

Page break

Please indicate how characteristic you think each of the following traits are of the CEO you have just seen, on a scale from "not at all characteristic" to "extremely characteristic" for each statement.

	Not at all				Nei- ther				Extre- mely
Dedicated									
Conceited (egenkär)									
Manipulative									
Strong									
Hard-working									
Loud									
Dynamic									
Selfish									
Motivated									
Pushy									
Energetic									
Domineering									

Page break

Please select B from the following alternatives

A
B
C
D
E

Page break

Section 5

Do you have working experience in Sweden (full-time positions, internships, summer jobs, part-time jobs...)? (STUDENTS ONLY)

Yes
No

What gender do you define with?

Male
Female
Other

How old are you?

--

Page break

Thank you for your time spent taking this survey. Your response has been recorded.

Appendix 3 - Cronbach's alphas for main study

Table 15 - Cronbach's alphas for variables in the main study

Variable	Number of items	Cronbach's alpha
Perceived athleticism	3	0.791
Perceived transformational quality	16	0.910
ILT - Dedication	3	0.847
ILT - Dynamism	3	0.760
ILT - Tyranny	6	0.861