ERASMUS UNIVERSITEIT ROTTERDAM
Faculteit der Economische Wetenschappen

Guidance: Wouter van den Berg

<table>
<thead>
<tr>
<th>Name</th>
<th>Bob Croes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam nr:</td>
<td>312549</td>
</tr>
<tr>
<td>Email adress:</td>
<td><a href="mailto:312549bc@eur.nl">312549bc@eur.nl</a></td>
</tr>
<tr>
<td>Direction:</td>
<td>Marketing</td>
</tr>
<tr>
<td>Thesis:</td>
<td>Master</td>
</tr>
<tr>
<td>Date:</td>
<td>03-05-2011</td>
</tr>
<tr>
<td>Phone:</td>
<td>0629339089</td>
</tr>
</tbody>
</table>
Foreword

With this thesis my career as a student on the Erasmus University has come to an end. I can honestly say it have been 4 wonderful years.

I’d like to thank Wouter van den Berg for his guidance throughout my research and Wim Riedijk for the necessary statistical support.

I’d also like to thank my parents for supporting me all those years in college.

I hope you’ll enjoy reading my master thesis.

Bob.
Content

Foreword ............................................................................................................................................. 3

Abstract ............................................................................................................................................... 6

1. Introduction ...................................................................................................................................... 7

2. Literature background .................................................................................................................... 10
   2.1 A leadership definition ............................................................................................................. 10
   2.2 Management and leadership .................................................................................................. 11
   2.3 Leadership effectiveness: from characteristics to characteristics .......................................... 12
      2.3.1 Characteristics ................................................................................................................. 12
      2.3.2 Leadership styles ............................................................................................................. 13
      2.3.3 Contingency theories ..................................................................................................... 13
      2.3.4 Characteristics 2.0 ......................................................................................................... 14
      2.3.5 Other insights: the end of leadership ............................................................................. 15
      2.3.6 Leadership in today’s business environment .................................................................. 16

3. Theory development ....................................................................................................................... 18
   3.1 Entrepreneurial leadership ....................................................................................................... 18
   3.2 Boldness ..................................................................................................................................... 19
   3.3 Hypotheses .............................................................................................................................. 24

4. Data description ............................................................................................................................... 28
   4.1 Type of research ...................................................................................................................... 28
   4.2 Units of Analysis ...................................................................................................................... 28
   4.3 The sample ............................................................................................................................... 28
   4.4 Time dimension ....................................................................................................................... 29

5. Methodology .................................................................................................................................... 30
   5.1 Participants ............................................................................................................................... 30
   5.2 Procedures ............................................................................................................................... 30
   5.3 Measures .................................................................................................................................... 31
   5.4 Reliability (internal validity) .................................................................................................... 33

6. Results ............................................................................................................................................... 35
   6.1 Revised boldness construct ..................................................................................................... 35
   6.2 Hypotheses testing ................................................................................................................... 356
A Bold Entrepreneurial Leader

7. Discussion of the findings ................................................................. 41
8. Managerial implications ................................................................. 44
9. Conclusions ..................................................................................... 46
References ............................................................................................ 47
Appendix ............................................................................................... 51
Abstract

This study will give an overview of the most important leadership theories in leadership literature. Based on these theories a connection is made between entrepreneurial leadership and boldness. In order to do this the entrepreneurial leadership concept established of Gupta and MacMillan (2004) and the boldness concept established of Patrick (2010) is used. In contrary to what is expected, the research results show a negative relation between entrepreneurial leadership and boldness. However, the suggestion is made that with the right encouragement boldness can be managed in a way that might enhance entrepreneurial leadership.

Keywords: leadership theories, entrepreneurial leadership, boldness
1. Introduction

Uncertain situations require strong leadership, so uncertain business environments require managers with quality leadership capabilities. Today’s economy is characterized by an ever accelerating pace of competition and increasing rate of technological development. The competitive business landscape is continuously being reshaped. This has brought pressure on analytical approaches to leadership and management (Brown & Eisenhardt, 1998; Gupta & MacMillan, 2004). In the beginning, many business leaders sought solutions in sophisticated forecasting techniques, but this couldn’t bring the salvation they were looking for. Like the weather, it turned out to be hard to make accurate predictions about a moment in time more than a week from now, let alone a month or a year!

An important challenge for many companies and managers is to keep up with developments and making the right innovations, at the right moment. In many industries “innovation” is the name of the game. It’s sometimes said that the worst thing is doing nothing (Hanft, 2002). Highly uncertain situations are often paired by both great opportunities and threats. The job of the leader is to continuously identify the high-potential business opportunities and exploit them with both speed and confidence (McGrath & MacMillan, 1997). When done successfully, this will of course, result in superior performance.

It all sounds quite straightforward, filtering the best business opportunities and acting upon them. However, in reality many managers struggle making any decisions at all. A lot of them are stuck in rationally analyzing all possible opportunities and endless scenario sketching. Successful leading a business unit in a highly uncertain environment can in some way be compared by catching a ball. Nobody ever catches it by carefully calculating its velocity and trajectory. A successful catch requires (in the words of Nike) a “just do it” mentality. The same can be said about jumping out of an airplane. Of course you must check your gear and make sure that your parachute is in good condition, but at some point you have to stop thinking about all the things that could go wrong and just make the jump.
So, as with many things in life, the best business leaders may not be the ones who have maximum information or maximum choice models. In many cases getting things done is about following your gut, telling you to just try and go for it. The most successful manager is likely to be the one who undertakes things, who makes the innovations happen, or in other words the one that acts “entrepreneurial”. McGrath and MacMillan (2000) refer to this individual as the “entrepreneurial leader”.

Considering that some leadership theories go back as far as Greek antiquity, the entrepreneurial leadership theory, officially established in 2000, is a relatively new to leadership literature. As a consequence, it hasn’t been intensively studied yet. Gupta and MacMillan (2004) described the facets of entrepreneurial leadership and the different tasks that a manager should accomplish to be considered an entrepreneurial leader (building commitment, defining gravity, absorbing uncertainty, framing and path clearing). Based on this they developed and validated an entrepreneurial leadership concept. This helped to operationalize entrepreneurial leadership, but Gupta and MacMillan left researchers in the dark about the characteristics, behavior or the personality of entrepreneurial leaders. After all, isn’t it possible that entrepreneurial leaders have certain tendencies that make them more suitable than other individuals to become what they are?

One of the main questions addressed in this thesis is therefore:

*Which tendencies define an entrepreneurial leader?*

The answer to this question might be found in psychology. McGrath and MacMillan emphasized that an entrepreneurial leader is someone who possesses the aggression to search for real opportunities and the propensity to get things started. Note that “propensity” is just another word for “tendency”, so basically it sounds as if an entrepreneurial leader is someone with tendencies towards bold behavior. Boldness is well known from psychological research. Recently, a boldness construct has been developed by Patrick (2010). On first sight there seems to be a lot of similarities between boldness and entrepreneurial leadership. The goal of my research it to investigate the possible connection between these two. To my knowledge this hasn’t been done before.
The entrepreneurial leadership construct is certainly not the first leadership theory. In order to better understand the various constructs and their backgrounds I start out with some exploratory research. Accordingly, I begin my thesis with a literature study. I will give an overview of the most important theories about leadership. This will help to understand the origins of entrepreneurial leadership, the necessity of it and its place in leadership literature. In addition to this, I’ll explain the boldness construct in more detail and I’ll explain the interfaces between boldness and entrepreneurial leadership more elaborately. Based on this I’ll form a number of hypotheses concerning the relationship between boldness and entrepreneurial leadership. So the second part of my research is of the explanatory kind. I end my research with a correlation table and the managerial implications of the main results.
2. Literature background

The exciting thing about leadership research is that it brings together so many different scientific disciplines. Part of the multi-disciplinary research is for example: biology, economy, ethics, history, neuroscience, philosophy, psychology and sociology. None of these have came up with a conclusive leadership theory on itself. That’s why we see more and more collaboration between researchers with different scientific backgrounds.

Everybody seems to agree on the essentiality of good leadership in society. Famous economists like Cantillon and Schumpeter have underwritten the importance of leadership for the economy. In this thesis the focus is on a special kind of leadership construct, namely “entrepreneurial leadership”. I will discuss and investigate this concept in great detail later, but in order to understand this concept, its place in the literature and its relevance I will give a review about the essentials of leadership literature.

2.1 A leadership definition

There has been written a lot about leadership. So much that it’s even confusing sometimes. Especially since there are all kinds of leadership definitions, concepts, thoughts on what effective leadership is and what a good leader should be like. It’s striking that almost all definitions have three things in common (Vroom & Jago, 2007):

- There is a process of influence.
- At least two people are involved, in most cases a group
- The purpose of influencing is to attain goals.

So an appropriate definition should grasp all three of these elements. If we bring these three elements together, we come to the following definition (Northouse, 2007):

“Leadership is a process whereby an individual influences a group of individuals to achieve a common goal.”

This definition implies that effective leaders are those that establish superior group performance. Performance can be anything from a successful start-up till a military victory. However, this definition doesn’t mention anything about the kind of process by which successful influence occurs. As you can imagine there are numerous processes that might
lead to successful influencing people. The question here is, whether these qualify as leadership. This is where theorists diverge (Vroom & Jago, 2007). Some of them claim that the term leadership is limited by specific forms of influencing. Others use the form of influence to define different types of leadership, for instance servant leadership (Kiechel & Rosenthal, 1992), tyrannical leadership (Glad, 2004), paternalistic leadership (Pellegrini & Scandura, 2008) and transformational leadership (Burns, 1978). The latter leadership concept plays an important role in the leader vs. manager issue, which I will attend to now.

2.2 Management and leadership

Leadership often goes hand in hand with a certain form of formal authority. We see this in organizations where people higher in hierarchy have formal control over so-called subordinates (or employees). This higher ranked person is called chief, boss or manager. However, it should be noted that not all leaders are managers and not all managers are leaders (Robbins, 1992). The distinction between managers and leaders broadly coincides with the distinction between transactional and transformational leadership. Two concepts that receive a lot of attention in leadership literature:

- *Transactional leadership* is about leadership through the means of exchange. The transactional leader gets things done by making (and fulfilling) promises of recognition, pay increase and advancement for employees who perform well. By contrast, employees who do not deliver good work are penalized (Bass, 1990). In these situations, a leader is influential because doing what he/she wants is in the best interest of the subordinates (Kuhnert & Lewis, 1987). Most management is associated with this kind of leadership, at least in principle.

- *Transformational leadership* originates in the personal values and beliefs of the leader, instead of an exchange of commodities between leader and followers. This form of leadership occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group (Bass, 1990). Charisma is said to be an important part of transformational leadership, some even claim the two are synonyms.
Obviously both kinds of leadership may be effective, but transformational leadership is in many cases associated with the highest overall performance (Robbins, 1992). Traditionally, these two concepts were viewed as isolated from each other. Today, most relationships between supervisors and their employees are a combination of both. Few managers depend mainly on their legitimate power to persuade people to do as they’re told (Bass, 1990). In organizations, being a manager (or transactional leader) is more of a starting point from which true (transformational-) leadership can be exercised. In this research there will be looked at leadership properties of managers. So even though there is a difference between the two terms, the terms will be used interchangeable.

2.3 Leadership effectiveness: from characteristics to characteristics

Besides the debate about the difference between managers and leaders, there has been a lot of discussion about the effectiveness of leadership. Theories concerning leadership effectiveness have changed a lot over the years.

2.3.1 Characteristics

Traditional theories about leadership effectiveness have focused on characteristics of successful leaders. The main idea was that all great leaders had some universal set of characteristics or traits that made them superior compared to others. These theories were based on the “Great Man Theory” of Friedrich Nietzsche. According to his theory, major events in the world history were the results of genius men whose visions changed the world.

These first theories let to believe that you were either born a leader or not. Nowadays we would say it’s in your DNA or it’s not. As always, there is divergence in the trait research. Some scholars sought to investigate physical traits like gender, height, eye color, etc. Others focused on psychological motives like for instance, drive/ambition (Kirkpatrick & Locke, 1991), extroversion (Mann, 1959), responsibility (Stogdill, 1948), achievement (Stogdill, 1974) and masculinity (Lord, DeVader & Alliger, 1986).

Research concerning characteristics has failed to come up with a specific set of universal leadership characteristics. As a result the thought that leaders were born that way was considered outdated. This led some scholars to believe that leadership was something one could learn.
2.3.2 Leadership styles

Due to the fact that characteristics failed to explain difference in effective leadership, researchers came up with alternative theories. The focus shifted from characteristics to behavior. If behavior proved to be successful in explaining leadership effectiveness this would mean that regular people could be trained to become effective leaders. In other words; leadership would be a skill (Robbins, 1992). Of course this idea was far more exciting and promising than the idea of a “born leader”.

As a consequence, a lot of research has been done on effective leadership styles. An important question was whether a leader should act democratic or autocratic. Overall, a democratic leadership style turned out to be the most successful in terms of group performance (Robbins, 1992). Very famous in this area are the research projects of the Ohio State University and the University of Michigan (1950’s). These studies explained a lot about job satisfaction of workers, but not about specific goal accomplishment, which is the most important part of effective leadership.

Despite all the efforts researchers put in they still couldn’t find consisted relations between leadership behavior and group performance.

2.3.3 Contingency theories

It became more and more clear that prognosticating leadership effectiveness wasn’t simply a matter of isolating behavior or characteristics. Something was missing, something involving the context of leadership. Scholars soon realized that they had overlooked the influence of the “situation” explaining the effectiveness of leadership. As a response they came up with numerous so-called contingency theories. Contingency theories deal with variability in person and situation. Popular situational variables that were used are: type of work, group values, time and culture of the organizations (Robbins, 1992).

Especially psychologists were very active in developing this “new” leadership perspective. Widespread are Fiedler’s Contingency Model (1967) and the Path-Goal Theory (1970) by Robert House. Fiedler’s model was the first to be quite comprehensive. He divided leaders into two groups, being task-orientated or relationship-orientated. This distinction was determined by an instrument he called least-preferred co-worker (LPC). If the leader in
question described his least preferred co-worker in a positive way, he would be labeled task-orientated. Fiedler also distinguished three situational variables (leader-member relations, task structure, position power) and investigated leader effectiveness in all eight possible leader-situation scenarios. He found out that relationship-motivated leaders outperformed task-motivated leaders in four of the eight cases, but the reverse was true in the other cases (Vroom & Jago, 2007).

The Path-Goal Theory is more straightforward, but not less respected. According to this theory a leader’s purpose is to built or help building subordinates’ “paths” in order to reach organizational or individual “goals” in different situations considering subordinate characteristics and environmental characteristics (Robbins, 1992). The convenient thing about this theory is that it perfectly matches modern leadership definition, like Northouse’s leadership definition mentioned earlier. As the theory itself, the research outcomes are also quite straightforward. The most well known outcome of the path-goal theory is that directive leader behavior will be effective in situations with low degree of subordinate task structure, but totally ineffective in those situations with a high subordinate task structure (Vroom & Jago, 2007).

Almost all researchers today use situational variables in their research projects, either as determinants of leader behavior or as moderating variables. In line with this trend the situation will also be included in this research.

2.3.4 Characteristics 2.0

Since the turn of the century there has been a renewed interest in leadership characteristics, led by Zaccaro. This is partly due to the rise in popularity of the charismatic leadership concept. “Charisma” is Greek for “gift” (Conger & Kanungo, 1987). Followers of the charismatic leader perceive him or her to have superhuman qualities and accept unconditionally the leader’s mission and directives for action (Willner, 1984). Charismatic leadership is often used as a synonym for transformational leadership. Though interrelated, these two concepts differ from each other. Charisma is only a part of transformational leadership (Bass, 1985). A lot of researchers have wondered whether this specific type of leader could be defined by a set of characteristics.
Zaccaro argued that the study of leadership traits was premature and based on something else than an unbiased appraisal of evidence (Vroom & Jago, 2007). This position was supported by a great deal of empirical research by other scholars. Zaccaro mentioned numerous shortcomings of previous research concerned with leadership characteristics. He argued that leadership represented complex behavior patterns and that various traits of leadership should be seen in cohesion to each other. This notion was in consistency with recent findings about intelligence (and entrepreneurship). Scholars came to agree that successful leadership (as entrepreneurship) required more than conventional intelligence alone. Successfulness in leadership requires a blend of analytical, creative, and practical aspects of intelligence, which, in combination, constitute successful intelligence (Sternberg, 2004).

Another popular term that keeps popping up in modern leadership literature is emotional intelligence (EQ). EQ is also considered to play an important role in the effectiveness of leadership (Golman, Boyatzis & McKee, 2004). Other important characteristics that are associated with effective leadership are creativity (Sternberg, 2007) and resilience (Bennis, 2007). Both traits can be measured by the means of psychological tests and even with DNA tests.

This second wave of trait research, which I will refer to as leadership characteristics 2.0, was quite sophisticated compared to the traditional theories. Besides the view that traits should be viewed as integrated, Zacarro also adopted a situational perspective. He argued that trait approaches should consider the situation as a corresponding source of significant variance in leadership.

2.3.5 Other insights: the end of leadership
It’s true that leadership isn’t always necessary. Not every situation needs a leader. There are in some cases individual, professional and organizational variables that can replace leadership (Robbins, 1992). Sometimes experience, the right training and a good employee’s attitude can neutralize the need for leadership. The same can be reached by explicit goal setting, rigid rules and the use of strict procedures.
Some people have claimed that leadership isn’t as important today as it used to be. By this, they often refer to the fact that organizational effectiveness can be improved by means of decentralization. This makes sense, because in a complex society which is as sophisticated as ours, it’s hard to imagine one man making all the decisions in an accurate and correct way. As a result it seems like the focus has shifted from “leader” to “team effort”.

Despite this shift in focus, leadership is without a doubt as important today as it was before. The only thing that has changed is the structure of leadership roles. Leadership never disappeared. It merely took place on lower organizational levels, instead of TOPdown (Bennis, 2004). There will always be examples of great leaders, like Steve Jobs, who seem to run a company on their own. However, in many cases leadership will be about managers working together with their teams to achieve the best possible outcomes.

So in contrary to what some people might say, it can also be said that leadership has become more demanding. As a manager, you’ll have to connect more and more with your subordinates.

2.4 Leadership in today’s business environment

As mentioned before, modern leadership theories should account for the situation in which the leader finds him/her-self. Looking at the competitive landscape of the twenty-first century a lot has changed. Today’s business environment is characterized by a very high innovation rate and an ever accelerating pace of competition (Bettis & Hitt, 1995; Bennis, 1999; Gupta & MacMillan, 2004).

Developments in telecommunication and computer technology have had far reaching consequences for managers in all industries (Bettis & Hitt, 1995). This in turn has created both opportunities and threats. Technology has changed the way managers interact with their subordinates and their customers. It has facilitated knowledge creation by means of, for example, information sharing and data mining. On the other hand, the internet has also made the customer faster, smarter and more critical (Mckeen, 2001). Companies have to continuously reinvent themselves to keep up with the needs of the customer. This brings us to innovation.
There is a lot of pressure on companies to keep innovating. Due to the enormous amount of product and process innovations forecasting becomes more difficult. With the current state of telecommunication innovations and best practices diffuse with the speed of light, which makes it harder for companies to maintain their competitive edge. In this environment investments should not be based on forecasting alone (Bettis & Hitt, 1995).

This new turbulent business environment asks for a specific type of leader. A manager is needed who can deal with this rapidly changing environment. This manager needs a new mindset, one that is more effective than the traditional managerial mindset. Keywords for the new business leader are; cooperation, innovation, entrepreneurship, learning and unlearning (Bettis & Hitt, 1995). As said before leaders don’t exist in a vacuum. So besides handling the new business environment, today’s managers should also have a team of people that is up to the job. In many cases this means that the manager will have to compose a new team or maintain the right people. The manager’s tasks are to built a good team and trigger them to go that extra mile. This brings us to the entrepreneurial leadership concept.
3. Theory development

3.1 Entrepreneurial leadership

Today’s business environment calls for a so-called “entrepreneurial leader”. The entrepreneurial leadership theory was developed by McGrath and MacMillan (2000). Instead of trying to develop detailed plans based on accurate predictions, an entrepreneurial leader forges an organizational unit that is continuously repositioning itself in order to capture opportunistic rents (Gupta & MacMillan, 2004). The discovery-driven mindset separates entrepreneurial leadership from the earlier discussed transformational leadership (Burns, 1978). If we decompose entrepreneurial leadership we see that it’s made up out of two other concepts, namely entrepreneurship and leadership. The combination of both implies two challenges, which are said to be interrelated (Weick, 1979; Gupta & MacMillan, 2004):

- A leadership challenge: mobilize a cast of social actors capable of and committed to accomplish the adaptive transformation process that will lead to a new well suited profit model. This challenge is referred to as “cast enactment”. Cast enactment in its turn asks for two roles; building commitment and defining gravity. It’s the entrepreneurial leader’s task to build among the members of the cast willingness to commit to the challenge of transformation that is needed (building commitment) and to create a shared sense of what can be done in the face of uncertainty (defining gravity).

- An entrepreneurial challenge: enact a transformation of the current business unit’s transaction set by positioning the business unit in a way it can exploit opportunities, the moment they emerge. This challenge is referred to as “transformational enactment”. Transformational enactment demands three roles of the entrepreneurial leader; absorbing uncertainty, framing and path clearing (also referred to as underwriting). First, the entrepreneurial leader has to absorb all kinds of uncertainty to prevent them from having paralyzing effects on the casted social actors (absorbing uncertainty). Second, goals have to be set and with this a balance needs to be found in ambition and what can be expected from the cast (framing). The third and final role is for the entrepreneurial leader to dissolve any potential risk in the business unit’s task environment (path clearing).
I’ve talked about leadership in great detail in the previous chapter, but entrepreneurship has remained undiscussed till now. Entrepreneurship is concerned with the discovery and exploitation of profitable opportunities (Shane & Venkataraman, 2000), as is cast enactment. Entrepreneurial opportunities are situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production (Casson, 1982). An entrepreneurial discovery will occur the moment someone makes the presumption that some resources are not put to their best use. When this presumption is acted up on correctly, this person or the organization he or she works for will earn an entrepreneurial profit (Shane & Venkataraman, 2000).

However, not all opportunities are obvious or visible to everyone all the time (Hayek, 1945). As a result not everybody will engage in entrepreneurial behavior. It’s unclear why some people act upon opportunities while others don’t. Shane and Venkataraman (2000) suggest two broad categories of factors that influence this: (1) the possession of the prior information necessary to identify an opportunity and (2) the cognitive properties necessary to value it. This last notion suggests that not everybody is as biologically/psychologically qualified to be an entrepreneurial leader. In a highly turbulent environment some people might be better fitted to act as entrepreneurial leaders, than others.

### 3.2 Boldness

Most economists agree that people make all kinds of different net present value calculations in their head, use different choice heuristics, place different values on risk, have different images of the future and might have different opportunity costs. These differences in rationality are than used to explain what leads people to make different economic decisions. The problem with theories like these is that they ignore the fact that decisions aren’t always made based on rationality, nor do they offer satisfying explanations about what factors underlie these different mental calculations people make. Considering this and the notion that not everybody is qualified to be an entrepreneurial leader, has led me to the suggestion that entrepreneurial leaders might have certain tendencies that characterize their behavior and separates them from non-entrepreneurial leaders. The question now is; which tendencies might these be?
It could be that the reason why some people see and act upon opportunities is simply because it’s psychologically easier for them. They might for instance feel fewer boundaries than other people do. These people are by nature more confident in a positive outcome, feel less sad when things do go wrong, or in some cases might even like taking risks. Put differently, business leaders (managers) exerting higher levels of entrepreneurial behavior might be tougher than those acting less entrepreneurial. The concept that captures toughness is the boldness concept.

Boldness is part of a bigger concept, namely the triarchic concept of psychopathy. Psychopathy, or psychopathic personality, refers to a pathologic syndrome involving prominent behavioral deviancy in presence of distinctive emotional an interpersonal features (Patrick, Fowles & Krueger, 2009). Like with leadership, there is a ton of research trying to define, conceptualize and measure psychopathy. The reason for this is that psychopathy is considered to have a harmful impact on society as a whole, especially in the form of criminal behavior. The foundation for modern conceptualizations measures of psychopathy can be traced back to Cleckley’s classic The Mask of Sanity (1976). Cleckley considered psychopathy to be a deep-rooted emotional pathology masked by an outward appearance of robust mental health. According to the triarchic model of psychopathy, based on both historic conceptualizations (like Cleckley’s) and empirical findings, psychopathy is best captured by three distinct phenotypic constructs; disinhibition, boldness and meanness (Figure 1). Difficult temperament and low fear presumably contribute to these phenotypic outcomes (Patrick, Fowles & Krueger, 2009).
Phenotypes are an organism’s observable behavioral characteristics/traits, they result from an interaction between an organism’s genes and environmental influences (Mahner & Kary, 1997). So, psychopathy and the underlying concepts, disinhibition, boldness and meanness are the consequence of both nature and nurture. However, whereas disinhibition and meanness reflect merely negative tendencies, boldness also embodies positive ones.

For example, disinhibition reflects tendencies toward impulsiveness, irresponsibility, oppositionality and hostility, all having a quite negative charge. This was to be expected of a concept explaining psychopathy. Tendencies of meanness reflecting callousness, cruelty and predatory aggression, may seem worse than those of disinhibition. Boldness on the other hand doesn’t sound so bad, with main tendencies being; high dominance, low anxiousness and venturesomeness (Patrick, 2010). Boldness is the capacity to remain calm under pressure and to recover quickly from stressors. Additionally, bold people have high social efficacy and a tolerance for unfamiliarity/danger (Patrick, Fowles & Krueger, 2009).
A Bold Entrepreneurial Leader

Considering this definition of boldness it’s conceivable that someone’s boldness could be used for the good, instead of the bad. The capacity to remain calm under pressure might come in hand in a turbulent business environment and social efficacy could help forging a team. It seems like a bold manager would possess a lot of tendencies (or in this case qualities) that could make him/her an excellent entrepreneurial leader.

Recently, Patrick (2010) developed a psychological boldness scale. Based on the aforementioned definition, Patrick identified nine different (but coinciding) tendencies of the boldness concept. Tendencies that might also be associated with entrepreneurial leadership. The nine tendencies are as follows:

- **Optimism**; the tendency of individuals to see things from the positive side instead of the negative. They have more believe in positive outcomes. Business leaders possessing this property are expected to have a brighter outlook of the future and opportunities to come. Where other people might see the downside of a project or plan they see the possibilities. This is why positively minded people will more easily grasp upon an opportunity and are more likely expected to exert in entrepreneurial behavior than pessimistic people. Optimism has been related to entrepreneurship many times, yet not to entrepreneurial leadership.

- **Intrepidness**; refers to whether individuals feel like taking physical danger. People with low intrepidness refrain from harmful situations and will be less inclined to take risks. When translated to a business setting, managers exerting intrepidness will not refrain from hardship and will face difficult situations head to head.

- **Resilience**; refers to whether individuals can handle difficult situations they might encounter. Managers that don’t have a hard time dealing with these situations should have the edge on other managers that do. Resilience will come in hand for any business leader today, considering the turbulent environment most management finds itself in. Bennis (2007) mentioned resilience to contribute to effective leadership.

- **Courage**; in French means “heart” or “spirit”. Courage can take on many forms depending on the situation. In a business setting courage can mean a bunch of things like revealing vulnerability, voicing an unpopular opinion, initiating the transition to a new competitive position, or making sacrifices to achieve long-term goals (Walston,
2003). It is conceivable that both leadership challenges considering cast enactment and transformational enactment will take some form of courage.

- **Dominance;** occurs when someone has more power or more influence than other people have. It’s often about enhancing one’s status over another. Sometimes dominance takes on the form of aggressive or antisocial behavior, like inflicting harm to a person, rebellion against authority and even law breaking. However, in many cases dominant behavior is expressed in a non-aggressive manner (Mazur & Booth, 1998).

- **Persuasiveness;** also called social influencing, is a skill or tendency using various techniques for changing others’ attitudes, opinions or behavior in desired directions (Greenberg & Baron, 2008). Persuasion is very important for managers to get things done. Many books and articles have been written about appropriate influencing techniques. Overall, most literature considers techniques that are diplomatic more successful than autocratic techniques, using pressure.

- **Tolerance for uncertainty;** refers to whether individuals like taking risk or not. Risk averse people don’t like gambling and will minimize risk when possible. In a business perspective, risk adversity might become harmful when it prevents decisions makers from accepting some risk in exchange for high profits. On the other side of the medallion are risk seekers. Risk seekers don’t refrain from risk, in fact they like taking risk. Again, this can also become harmful in an organization when turned into reckless gambling on business opportunities. Research points out that people are not consistently risk averse or risk seeking (Anderson & Stafford, 2009). However, overall most people are said to be risk averse (Frank, 2006).

- **Self confidence;** is how individuals perceive their ability to succeed at a particular endeavor, or judge their effectiveness once a task is finished (McCarty, 1986). Competitive, complex, turbulent and challenging decision environments demand a manager with a lot of self-confidence. For managers self confidence is the tendency/commitment to trust his/her own judgment, to be free from debilitating fears, to take calculated risk, to confront openly rather than avoid the unpleasant aspects of work and to judge the effectiveness of those actions (Ireland & Hitt, 1992). Expressing confidence in others is seen as a byproduct of high self confidence, so self-
confident managers are more likely to share their own power with others and empower employees.

- Social assurance; refers to whether or not an individual feels secure in a social setting. People with low social assurance feel quickly embarrassed and worry a lot about what others might think of them. Social assured people, on the other hand, don’t endure these fears. In fact, in some cases they don’t care about what other people might find of them at all. Logically people with low social assurance would make bad managers let alone entrepreneurial leaders. The reasoning is that they would be too occupied about what other people might think of their behavior, that it would keep them from taking decisive actions.

### 3.3 Hypotheses

If boldness and entrepreneurial leadership were to be related than so should the concepts be. In other words, the different facets of entrepreneurial leadership concept (absorbing uncertainty, framing, path clearing, building commitment and defining gravity) should correlate positively with the boldness concept.

As I’ve discussed, in order for a manager to be considered an entrepreneurial leader he/she has to be able to build commitment among his/hers employees. They should all be prepared to put in the effort that is required and when necessary to make sacrifices. For this to work, all the employees forming the cast have to be inspired to work together and to achieve the formulated goal(s). A quite difficult task for the manager. Various tendencies of the boldness concept could come in hand here. For instance; self-confidence, dominance and social assurance might be helpful when inspiring the employees. These in combination with things like showing courage and being persuasive should result in a proper amount of commitment by the cast. This brings me to the first hypothesis:

*Hypothesis I. Building commitment will be positively related to the manager’s boldness rating.*

Second, entrepreneurial leadership demands a manager to define gravity. This is meant to create a shared sense of what can be done facing uncertainty. The role hereby is for the manager to reshape and integrate the cast’s perceptions of what are and what are not the barriers to enactment. This calls for the entrepreneurial leader to deploy his/her optimism
and express confidence in the cast (Gupta & MacMillan, 2004). Recapture that both optimism and confidence are part of the boldness construct. Of course other aspects of boldness also play a role here, like for instance courage and/or persuasiveness. This results in the second hypothesis:

**Hypothesis II. Defining gravity will be positively related to the manager’s boldness rating.**

Next to defining gravity comes absorbing uncertainty. As before mentioned, absorbing uncertainty means for the entrepreneurial leader to absorb any paralyzing effect that uncertainty has on his/hers employees. Basically, the task of reducing uncertainty for the selected cast is to convince them that the transformational vision is in fact enactable by them (Gupta & MacMillan, 2004). A powerful and decisive manager is demanded here. Boldness could play an important role in this. A bold manager would have the optimism and the persuasiveness to be this convincing. At the same time the bold managers tolerance for uncertainty could also be transferred to the group and negate the remaining paralyzing effects. This reasoning results in the following hypothesis:

**Hypothesis III. Absorbing uncertainty will be positively related to boldness ratings.**

After absorbing uncertainty comes framing. The task for the manager is to frame the transformation. Recapture that a balance should be found here between ambition and what can realistically be expected from the cast of employees. Ultimately, the manager needs to frame a challenge that pushes the team members to the limits of their abilities without pushing them over it (McGrath & MacMillan, 2000). Especially optimism, intrepidness and courage could be of importance here. Optimism and courage should foster a frame that is challenging and strategically interesting. Intrepidness will help the manager not to refrain from any hardship on the horizon. Tolerance for uncertainty could also help with framing, as long as it doesn’t takes on the form of gambling. The manager should make realistic estimates of the future. I again expect a relation here between boldness and entrepreneurial leadership, the hypotheses is as follows:

**Hypothesis IV. Framing will be positively related to boldness ratings.**

Finally, an entrepreneurial leader should clear the path from all obstacles that come in the way of the cast achieving its goals. The task here is to smoothen the bumps in the road, both
inside and outside the firm. Considering the turbulent business environment described earlier, there will most likely be a lot of these bumps. The entrepreneurial leader might have to deal with things like opposition from stakeholders, critics from the press and difficulties with suppliers, just to name a few. This calls for an ability to anticipate and dissolve any potential resistance to the reconstruction of the transaction set (Gupta & MacMillan, 2004). A bold manager should perfectly be capable of doing so. Resilience, one of the boldness tendencies, refers to this specific ability. Resilient managers can handle difficult situations they encounter. Besides resilience, the intrepidness tendency could also play a prominent role here. Intrepidness will help the manager to deal with hardship and to face difficult situations head to head. The same holds for optimism. Optimism is far from an unwanted luxury in difficult situations. It helps the manager to keep positive. Similar connections can be made between path clearing and other aspects of the boldness construct. This reasoning results in the last hypothesis:

_Hypothesis V. Path clearing (or underwriting) will be positively related to boldness ratings._

I have shown the possible connections between the boldness construct and the entrepreneurial leadership construct. A total of five relationships have been formulated, which can be graphically summarized (Figure 2). The directions of the arrows suggest the directions of the relationships. Note that all relationship are expected to be positive.
Figure 2. Visualization of the five hypotheses. Relationships between boldness and the various roles of the entrepreneurial leadership are shown, the relationships are expected to be positive.
4. Data description

4.1 Type of research
For both scientific and efficiency reasons I chose to conduct a survey. Surveys are a very old and widespread research technique. Outcomes of surveys are relatively easy to interpret and perfectly fit for explanatory research. Furthermore, survey research is said to be the best method available for a population too large to observe directly (Babby, 2007). Of course observations would have given more honest and elaborate results, but observational studies are much harder to conduct and it’s hard to interpret behavior. Moreover, I hold a new exciting scale and corresponding questionnaire I wanted to put to the test.

4.2 Units of Analysis
One of the most important questions in research is: What or whom has to be studied? I want to know whether high boldness ratings are connected to entrepreneurial leadership. The problem here is that you can’t just see with the naked eye who is an entrepreneurial leader and who is not. What is possible though, is to test to what extend someone can be considered an entrepreneurial leader. This can be done by using the aforementioned survey. The question now becomes: Which people can be entrepreneurial leaders? As was noted before, not all leaders are managers and not all managers are leaders. The same can be said about management with respect to entrepreneurial leadership. However, managers do find themselves in leading positions and as a consequence are more likely to exert entrepreneurial leadership. Moreover, the entrepreneurial leadership survey was developed for managers.

4.3 The sample
Because was impossible to survey the entire population of managers, a sample had to be selected. It would not make any sense to randomly survey students or people on the corner of the street, since these people were not likely to be managers. So instead of probability sampling, nonprobability sampling was chosen as the appropriate sampling method. The most obvious thing to do was to search for a company with a sufficient pool of managers with and a willing to cooperate. A Dutch company, with locations all over the Netherlands, was selected. For privacy reasons the company’s name cannot be revealed. In the remaining the company will be referred to as “company X”. Company X has a large number of locations, with each location having his own manager. There are no concrete rules about
sampling size, however it’s common statistical knowledge that a too large sample will make any effect in the data significant (through a shrinking standard error). I figured that information of a least 50 managers would be enough. With response rates in social studies of around 50 percent, 100 managers of company X were randomly selected to be subject of further investigation.

4.4 Time dimension

Unlike most research, time plays no important role in this study. Both entrepreneurial leadership and boldness are assumed to remain constant over time. This is a reasonable assumption given the fact that character doesn’t alter much after people reached maturity. Therefore a cross-sectional study was conducted. Cross-sectional studies involve measurements/observations, of a population made at one point in time.
5. Methodology

5.1 Participants
Company X was very benevolent to deliver the information needed and agreed upon a survey. A total of 100 envelopes were sent out to different locations. 65 envelopes were retrieved. This results in a 65% percent response rate which is quite good for a survey.

Of the 65 envelopes that were retrieved, 4 of them contained managerial surveys that weren’t completed at all and another 4 were completed very poorly (over more than 10 answers were missing in a row, or an entire page was skipped). Of course these 8 managerial surveys and the corresponding employee surveys were deleted and haven’t been taken into account when the data was analyzed.

Near complete data was obtained for 57 managers. The average age of the managers was 42 years. Women were well represented in the sample. A total of 69 percent of these managers was female, 29 percent male and 2 percent unknown. On average managers have worked for over 10 years at the company. Their average workweek contained over 30 hours.

5.2 Procedures
The questionnaires were mailed to the addresses of the company’s various locations. The questionnaires came with a letter that kindly requested the manager to fill in the questionnaires and return them in the postage-paid envelopes that were included.

Participation in this study was entirely voluntary. There was no pressure from the board that demanded managers to cooperate in the research. Filling in the questionnaires also
happened anonymously. So, confidentiality of all personal information was assured. This guaranteed more honest answers, since managers no longer had reason to fear any information might be held against them in future assessments.

5.3 Measures
The entrepreneurial leadership construct containing absorbing, framing, path clearing, building commitment and defining gravity, was measured using a (construct-)valid questionnaire developed by GLOBE (Global leadership and Organizational Behavior Effectiveness Program) (House et. al., 1998). The participating managers had to rank agreement to several statements on a 7-level Likert scale, with anchors of “strongly disagree” (1) and “strongly agree” (7).

Building commitment. This concept was measured using five items. The first two of them were of an inspirational kind; “I can inspire employees to work hard” and “I can inspire employees to take on better values”. The third and fourth item were aimed more at creating enthusiasm; “I engage positive feelings among my employees through leading by example” and “I encourage employees and strengthen believe in their own abilities”. The last item focused on teambuilding; “I can make employees work as a team”.

Defining gravity. For defining gravity another four items were used. The first item was about decisiveness; “I decide quick and firm”. The second was about the manager as an integrator of people in order to create cohesiveness; “I can make employees of my outlet form a close group”. The third was about facilitating positivism; “I’m usually optimistic and self-confident”. The fourth and last item was about stimulating different employees intellectually; “I encourage employees to think critical and use their common sense”.

Absorbing. Four items were used to measure absorbing. The first two questions were about the future; “I always realize that the future can look different” and “I have an idea how the future can change this formula”. The following two questions were about the manager’s subordinates; “I make employees more self-confident by acting determined” and “I try to provide insight to my employees in how they can work differently”.

Framing. Four items were also used to measure framing. The first and the third questions were about goal setting; “I set high targets for my employees and encourage them to work
harder” and “I set high performance measures for my employees”. The second question was about the future; “I often read and talk about the future and make myself aware of the what this means to my outlet”. The last question was about improvement; “I continuously focus on improving my employee’s performance”.

**Path clearing.** Path clearing, or underwriting as you may call it, was measured through three items. The first question sounded; “I’m tactful and good at maintaining personal relationships”. The second question was about negotiation skills; “I’m good at negotiating en handling business so that others will also prosper by it”. The third and last question focused on persuasiveness; “I’m good at convincing others about my own view”.

**Boldness.** A total of nine possible leader instincts were identified, translated into nineteen questions/statements (aimed at managers) and added to the original GLOBE questionnaire. Each instinct was measured by two to three items. Some positively stated and others negatively. All items used a 4-level scale, respectively; “not true” (1), “usually not true” (2), “usually true” (3) and “true” (4).

Two items were on optimism; “I’m more often optimistic than not” and on the opposite “It is hard for me to make this go the way I want it to go”. Another two were on intrepidness; “I have a strong need to go skydiving” and “I stay away from physical danger as far as I can”. The next instinct to be measured was resilience to stress. Two items were used; “I possess the capacity to handle stress easily” and “I can handle things that would traumatize other people”. Courage was also measured using two items; “I get scared easily” and “I’m scared of fewer things than most people are”. The same holds for dominance; “I’m a born leader” and “I don’t like to take the lead in a group of people”. Three items were used to measure persuasiveness; “It’s easy for me to influence people”, followed by the same question but negatively stated “It isn’t easy for me to influence people” and “I can convince people to do what I want”. Tolerance for uncertainty was again measured through two items; “I perform well in a new situation, even if unprepared” and “I worry when encountering an uncertain situation wherein I don’t know what to expect”. Another two were on self-confidence; “I don’t see myself as talented” and “I never worry about making a fool out of myself”. Finally, the last instinct, social assurance, was also measured using two items; “It’s easy to embarrass me” and “I never worry about embarrassing myself in front of other people”.

Demographics. Each participant was asked about gender being male or female, their age in years, their tenure at company name X in years and average amount of hours in their workweek.

5.4 Reliability (internal validity)
In order for a scale to posses some practical utility it needs to be reliable, but how do you measure something like reliability? Cronbach’s Alpha is the most widely used measure of scale reliability (Peterson, 1994). It can be calculated using the following standardized formula (Field, 2009):

$$\alpha = \frac{N \cdot \bar{r}}{1 + (N - 1) \cdot \bar{r}}$$

In this equation $N$ stands for the number of variables and $\bar{r}$ stands for the number of inter item correlations.

Theoretically, the $\alpha$ will take on values varying between 0 and 1. Where higher values are more desirable than lower ones. Ultimately $\alpha$ would be 1, which would mean that all the selected items of a questionnaire measure the same construct/concept. However, in most cases $\alpha$ will differ from 0. The question is: what is an acceptable value of $\alpha$? There seems to be a lack of clear guidelines in literature regarding the minimum value $\alpha$ should take on in order for a construct/questionnaire to be considered reliable. As a consequence most researchers use rules of thumb based on other researchers recommendations. The most widely referenced recommendations are those of Nunally (Peterson, 1994). What is interesting here is that Nunally changed his recommendations between 1967 and 1978. Initially, Nunally recommended the minimum value of $\alpha$, for preliminary research, to be between .5 and .6. In 1978, he changed his earlier opinion and recommended $\alpha$ to be at least .7. Nunally did this without further explanation. Ironically, this illustrates most Cronbach’s Alpha research.

Based on Nunally’s recommendations, I suggest the bare minimum of $\alpha$ to be .6 and preferably above .7. Note that Nunally’s recommendations apply to preliminary research only. So for accepted concepts an even lower $\alpha$ might already be sufficient. I’ve tested the
reliability of the aspects of entrepreneurial leadership concept. I also tested the reliability of the items of the boldness concept. The results are displayed in Table 1.

**Table 1. Cronbach’s Alpha’s of the research concepts**

<table>
<thead>
<tr>
<th>Concept</th>
<th>Cronbach’s Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building commitment</td>
<td>.806</td>
</tr>
<tr>
<td>Defining gravity</td>
<td>.710</td>
</tr>
<tr>
<td>Absorbing uncertainty</td>
<td>.600</td>
</tr>
<tr>
<td>Framing</td>
<td>.671</td>
</tr>
<tr>
<td>Path clearing</td>
<td>.723</td>
</tr>
<tr>
<td>Boldness</td>
<td>.707 (after item deletion)*</td>
</tr>
</tbody>
</table>

* Questionnaire items were deleted to improve the concept’s α.

As can be seen from the table all concepts have a Cronbach’s Alpha of at least .6. Building commitment, defining gravity, absorbing, framing and path clearing, have already been tested in past research. Accordingly, they have been published and are widely accepted in science. So in this case a lower α will satisfy. However, the boldness construct and the corresponding questionnaire are new. In order to achieve the α of .707 various items had to be removed. This will be discussed in more detail in the subsequent chapter.
6. Results

6.1 Revised boldness construct

Before testing the hypotheses, I conducted a series of Cronbach’s Alpha tests using different items of the boldness concept. As mentioned before, the boldness concept I used in my research comes from psychology. Which implies it’s intended to be used primarily on psychiatric patients and for psychiatric purposes. It should also be taken into account that the boldness construct and the corresponding questionnaire is to say “very new”. In fact, it hasn’t even been published yet. Considering that I was about to use a new concept in an extraordinary way, I decided to put the questionnaire through some SPSS tests first.

Table 2. Cronbach’s Alpa boldness

<table>
<thead>
<tr>
<th>Round</th>
<th>Number of items</th>
<th>Item deleted</th>
<th>Cronbach’s Alpa (α)</th>
<th>Improvement α</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19</td>
<td>-</td>
<td>.122</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>16</td>
<td>.239</td>
<td>.117</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>15</td>
<td>.301</td>
<td>.62</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>12</td>
<td>.381</td>
<td>.80</td>
</tr>
<tr>
<td>5</td>
<td>15</td>
<td>14</td>
<td>.467</td>
<td>.86</td>
</tr>
<tr>
<td>6</td>
<td>14</td>
<td>6</td>
<td>.543</td>
<td>.76</td>
</tr>
<tr>
<td>7</td>
<td>13</td>
<td>17</td>
<td>.613</td>
<td>.70</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>19</td>
<td>.674</td>
<td>.61</td>
</tr>
<tr>
<td>9</td>
<td>11</td>
<td>4</td>
<td>.707</td>
<td>.33</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>2</td>
<td>.732</td>
<td>.25</td>
</tr>
</tbody>
</table>
The original boldness construct contained a total of 19 items. However, the problem was that taken altogether, they gave a very bad Cronbach’s Alpha (.122). This could basically mean two different things. One, that the different items measure different underlying concepts (and not just boldness). Or two, that some questions were too vague and not suited for managers. Either way, in order to test the hypotheses a reliable boldness concept is required. So Cronbach’s Alpha needed to be improved.

A common technique to inflate $\alpha$ is to eliminate scale items (Kopalle & Lehmann, 1997). Many researchers do this. The trick is to remove the items that deteriorate $\alpha$ the most, because these are most likely to be the ones that fail to measure boldness. In addition to the first round, I ran 9 rounds to improve the initial $\alpha$ of .122 (Table 2). After the first elimination round (round 2), $\alpha$ nearly doubled. During the subsequent elimination rounds $\alpha$ kept drastically improving, till it reached .674. In the elimination round that followed up, $\alpha$ exceeded .7, reaching a value of .707. Though it was possible to even further improve $\alpha$, I deliberately chose not to. Eliminating another item would improve $\alpha$ only by .25, which would be a too minor improvement to consider. With eleven items of the original concept left, I now had an alpha above .7. In the new situation, I still covered all nine tendencies with at least one item. So all tendencies of the original boldness construct were still represented in the new construct.

It should be noted that dropping items to inflate $\alpha$ is only allowed when there is a logical reason underlying their removal. Put differently, trimming should pass theoretical/logical grounds (Kopalle & Lehmann, 1997). What is striking in this case is that all the items that were eliminated had one thing in common. They all were formulated in a way that portrayed a negative self-image or a weakness of the subject. This differentiated them from the other items in the questionnaire that, when agreed upon, contained a more positive message about the subject. For instance, “I get scared easily” (item 4), reflecting low courage, this item was dropped, but its counterpart “I’m afraid of far fewer things than most people” (item 10), reflecting high courage, was maintained. It is very plausible that negatively stated items evoked a different reaction from the subjects. Managers might simply agree more easily on a positive statement than disagree on a negative one. Which in turn would affect $\alpha$. 
### 6.2 Hypotheses testing

In order to test the hypotheses I conducted a series of 2-tailed Pearson Correlation tests. The results of these tests are summarized in a correlation matrix, which can be seen in Table 3. The Pearson correlation coefficient \( r \) is used to investigate and measure cohesion between two stochastic variables. It can be calculated using the following formula (Field, 2009):

\[
r = \frac{\sum_i (x_i - \bar{x})(y_i - \bar{y})}{(n - 1) s(x) s(y)}
\]

In this equation \( s(x) \) is the standard deviation of variable \( x \) and \( s(y) \) is the standard deviation of variable \( y \), whereas \( n \) stand for the number of subjects.

Correlation coefficients vary anywhere between -1 (negative correlation) and +1 (positive correlation). The size of the effect can be tested with a T-test. Like in most research, a significance level of .05 is used.

In this research there are six stochastic variables (boldness, absorbing uncertainty, framing, path clearing, commitment building and defining gravity). Since I try to discover a positive cohesion between the boldness construct and the entrepreneurial construct, five correlations are of special importance to me:

- Between boldness and building commitment (Hypothesis I)
- Between boldness and defining gravity (Hypothesis II)
- Between boldness and absorbing uncertainty (Hypothesis III)
- Between boldness and framing (Hypothesis IV)
- Between boldness and path clearing (Hypothesis V)

According to hypothesis I there should be a positive connection between boldness and building commitment. So the correlation between boldness and building commitment is also expected to be positive and significant. The data analysis shows a whole other story. Table 3 depicts a big and negative correlation of -.430. Providing no support for hypothesis I at all. Evidence for a connection in the other than predicted direction is very strong. With a possibility of .001 the correlation that was found is far beyond the .05 and
### Table 3. Correlations entrepreneurial leadership and boldness

<table>
<thead>
<tr>
<th></th>
<th>Boldness</th>
<th>Building commitment</th>
<th>Building gravity</th>
<th>Defining gravity</th>
<th>Absorbing uncertainty</th>
<th>Framing</th>
<th>Path clearing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boldness</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.430**</td>
<td>-0.654**</td>
<td>-0.353**</td>
<td>-0.293*</td>
<td>-0.470**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td><strong>Building commitment</strong></td>
<td>Pearson Correlation</td>
<td>-0.430**</td>
<td>1</td>
<td>0.610**</td>
<td>0.394**</td>
<td>0.475**</td>
<td>0.656**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td><strong>Defining gravity</strong></td>
<td>Pearson Correlation</td>
<td>-0.654**</td>
<td>0.610**</td>
<td>1</td>
<td>0.444**</td>
<td>0.470**</td>
<td>0.564**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td><strong>Absorbing uncertainty</strong></td>
<td>Pearson Correlation</td>
<td>-0.353**</td>
<td>0.394**</td>
<td>0.444**</td>
<td>1</td>
<td>0.515**</td>
<td>0.413**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td><strong>Framing</strong></td>
<td>Pearson Correlation</td>
<td>-0.293*</td>
<td>0.475**</td>
<td>0.470**</td>
<td>0.515**</td>
<td>1</td>
<td>0.396**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td><strong>Path clearing</strong></td>
<td>Pearson Correlation</td>
<td>-0.470**</td>
<td>0.656**</td>
<td>0.564**</td>
<td>0.413**</td>
<td>0.396**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).
.01 significance levels. Put differently, boldness reduces the likelihood of commitment building capabilities. This contradicts what was expected earlier. The counterevidence is very strong. In fact so strong, that hypothesis I can be rejected with a lot of confidence.

Next in line is hypothesis II, Hypothesis II suggests there has to be a positive relation between boldness and defining gravity. So as with the first hypothesis a positive correlation is expected. However, the correlation turned out to be negative as well. With a value of -.654 defining gravity had a very good correlation with the boldness construct, but very bad in terms of the predicted effect. This correlation far exceeded all significance levels and again the relation was in the opposite direction of what was expected in advance. This is why hypotheses II also had to be rejected.

Hypothesis III predicts a positive relation between the boldness construct and absorbing uncertainty. Put in other words; the correlation between boldness an absorbing uncertainty is expected to be positive and significant. Table 3 shows a correlation of -.353. This is quite high. With a chance of .007, r is significant for the .05 level and even for the .01 level. Again, this result suggests an effect in the opposite direction of the prediction, meaning high boldness would lead to a lack of absorbing uncertainty. For the third time in a row the counterevidence was substantial and as a consequence the third hypothesis can also be rejected with a lot of certainty.

In the fourth hypothesis, Hypothesis IV, a positive relation between boldness and framing is suggested. As with Hypothesis III, the observed direction of the effect is again inconsistent with the predicted direction. This time, Table 3 shows a correlation of -.293. This is somewhat smaller than the correlation between boldness and absorbing uncertainty. With a chance of .027 this correlation is significant at the .05 level, only not at the .01 level. Basically, this significant negative correlation means that a higher boldness rating will on average have a negative influence on the framing capability of the manager. Since the evidence is again very strong, hypothesis IV can also be rejected.

The final hypothesis, Hypothesis V suggests a positive relation between boldness and the entrepreneurial leadership facet; framing. However, the correlation that was calculated in research showed the effect to be the other way around. Table 3 reports a big and negative
correlation of -0.470. This is bigger than the previous two correlations that were discussed. As a result, this correlation far exceeds both the .05 and .01 significance levels. So in contrary to the hypothesis, the empirical evidence suggests that boldness will result in a manager/leader that is incapable (or less likely to be capable) of framing. There is nothing left to do than also rejecting the last hypothesis.

Taking a closer look at Table 3 all correlations that are reported turn out to be significant. It comes as no surprise that there are high and positive correlation among commitment building, defining gravity, absorbing uncertainty, framing and path clearing. This is because of the fact that they are part of the underlying entrepreneurial leadership concept and by theory should be connected. More surprisingly is that none of the five hypotheses that were formulated from theory, received support in reality. In fact, the correlations suggest the sign of the effect between boldness and entrepreneurial leadership, to be the other way around.
7. Discussion of the findings

The previous chapter showed that all of the five original hypotheses had to be rejected after careful examination. The results were far from what was expected in advance. However though, they were in no way dull. The test results are summarized in figure 3.

![Diagram showing the relationship between boldness and other variables]

Figure 3. Visualization of the five hypotheses combined with the test results (correlations).

The fact that the correlations between boldness and entrepreneurial leadership turned out to be negative instead of positive, made me have to reconsider the grounds/foundations of the hypotheses.

Initially, a positive relation was expected between boldness and building commitment. In order to built commitment, employees should feel (in some way) inspired by the manager. My reasoning was that boldness tendencies like self-confidence, dominance, social assurance and persuasiveness could help with this. However, I failed to account for the possibility that
these tendencies, when expressed strongly, might backfire on a leader trying to act entrepreneurial. Consider the following examples:

- A very self-confident individual could be seen as cocky.
- High dominance could come across as antisocial (especially when aggression is involved).
- Social assurance could be interpreted as negligence.
- Non-diplomatic persuasiveness could be seen as a sign of tactlessness.

It is not hard to imagine a scenario were cockiness, antisocial behavior, negligence and tactlessness might create envy towards the manager, his message and the tasks to perform. Employees would experience the bold manager as reckless and the manager in turn would fail to build any kind of commitment. Whether these interactions with employees will result in a negative correlation between boldness and entrepreneurial leadership will have everything to do with self-conscience of the manager involved. A bold but self-conscience manager would acknowledge the lack of entrepreneurial capabilities and would likewise rank himself/herself low on the questions about entrepreneurial leadership. This would explain the very high negative correlation between boldness and entrepreneurial leadership.

Similar reasoning can explain the other negative correlations as well. Recapture that an important part of defining gravity is to deploy optimism and expressing confidence in the cast of employees. Overall, optimism and self-confidence are considered to be a good thing, but when a manager is too optimistic and too confident this might trigger oppositional sentiments among his/her employees. For instance, a bold manager’s confidence in an optimistic target/outcome could be mistaken for wishful thinking or even overestimation of his/her leader capabilities. None of these would foster a manager’s task of defining gravity.

Over-optimistic behavior could also lead to resistance in case of a manager attempting to absorb uncertainty. The trick with absorbing uncertainty is to take away all paralyzing effects that employees encounter. In practice, a lot of these paralyzing effects are likely to be of psychological kind. It is very conceivable that there is a gap between an employee’s tolerance of uncertainty and a bold manager’s tolerance of uncertainty. The managers risk seeking behavior combined with optimism could then cause an adverse reaction of the risk
averse employees, further widening the gap. This process is better known as polarization. Polarization is a process through which individuals’ opinions diverge to the extremes. Polarization in uncertain situations is very common in small groups (Rothwell, 1986), like small business units.

When it comes to framing, it’s very important for the manager to find a balance between ambition and what is realistic. A frame should be formulated that is challenging but feasible. With tendencies like optimism, intrepidness and courage a bold manager might push the limits of his/her team too far. This in turn could induce reluctance, which would narrow down the frame.

Instead of optimism, I elected resilience and intrepidness to play a key role in path clearing. Both can help managers facing difficult problems along the road to success. However, high levels of resilience and intrepidness could also keep the manager from being flexible and making creative solutions that can benefit multiple parties. It’s also conceivable that resilience could lead to resistance in personal relationships. A bold manager that is very rigid in his/hers positions will not be able to convince others, or to make good compromises when needed. Altogether boldness would result in a low score on path clearing. Explaining the negative correlation between boldness and this entrepreneurial leadership facet.
8. Managerial implications

As mentioned before, the boldness construct used in this research is new to the field of economics and management. In order for the results to have some value, they should have external validity. The external validity is expected to be reasonable since actual business leaders (namely managers) were used in this research. Complementary research is needed to further strengthen the results of this study. Nevertheless, the obtained outcomes provide interesting initial insights for management.

It turned out that boldness wasn’t positively related to any of the five entrepreneurial leadership facets as formulated by Gupta and MacMillan (2004). As a matter of fact, analysis showed a significant negative relation between boldness and entrepreneurial leadership. So even though there were good reasons to suspect a positive relation between boldness and entrepreneurial leadership, this has led me to the suggestion that not boldness, but its counterpart is positively related to entrepreneurial leadership. Companies and recruiters looking for an entrepreneurial leader/manager should then aim at an individual who is far from bold.

If this were to be true an entrepreneurial leader would be the opposite of bold. The opposite of boldness is “timidity”. Though it’s not hard to recognize the usefulness of a calm and restful manager in turbulent business environment, I hardly doubt this person would be up to the job of engaging in it, grabbing the right opportunities and motivating his/her staff actively. Entrepreneurial leadership is by definition connected to assertive behavior. According to McGrath and MacMillan (2001) a critical hallmark of entrepreneurial leadership is its emphasis on discovery-driven action in the propensity to stop over-analyzing and getting started, aggressively using outcomes of earlier efforts to redirect and learn the way the real opportunity.

It’s more plausible that moderate forms of boldness may lead to entrepreneurial leadership. Consider for instance tolerance of uncertainty. Risk neutrality might be more entrepreneurial than risk seeking. Risk seeking behavior could come across as gambling. This might trigger reluctance of the employees. A more moderate bold manager would be better equipped to perform the task of being an entrepreneurial leader.
Moderation of boldness will also benefit the (self perceived) persuasiveness of the manager. Persuasiveness can be expressed in multiple ways. I pointed out that diplomatic ways of persuasiveness are overall more successful than pressuring. High levels of boldness might have more to do with pressure than diplomacy and this might in turn be one of the reasons it correlates negatively with entrepreneurial leadership roles.

As I showed the risk of a manager being too bold, an important task of the higher management could be to temper bold managers in order to prevent them from acting reckless or coming across as so. They should foster rationality and keep the manager from acting solely emotional. Higher management could do so by promoting the aggressive opportunity seeking behavior of a bold manager, while at the same time stimulating realism and self-criticism. Ultimately, this should enhance entrepreneurial leadership of the bold manager.
9. Conclusions

This study brought together two relatively new concepts, namely the boldness concept and the entrepreneurial leadership concepts. Before the relations between the two concepts could be measured the boldness concept had to be validated for a business setting. A new boldness concept was formulated that suited the business environment well. This concept contained all of the original nine tendencies of boldness.

Boldness comes from the triarchic concept of psychopathy. When combined with disinhibition and meanness, boldness is considered to be harmful to society. On its own boldness is probably the least harmful of the three. This let me to the proposition that in some situations or under some circumstances boldness can also be used for the good. This reasoning seemed to be supported by some of the tendencies making up the boldness construct, for instance; optimism, courage and self-confidence.

Intensive literature research suggested a positive relation between boldness and entrepreneurial leadership. Reasoning was that today’s turbulent business environment demanded a leader that aggressively pursued profitable opportunities. However, empirical research showed a whole other story. The negative correlations between boldness and ALL facets of entrepreneurial leadership imply that higher levels of boldness correspond to lower levels of entrepreneurial leadership. Meaning that boldness is not likely to result in entrepreneurial leadership.

Though the correlations show otherwise I still believe that boldness could assist a manager in being a good (entrepreneurial) leader. The no-nonsense approach of a bold manager should prevent against the risks of overanalyzing business options leading to an inadequate response or even status-quo. Boldness is said to be a phenotypic construct, meaning that boldness will result from an interaction between both genes and environmental influences. As a consequence, it might be possible to temper boldness, keeping it from turning into recklessness behavior and creating reluctance among employees and external parties. So in order for a bold manager to be an entrepreneurial leader he/she should receive some training. Potentially this could make the bold manager a better entrepreneurial leader than managers scoring low on boldness. However, further research will be needed to confirm such suggestions.
References


A Bold Entrepreneurial Leader


Hanft, A. The Risk of Doing Nothing. *Inc: The Magazine for Growing Companies*, 24 (13), 140-141


A Bold Entrepreneurial Leader


Appendix

Original boldness scale items:

1. I’m optimistic more often than not.
2. I have no strong desire to parachute out of an airplane. [reversed]
3. I’m well-equipped to deal with stress.
4. I get scared easily. [reversed]
5. I’m a born leader.
6. I have a hard time making things turn out the way I want. [reversed]
7. I have a knack for influencing people.
8. I function well in new situations, even when unprepared.
9. I don’t think of myself as talented. [reversed]
10. I’m afraid of far fewer things than most people.
11. I can get over things that would traumatize others.
12. It worries me to go into an unfamiliar situation without knowing all the details. [reversed]
13. I can convince people to do what I want.
14. I don’t like to take the lead in groups. [reversed]
15. It’s easy to embarrass me. [reversed]
16. I stay away from physical danger as much as I can. [reversed]
17. I don’t stack up well against most others. [reversed]
18. I never worry about making a fool of myself with others.
19. I’m not very good at influencing people. [reversed]

Revised boldness scale items:

1. I’m optimistic more often than not.
2. I have no strong desire to parachute out of an airplane. [reversed]
3. I’m well-equipped to deal with stress.
4. I’m a born leader.
5. I have a knack for influencing people.
6. I function well in new situations, even when unprepared.
7. I don’t think of myself as talented. [reversed]
8. I’m afraid of far fewer things than most people.
9. I can get over things that would traumatize others.
10. I can convince people to do what I want.
11. I never worry about making a fool of myself with others.

Absorbing uncertainty items:

1. I realize that the future can look different.
2. I have a vision about the way the future can change the existence of this formula.
3. I enhance my employees’ self-confidence by acting determined.
4. I try to show my employees how they can work differently.

Framing items:

1. I set high goals for my employees and encourage them to work hard.
2. I read and talk often about the future and make myself aware of what this can mean for my outlet.
3. I set high performance measures for my employees.
4. I continually try to improve my employees’ performance

Path clearing items:

1. I’m discreet and good at maintaining personal relationships with my employees.
2. I’m good at negotiating and handling things in a way other people will benefit too.
3. I’m strong at convincing other people of my opinion.

Building commitment items:

1. I can inspire employees to work hard.
2. I can inspire employees to take on better values.
3. I bring positive feelings to my employees by leading by example.
4. I stiffen my employees and strengthen their beliefs in themselves.
5. I can make employees work as a team.

Defining gravity items:

1. I decide quick and decisively.
2. I can make the employees at my outlet form a tight group.
4. I encourage employees to think critical and to use their common sense.