Thesis Executive Internal Audit Programme
University of Amsterdam, Amsterdam Business School

The persuasive internal auditor

A study on source personality of persuasive internal auditors



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Preface

The IIA ("Institute of internal auditors") in cooperation with the University of Amsterdam performed an exploratory research into personality traits of internal auditors in relation to specific aspects of their work. This research was led by projectleader Dr. J.R.H.J. van Kuijck RA RC (Director of Lime Tree Research and Education). This thesis is part of this project and describes the study on source personality traits of persuasive internal auditors.

I would like to thank my coach Dr. J.R.H.J. van Kuijck RA RC for giving me the opportunity to participate in this research and for his guidance and feedback during my dissertation trajectory.

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Management Summary

The main question to be answered in this thesis is:

Are persuasion related 'source' personality traits significantly represented within the population of internal auditors?

In order to being able to provide an answer for this problem definition, the main question was divided into the following three underlying research questions: (I) What is persuasion and what are personality traits?; (II) Which personality traits are related to persuasion?; (III) To what degree are these 'source' personality traits significantly represented within the population of internal auditors?

The first two questions were answered by conducting an extensive literature study (Chapter 2). The third research question was answered by the results of a field research (Chapter 3) conducted by the IIA ("Institute of Internal Auditors") in cooperation with the University of Amsterdam (UVA). The research conducted for this thesis is part of the above-mentioned wider research project and is therefore based on the same dataset. The data for this research was gathered by sending out the PfPI (survey to measure personality traits in a work related context) to all 2,518 members of the Dutch IIA division. A response rate of 12,4 % was achieved, as 312 respondents adequately filled out the survey. The scores of the internal auditors, were compared to a norm group of highly educated Dutch peers (311 respondents).

Persuasion

The literature study (Chapter 2) shows that persuasion ultimately leads to Target Attitude Change. The Yale communication-persuasion paradigm (Hovland et al. 1953) states that in the case of persuasive communication, a communicator (source) delivers a message over some medium to an audience (target) with the intent of producing some desired effect. These above-mentioned elements such as source, message, target & effect form the basic elements of persuasion. In this study therefore the following comprehensive definition of persuasion is used:

"Persuasion is an activity or process in which a communicator (source) attempts to induce a change in the belief, attitude, or behavior (effect) of another person or group of persons (target) through the transmission of a message (message) in a context in which the persuadee has some degree of free choice (non-coercive)." (Perloff, 1993, p. 15).

In the past decades a number of theoretical perspectives on the persuasion process have been developed. Among the more prominent and mostly used models within scientific literature are the Elaboration Likelihood Model, the Social Judgment Theory, the Cognitive Dissonance Theory and the Narrative Paradigm. The Elaboration Likelihood Model proved to be the most suitable theory, as it was the only model that covered all four elements of persuasion including the source characteristics. Therefore, the Elaboration Likelihood Model was used in this study as the theoretical framework for persuasion. The model suggests two possible routes to persuasion, the central route (high elaboration likelihood) and the peripheral route (low elaboration likelihood). In the central route, the quality of the message is the most determining factor of getting the target to change their mind. In the peripheral route to persuasion, it is not the quality of the message that will determine the target's

attitude change, instead peripheral cues play a dominant role in getting the target to change their mind. For example, rather than diligently considering the issue-relevant arguments, a person may accept an advocacy simply because the source is an expert and seems credible. These peripheral cues (e.g. source expertise & credibility) may shape or change attitudes without the need for engaging in any extensive thought about issue- or product relevant arguments (Petty et al., 1983)

Personality Traits

The literature study (Chapter 2) shows that "Personality traits are stable individual-difference constructs that reflect reliable and distinct habits, consistencies, or patterns in a person's thoughts, feelings, and behaviors over time and across situations" (Oswald, Hough, and Ock, 2013, p. 11). The "Big Five" is considered to be the primary organizing structure relied upon when conducting and considering personality research in organizational settings (Oswald et al., 2013). The Big Five were used to measure personality traits in this study. The Five Factor Model consist of five basic dimensions (Barrick & Mount, 1991, pp. 3-5), namely Emotional Stability, Extraversion, Openness to Experience, Agreeableness and Conscientiousness.

Personality traits related to persuasion

Finally, the literature study (Chapter 2) indicates that four of the Big Five dimensions are related to persuasiveness. Emotional Stability, and Conscientiousness were found to have a significant positive effect on persuasiveness in the central route to persuasion. Emotional Stability, Extraversion and Openness to Experience were found to have a significant positive effect on (perceived) persuasiveness in the peripheral route to persuasion. However, no direct link between Agreeableness and persuasion was found.

Personality traits of the population of internal auditors

The field research (Chapter 3) proved that all of the four persuasion related personality traits are indeed significantly represented within the population of internal auditors, when compared to the norm group of highly educated peers.

Overall Conclusion:

YES: Persuasion related source personality traits are significantly represented within the Dutch population of internal auditors.

Moreover, because of the fact that the internal auditors in this Dutch sample scored significantly higher on Emotional Stability, Extraversion, Openness to Experience and Conscientiousness than their highly educated peers, it can be stated that the personality traits of the internal auditors make them naturally well-equipped to being persuasive, being perceived as persuasive and creating a persuasive message of high quality.

Limitations mostly lie in the one-method research design, using the PfPI survey (or self report) as the only measurement for personality traits in this study. Recommendations for future research focus on considering i.e. comparing the personality traits of internal auditors to other (more persuasion related) norm groups and further exploring interesting differences regarding 'experience' and 'gender'.

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1 Introduction

1.1 Introduction

Driven by recent 'fraudulent' events, the past few years people have come to understand that, company culture, soft controls, tone at the top and integrity play an undeniable and even essential role in any control environment. Organizations may have designed the most well written procedures, preventive and monitoring controls yet they may all be negligible when the mindset and culture surrounding these internal controls, is lacking. Some well-known examples that illustrate the consequences of the absence of control awareness are the Deepwater Horizon oil spill (2006), the Enron affair (2001) and the more recent Libor scandal (2012) (BDO, 2014).

In adherence to the above mentioned events, it is no wonder that this has led to rising attention within the internal audit community. The reluctance of most internal auditors regarding audits on soft controls, culture and tone at the top stems from the fact that the underlying evidence for those topics is commonly less hard and intangible. The 'traditionally' educated internal auditor is taught that audit findings must purely be based on irrefutable facts. It can therefore be stated that auditing soft controls, cultural aspects and tone at the top poses a challenge. The more the audit findings are based on less tangible or even intangible evidence, the more insecure the internal auditor will feel when communicating the audit results to the auditee and other stakeholders.

However, auditing soft controls can be a challenge, a publication by the Chartered Institute of Internal auditors (2014) emphasizes the importance of this type of auditing:

"As organizations come under increasing pressure to demonstrate their commitment to improving standards of behavior, internal audit can be a key player in giving confidence to boards that measures put in place to change culture and thus behavior are actually working, and that the tone at the top is reflected at all levels." [...] "This takes the auditors beyond focusing on processes and controls and requires them to be comfortable with combining hard data with gut feel. They also need to have a different type of dialogue with the Audit Committee chair and/ or CEO, using more subjective judgements and requiring enhanced communication skills."

In short, the arguments underlying audit findings regarding aspects of culture, soft controls and tone at the top are based on evidence (mostly intangible) and gut feel. This makes it more difficult for the internal auditor to persuade management that these culture related findings are an undeniable risk for the organization and action is needed. This shift implies that something extra is required of the internal auditor, in addition to merely bringing great arguments and hard evidence to the fore. That is, the internal auditor must possess strong communication skills and a high level of persuasiveness in order to convince management that cultural change is necessary.

Nevertheless, this does not mean that the level of an internal auditor's persuasiveness is of less importance when hard evidence is plentiful. Even when there is no discussion regarding the underlying facts, the way in which, and to what extent management undertakes action, remains a crucial question. After all, audit findings and recommendations create no value for the organization, when management decides not to take proper action. Marks (2014) states that not following up on reported findings may be explained in several ways. Management may not act based upon the costs involved

in corrective action, may disagree with the level of risk associated with the finding or simply does not grant it priority. Or even worse: Management may not understand the report. Marks then concludes that "The client's failure to act reflects internal audit's inability to sell its findings and persuade management to make timely changes. Internal auditors need to convince managers that action is necessary, appropriate, and in some cases, urgently required". At the very least, Marks points out that simply stating facts and leaving the interpretation of these facts to management undermines the Auditors' responsibility to persuade management of the true meaning of a finding.

1.2 Persuasion

Throughout this thesis the following definition will be applied for the term "persuasion":

"Persuasion is an activity or process in which a communicator (source) attempts to induce a change in the belief, attitude, or behavior (effect) of another person or group of persons (target) through the transmission of a message (message) in a context in which the persuadee has some degree of free choice (non-coercive)." (Perloff, 1993, p. 15).

As already described in the previous section (1.1), persuasiveness can be seen as a very important competence for every internal auditor in order to effectively communicate audit findings specifically regarding audit objects such as culture, soft controls and tone at the top. Additionally, persuasiveness is needed in order to get management to really understand the underlying risks and ultimately to get management to take adequate actions to mitigate the identified risks.



importance of persuasion to the internal audit profession.

The Global Internal Audit Competency

Correspondingly, the IIA (2013) underlines the

The Global Internal Audit Competency Framework (IIA, 2013) describes the internal audit competences needed in order to comply with the IIA standard (IPPF). The importance of persuasion as a part of the internal audit profession is stated as follows:

 $\hbox{``Internal auditors need to be competent in ``Communication', Persuasion', Collaboration'', and ``Critical''}$

Thinking" in order to deliver internal audit engagements, and drive improvement and innovation in an organization" (IIA, 2013, p.3).

Additionally, when reviewing job vacancies for internal auditor positions it also becomes apparent that in nearly every vacancy "persuasiveness" is mentioned as a required key competence for the candidate. To give an impression of the required profile for an internal Audit candidate, one of the many descriptions found on the internet is quoted: "When an audit subject is deemed inadequate improvement is absolutely necessary. In order to stimulate change in an organization, an Auditor must possess certain social skills; he must be able to change people's thinking. More specifically their perception of the world surrounding them. This requires the internal auditor to engage in real

conversations. The role of the internal auditor as Police Officer is outdated and communication skills, persuasiveness and perseverance are a requirement" (www.robertwalters.nl).

Consequently, persuasiveness can indeed be seen as an essential part of the toolset for any internal auditor. This in turn leads to the following question: Which personality traits are involved in determining ones persuasiveness?

1.3 Problem definition and research questions

In persuasion, the message itself (content, arguments, evidence) and the manner in which the message is presented by the persuader (communication skills, personality) are key elements to get others to change their minds. "In persuading people to change their minds, great arguments matter. No doubt about it. But arguments, by definition, are only one part of the equation. Other factors matter just as much, such as the persuader's credibility and his or her ability to create a proper, mutually beneficial frame for a position, connect on the right emotional level with an audience and communicate through vivid language that makes arguments come alive" (Conger, 1998). Inspired by Congers' ideas this thesis shall not focus on theories regarding the message itself, how it is proven by audit-evidence and supported by argumentation. Instead, this thesis shall give an in-depth analysis of the personality traits an internal auditor should possess in order to be persuasive.

Subsequently, the main question to be answered in this thesis is:

Are persuasion related 'source' personality traits significantly represented within the population of internal auditors?

In order to being able to provide an answer for this problem definition, the main question was divided into three underlying research questions:

- 1) What is persuasion and what are personality traits?
- 2) Which personality traits are related to persuasion?
- 3) To what degree are these 'source' personality traits significantly represented within the population of internal auditors?

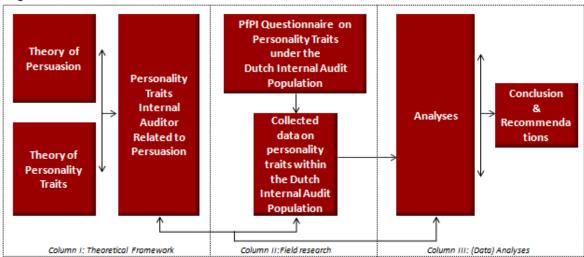
1.4 Approach and methods

The IIA ("Institute of internal auditors") in cooperation with the University of Amsterdam performed an exploratory research into personality traits of internal auditors in relation to specific aspects of their work. This research was led by project leader Van Kuijck (Director of Lime Tree Research and Education). This thesis is part of this project. As of yet, no research has been performed in order to measure the representation of personality traits related to persuasion among internal auditors. Therefore, this explorative research can, for example, be an aid in the process of recruiting internal auditors and Chief Audit Executives where the need for persuasion exists. At the same time, this research may help to explain why internal auditors may struggle when it comes to persuasion while practicing their profession.

This thesis consists of three main parts; the theoretical framework (I), the field research (II), and the analysis (III). The theoretical framework is constructed through literature review on persuasion and personality (research question 1), aiming to connect these topics (research question 2). Resulting from this literature framework, hypotheses are formulated which in turn will be statistically tested.

The field research is based on a questionnaire which has been specifically designed for gathering information on personality traits within a working environment. This questionnaire, the PfPI, is a reliable scientifically sound method with which the personality traits of internal auditors have been measured. Every internal auditor associated with the IIA Netherlands (2,518 members) has been requested by e-mail to fill out this questionnaire in the form of a web survey. After collecting the raw quantitative data, regarding the personality traits of Dutch internal auditors, the data will be statistically analyzed in order to answer the formulated hypotheses (research question 3). As a result, the main question regarding the degree to which source personality traits, related to persuasion, are significantly represented within the Dutch internal audit population will be answered. Figure 1.1 represents the research model that forms the basis of this study.

Figure 1.1



1.5 Structure of this thesis

Chapter 2 contains the literature review in order to provide the theoretical framework of this thesis. Thus providing an in depth analysis of both persuasion and personality traits and the relationship between them. This forms the basis upon which the hypotheses are formulated.

Chapter 3 contains an extensive review of the field research which has been conducted for this thesis. The methodology is discussed, followed by a description of the statistical analysis.

Finally, conclusions, limitations and recommendations for additional research are included in chapter 4.

2 Theoretical Framework

2.1 Introduction

Chapter 2 contains an extensive review of literature in order to provide a scientific context for the quantitative section of this thesis. It will explain how persuasion and personality traits can be defined and should be perceived in the context of this thesis. It shall also link these two topics in order to understand exactly which personality traits are considered to have an impact on the persuasiveness of any given individual. Subsequently, this insight will be used in order to formulate the hypotheses of this thesis.

At first, the concept of persuasion will be elaborated on. In section 2.3 persuasion is placed within the bigger context of social influence. In section 2.4 attitude change is explained. Also the definition of persuasion is provided in this section. In section 2.5, four commonly used models of persuasion are discussed. Finally, after thorough consideration, one model is chosen to be used as the central theoretical framework for persuasion throughout this thesis.

Subsequently, in section 2.6 personality traits are defined. Thereafter, the fundamental difference between personality traits and competences are elaborated on in section 2.7. This understanding is desired as a basis for the next session 2.8, which explores the relationship between each personality trait of the Big Five and persuasion.

At last, in section 2.9 the findings concerning the relationships between the Big Five personality traits and persuasion are summarized, and consequently hypotheses regarding these relationships are formulated.

2.2 Social Influence & persuasion

Every day of our lives we are inundated with influence attempts of those around us. A common phenomenon also known as social influence. DeLamater et.al (2015) describe that social influence occurs when "one person (the source) engages in some behavior (such as threatening, promising, issuing orders or persuading) that causes another person (the target) to behave differently as he or she would otherwise behave". This definition entails multiple forms of social influence, including (I) compliance with threats and promises, (II) obedience to authority and (III) the use of persuasive communication leading to attitude change. Thus, persuasion can be viewed as part of an overarching concept called social influence and represents just one way to influence others. Although this study focuses on persuasion as a form of social influence, a description of the other forms of social influence is given below in order to better understand the conceptual context of persuasion as well as the fundamental differences between the forms of social influence.

DeLamater et al. (2015, p. 325) define compliance as "behavioral conformity by the target to the source's requests or demands". The main focus is getting the target to behave in a desirable way. Making promises or threats are two widely used influence techniques to achieve compliance from the target (French & Raven, 1959). A promise is a statement from one person (the source) to another (the target) that is similar to, "If you do X [which I want], then I will do Y [which you want]" (DeLamater et

al., 2015, p328). The greater the size of the reward promised by the source, the greater the likelihood of compliance by the target (Lindskold & Tedeschi, 1971).

A threat is similar to a promise, except that it involves punishment instead of rewards. A threat generally takes the form of, "If you don't do X [which I want], then I will do Y [which you don't want]" (DeLamater et al., 2015, p. 328). Compliance with threats corresponds directly with the size of the penalty (DeLamater et al., 2015).

When individuals occupy roles within a group, organization, or a larger social system, they accept certain rights and obligations. "Authority refers to the capacity of one group member to issue orders by invoking rights vested in his or her role. In exercising authority, the source invokes a norm and, thereby, obliges the target to comply." (DeLamater et al., 2015, p 332-333).

Social influence based on compliance and authority are fundamentally different from persuasion. When using persuasion the source tries to change the way a target views the situation (attitude change). Whilst in the cases of inducing compliance (through threats and promises) and obedience (through authority) only behavioral change is gained, irrespective of whether the target's beliefs and attitudes have changed (DeLamater et al.,2015). In the next section, persuasion will be described in more detail.

2.3 Attitude change and persuasion defined

Persuasion is part of daily life as it takes a central role in human interactions and exchanges. Oreg and Sverdlik (2014) describe in their article that persuasion is considered to be essential in a diversity of contexts, such as the work setting (e.g. Hogan, et al. 1992), the educational field (e.g. Hynd, 2001), the political arena (e.g. Barker, 2005) and marketing (e.g. Karmarkar & Tormala 2010). But what is persuasion and how does the persuasion process work?

As discussed in the previous section, persuasion fundamentally differs from other forms of social influence such as compliance and authority. In contrast to compliance and authority, when using persuasion the source tries to change the way a target views the situation, and thus persuasion ultimately leads to attitude change. As "attitude change" can be seen as the primary objective of persuasive communication, many persuasion theories are concerned with attitude change. So it is important to explain what is meant by the term 'attitude' and thus 'attitude change' before exploring the concept of persuasion in more depth.

An attitude is a "relatively enduring predisposition to respond favorably or unfavorably toward something" (Simons, 1976, p.80). We have attitudes toward people, places, events, products, policies, ideas and so forth (O'Keefe, 1990). "Attitudes are learned evaluations; they are not something people are born with. As such attitudes are changeable" (Dainton & Zelley, 2005, p.104). Finally and most importantly in regard to persuasion, attitudes are presumed to influence behavior. The theory of reasoned action (TRA) (Fishbein, 1976) and the theory of planned behavior (TPB) (Aijzen, 1991) focus on individual factors as determinants of the likelihood of specific behaviors. Both theories assume that the best predictor of a behavior is intention, which is determined by attitudes toward and social normative perceptions regarding the behavior.

Persuasion defined

Trenholm (1989) describes persuasion as "symbolic and noncoercive", "creating, reinforcing, or changing responses", "transactional" and "ubiquitous". Apart from Trenholm's somewhat vague description of characteristics of persuasion, a variety of more detailed definitions can be found in scientific literature. A few basic elements can be drawn from these various definitions, which can at best be explained using a general model of communication and attitude change, namely the Yale communication-persuasion paradigm. This model has been developed by Hovland et al. (1953). The basic idea is that in a persuasive communication, a communicator (source) delivers a message over some medium to an audience (target) with the intent of producing some desired effect. These abovementioned elements such as source, message, target and effect are the basic elements of the communication-persuasion paradigm (DeLamater et al., 2015).

O'Keefe (1990) finds a quite similar set of elements relevant for the concept of persuasion. He states that there are requirements for the source (sender), the means (message), and the target (recipient) to consider something persuasive. First of all, the source must have the intention to achieve a specific goal. Second, the sender uses communication (persuasive message) to achieve this goal. Last, the target must have a certain amount of autonomy and freedom. Threatening someone in order to achieve compliance (an earlier mentioned type of social influence) is not considered to be persuasion but force (Dainton & Zelley, 2005).

Thus, a comprehensive definition of persuasion should to some extent capture the four basic elements of persuasion, the source, the message, the receiver and the effect. As a consequence, the following definition of persuasion is used:

"Persuasion is an activity or process in which a communicator (source) attempts to induce a change in the belief, attitude, or behavior (effect) of another person or group of persons (target) through the transmission of a message (message) in a context in which the persuadee has some degree of free choice (non-coercive)." (Perloff, 1993, p. 15).

2.4 Theories of persuasion

In the previous section the four basic elements of persuasion are identified and a definition of persuasion is formulated. Yet the definition alone does not provide us with sufficient understanding of how the process of persuasion works. In the past decades a number of theoretical perspectives on the persuasion process has been developed. Among the more prominent and mostly used models within scientific literature are the Elaboration Likelihood Model and the concept of Social Influence (section 2.4.1), the Social Judgment Theory (section 2.4.2), the Cognitive Dissonance Theory (section 2.4.3), and finally the Narrative Paradigm (section 2.4.4). Finally, in section 2.4.5 a summary of the theories in terms of their focus on the basic elements of persuasion is given. Consequently one model is chosen and used as the central theoretical framework for persuasion throughout this thesis.

2.4.1 Elaboration Likelihood Model

The Elaboration Likelihood Model (ELM) was developed and introduced by Petty and Cacioppo (1981). According to the ELM, persuasion is primarily a cognitive event, meaning that the target uses mental processes (or lack thereof) to either accept or reject a persuasive message (Dainton & Zelley, 2005). Previous to the ELM, none of the theories of persuasion offered a comprehensive view of attitude

change (Petty & Cacioppo, 1983). An enormous amount of ELM literature is available, with more than 125 articles and chapters in the advertising and marketing literature since 1981 (Schuman et al, 2012). Petty and Cacioppo (1986) state that the ELM is applicable to a variety of source, message, receiver and context variables. As a "respected" (Karson & Kargaonkar, 2001) and "widespread" framework (Morris et al., 2015) the model is often used by advertising researchers when studying target attitude change.

ELM describes persuasion as a process in which the success of the influence attempt is largely determined by the way the target makes sense of the message (Dainton & Zelley, 2005). The model suggests two possible routes to persuasion, the central route (high elaboration likelihood) and the peripheral route (low elaboration likelihood). Petty and Cacioppo make it clear that the central and peripheral route are not mutually exclusive, but that they represent positions on a continuous dimension ranging from low to high elaboration likelihood. Furthermore, the ELM shows that the route to persuasion is dependent on a person's motivation and ability.

"The central route views attitude change as resulting from a person's diligent consideration of information that the target feels is central to the true merits of a particular attitudinal position" (Petty et al. 1983, p. 135). The actual content of the persuasive message is what leads to attitude change through the central route. Centrally routed messages should include strong arguments, a lot of information, and hard evidence to support the advocated position (Dainton & Zelley, 2005).

"When conditions increase the likelihood for central processing, characteristics that increase the quality of the source's arguments (e.g. cognitive ability) should be most relevant" (Oreg & Sverdlik, 2014, p. 253). Persuasion through the central route is assumed to be relatively enduring and predictive of behavior (Petty et al., 1983). The central route to persuasion will only occur when the target is both motivated and able to cognitively process all of the information being given (Dainton & Zelley, 2005).

"Attitude changes that occur via the peripheral route to persuasion do not occur because an individual personally considered the pros and cons of the issue. Attitude change occurs because the issue is associated with negative or positive cues, or because the person makes a simple inference about the merits of the advocated position based on various simple cues in the persuasion context. For example, rather than diligently considering the issue-relevant arguments, a person may accept an advocacy simply because it was presented during a pleasant lunch or because the source is an expert. These peripheral cues (e.g. good food, and source expertise) may shape attitudes or allow a person to decide what attitudinal position to adopt without the need for engaging in any extensive thought about issue-or product relevant arguments" (Petty et al. 1983, p. 135-136). These peripheral cues (e.g. the appearance, credibility and expertise of the source) lead to attitude change through the peripheral route (Oreg & Sverdlik, 2014). The peripheral route to persuasion thus stresses fleeting emotional responses and is likely to create temporary attitude change (Dainton & Zelly, 2015). The peripheral route is likely to occur when the target is unmotivated and unable to cognitively process all of the information being given (Dainton & Zelley, 2005).

It can be concluded that Petty and Cacioppo's Elaboration Likelihood Model focuses on all four of the earlier described basic elements of persuasion, namely:

1. The source:

Peripheral cues (unrelated to the message itself) such as source credibility, source expertise and source attractiveness are important when persuasion occurs through the peripheral

route. It is therefore important to take the effects of the source characteristics into account when preparing a persuasive attempt, especially when the motivation and or ability of the target is low or unknown.

2. The message:

When elaboration likelihood is high, the strength of the message arguments are most important. However, when elaboration likelihood is low, the target is relatively unaffected by the strength of the message arguments.

3. The target:

The motivation and ability of the target determines whether the central or the peripheral route will be taken. It is therefore important to assess the motivation and ability of one's target when preparing a persuasive attempt.

4. The effect of the message:

The effect of the message can either be strong (central route) or weak (peripheral route).

2.4.2 Social judgment theory

The Social Judgment Theory (SJT) developed by Sherif and Hovland (1961) focuses on people's assessment of persuasive messages. The theory suggest that people make evaluations (judgments) about the contents of messages based on their attitude towards a particular topic (Sherif & Hovland, 1961; Sherif et al, 1965). So when trying to persuade someone it can be very helpful to know that person's attitude on a specific topic in advance (Dainton & Zelley, 2005).

According to Sherif and Hovland (1961) each person's attitude can be placed into three latitudes on a (one-dimensional) attitude dimension. First, there is the latitude of acceptance (opinions with which the person agrees). Second, there is the latitude of rejection (opinions with which the person disagrees). Finally, there is the latitude of non-commitment (opinions with which the person neither agrees nor disagrees). A person's reaction to a message depends on the level of ego-involvement (Dainton & Zelley, 2005) and subsequently on his or her position on the topic (Sherif & Hovland, 1961). O'Keefe (1990) states that a person is considered to be highly ego-involved with a topic, when the topic has personal significance (it is important to that person) and the person holds a passionate position. Dainton and Zelley (2005) states that the more ego-involved a person is, the larger the latitude of rejection and the smaller the latitude of non-commitment of that person will be.

Messages that fall within the receiver's latitude of acceptance will be viewed positively and are supposed to be assimilated. This assimilation effect means that "the receiver subconsciously minimizes the difference between the message's position and his or her own position" (Dainton & Zelley, 2005, p. 108). In the case of assimilation, an attitude change in the direction of the persuasive message does not take place (Siero & Doosje, 1993).

Messages that fall within the receiver's latitude of rejection will be viewed negatively and are supposed to be contrasted. This contrast effect means that a persuasive message is perceived as further away from that person's attitude than it actually is. "The receiver subconsciously exaggerates the difference between the message's position and his or her own position" (Dainton & Zelley, 2005, p. 108). When messages are contrasted, they hardly ever result in an opinion shift (O'Keefe, 1990).

Messages that fall in the latitude of non-commitment probably will not be assimilated or contrasted, and are therefore likely to generate opinion shifts in the direction of the persuasive message (Siero & Doosje, 1993). In summary, people make evaluations of a message and place them within their attitude map. When a message falls into their latitude of non-commitment they are likely to be persuaded. Highly ego-involved people are less likely to be persuaded because they have a larger latitude of rejection, and a smaller latitude of non-commitment.

To summarize, Sherif and Hovland's Social Judgment Theory, mainly focuses on three of the basic elements of persuasion, namely:

1. The message:

The message will be evaluated in terms of perceived distance to existing attitudes.

2. The target:

The target can have different levels ego-involvement and latitudes towards a topic.

3. The effect of the message:

A person is persuaded when the message falls within the latitude of non-commitment or at the edges of the latitude of acceptance. A message that falls within the latitude of rejection will not effect in persuasion.

This theory doesn't specifically focus on the source of the persuasive message. As described earlier in this thesis, the source does represent a basic element of persuasion and fulfills a central role in this study (source's personality traits).

2.4.3 Cognitive Dissonance Theory

The Cognitive Dissonance Theory (CDT) is developed by Festinger (1957, 1962). Festinger states that people use schemata (cognitive structures) to organize new information. When the newly presented information is not consistent with our existing attitudes (beliefs) people will experience an unpleasant feeling of discomfort and dissonance (Festinger, 1957). Festinger also beliefs that people will feel so uneasy with the fact that their actions are not congruent with their attitudes, that they will attempt to restore the balance between thought and action in order to minimize the feeling of dissonance. To restore consonance the person may change his or her beliefs or behaviors (Festinger, 1957).

Dainton and Zelley (2005) strikingly describes the CDT as follows; "CDT focuses primarily on an individual's psychological response to inconsistencies in beliefs and actions. Because dissonance produces stress, human beings seek to maintain consonance or the appearance of consonance whenever possible. This adverse effect may mean changing one's behaviors or realigning one's beliefs through some kind of rationalization. Although often a post-reactive approach, communicators can use this knowledge of CDT to better target their persuasive messages. By offering a solution, product or course of action that bridges that gap between receivers' incongruent beliefs and behaviors, communicators may influence receivers to use methods to create cognitive harmony".

It can be concluded that the Festinger's Cognitive Dissonance Theory mainly focuses on three of the basic elements of persuasion, namely:

1. The message:

Persuaders can better target their persuasive messages, by for instance providing a solution for solving the feeling of dissonance.



2. The target:

The target can experience feelings of discomfort and dissonance that motivates action to (re)create consonance.

3. The effect of the message:

When dissonance is created and a solution to resolve the dissonance is provides, the receiver is likely to change his or her beliefs or behaviors.

Similar to the Social Judgment Theory (SJT), the Cognitive Dissonance Theory (CDT) pays no specific attention to the source or the required characteristics of the source. It only provided the source with some guidance on how to effectively shape a persuasive message.

2.4.4 Narrative Paradigm

The narrative paradigm is developed by Fisher (1984). Fisher argues that human beings are homo narrans, or storytelling creatures. Therefore Fisher (1984) states that the most persuasive or influential message is not that of a rational fact, but instead a narrative that convinces us of "good" reason for engaging in a particular action or belief.

According to Fisher (1984, p7-8) five presuppositions structure the narrative paradigm. "First, humans are essentially storytellers. Second, communication is based on the logic of 'good reason' which varies in form among communication situations, genres and media. Third, the production and practice of good reason is ruled by matters of history, biography, culture, and character. Fourth, rationality is determined by the nature of persons as narrative beings- their inherent awareness of narrative probability, what constitutes a coherent story, and their constant habit of testing narrative fidelity, whether the stories they experience ring true with stories they know to be true in their lives (narrative probability and narrative fidelity). Finally, the world is a set of stories, which must be chosen among, to live the good life in a process of continual recreation".

The narrative paradigm contrasts with a typically Western model of communication known as the Rational Paradigm. (Dainton & Zelley, 2005). Table 2.1 presents the contrast between Fisher's narrative paradigm and the rational paradigm.

Furthermore, Fisher advocates a more integrated perspective in which humans are seen as both rational and narrative, rather than either one (Dainton & Zelley, 2005).

Table 2.1 Comparing the Narrative and Rational World Paradigms

Narrative Paradigm	Rational World Paradigm			
Humans beings are storytellers.	Humans beings are rational.			
Communication, persuasion, and decision making are based on the logic of good reasons.	Communication, persuasion, and decision making are based on sound arguments.			
 What one accepts as "good reasons" is determined individually by a person's culture, character, experiences, and values. 	Strong arguments adhere to specific criteria for soundness and logic (e.g., Aristotle's use of the enthymeme).			
 Rationality is based on one's awareness of how consistent and truthful a story appears when compared with one's own (and others') lived experiences. 	 Rationality is based on the accuracy of information presented and on the reliability of the reasoning processes used. 			
 People experience the world as a series of stories from which we choose. As we make these choices, we create and recreate reality. 	 The world and reality can be viewed as a series of logical relationships that are revealed through reasoned argument. 			

Reprinted from "Applying Communication Theory for Professional life (page 128), by Dainton, M. & Zelley, E.D., 2005, Thousand Oaks, California; Sage Publications, Inc. Copyright 2005 by the Sage Publications, Inc.

Fisher (1987) states that logos (rational arguments) have been unjustly treated as the most important determinant of rationality. The narrative paradigm assumes that not many things in our social worlds can be understood by facts alone, and that the way people see the world is always subjective, based on their own individual characteristics, values and experiences (Daintion & Zelley, 2005). And so, the narrative paradigm does not exclude logos (Fisher, 1987), but makes us aware that mythos (narratives) and ethos (emotional appeals) are more meaningful to humans and therefore more persuasive.

It can be concluded that Fisher's Narrative Paradigm mainly focuses on three of the basic elements of persuasion, namely:

1. The message:

The message should be a narrative (story), rather than an enumeration of facts and arguments.

2. The target:

The target is perceived as a narrative being, making decisions based on the logic of good reason.

3. The effect of the message:

A person accepts (or rejects) another's narrative based on the perceived narrative fidelity and narrative coherence.

The Narrative Paradigm however doesn't explicitly focuses on specific requirements regarding the source of the narrative.

2.4.5 Summary

In the previous sections four models of persuasion are discussed. Each section ended with a concluding description of the theory in terms of its focus on the basic elements of persuasion. Table 2.2 summarizes these conclusions. The figure shows that the Elaboration Likelihood Model is the only theory that explicitly states that the source characteristics (credibility, expertise and attractiveness) are relevant in the process of persuasion.

Table 2.2 Main focus of theories of persuasion with regard to the four basic elements of persuasion

Theory of Persuasion	Section	Source	Message	Target	Effect
Elaboration Likelihood Model	2.4.1	V		V	
Social Judgment Theory	2.4.2	X			
Cognitive Dissonance Theory	2.4.3	×			
Narrative Paradigm	2.4.4	×			

As the source personality traits related to persuasion are the main focus of this study, the Elaboration Likelihood Model proves to be the most suitable theory. Therefore, the Elaboration Likelihood Model will be used as the theoretical framework for persuasion in this study, and will be elaborated on in the next section.

2.5 The Elaboration Likelihood Model in more detail

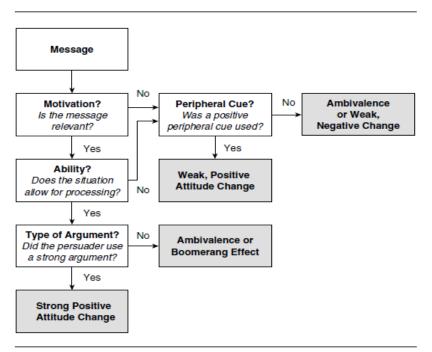
In the previous section, the ELM is argued to be the best fitting framework for the purpose of this study. Therefore, in this section, the model is described in more detail followed by an elaboration on the ELM in relation to the internal audit profession.

As explained earlier in section 2.4.1, the ELM shows that persuasion can take place via two different routes, the 'central' and the 'peripheral route. Furthermore, the model suggests that, the route to persuasion is dependent on a person's motivation and ability.

"The central route views attitude change as resulting from a person's diligent consideration of information that the target feels is central to the true merits of a particular attitudinal position" (Petty et al. 1983, p. 135). The actual content of the persuasive message is what leads to attitude change through the central route. Centrally routed messages should include strong arguments, a lot of information, and hard evidence to support the advocated position (Dainton & Zelley, 2005). The central route is likely to occur when the target is motivated and able to cognitively process all of the information being given (Dainton & Zelley, 2005).

In the peripheral route peripheral cues (e.g. the appearance, credibility and expertise of the source) lead to attitude change (Oreg & Sverdlik, 2014). The peripheral route to persuasion thus stresses fleeting emotional responses and is likely to create temporary attitude change (Dainton & Zelley, 2005). The peripheral route is likely to occur when the target is unmotivated and unable to cognitively process all of the information being given (Dainton & Zelley, 2005).

Figure 2.1 Elaboration Likelihood



Reprinted from "Communication and Persuasion (p.4) by R.E. Petty and J.T. Cacioppo, 1986, New York: Springer-Verlag. Copyright 1986 by Springer-Verlag New York Inc.

Both routes to persuasion are represented in figure 2.1. The top-down route passing 'Type of argument?' represents the central route to persuasion ultimately leading to strong and positive attitude change. The route that at some point follows an arrow from the left to the right and then passing 'Peripheral cue?' represents the peripheral route, ultimately leading to weak yet positive attitude change. In short, the message quality is what leads to target attitude change through the central route. On the other hand peripheral cues lead to target attitude change through the peripheral route (Oreg & Sverdlik, 2014). The fundamental elements within the Elaboration Likelihood Model (motivation, ability, message quality and peripheral cues) will now be discussed separately in more detail.

Message quality (Central Route)

In the central route, the quality of the message is the most determining factor of getting the target to change their mind. Strong arguments generate a positive cognitive response in the target's mind, and at the same time positively align the target's beliefs with the beliefs of the sender (Petty & Cacioppo, 1986). Weak arguments, on the other hand, generate a negative cognitive response to a message. This negative response can have a reverse effect by actually reinforcing beliefs opposite to the beliefs of the sender.

Peripheral Cues (Peripheral Route)

The peripheral route to persuasion requires little cognitive effort. Instead peripheral cues such as source credibility, source attractiveness, source expertise and heuristics are determinant in persuasion (Petty and Cacioppo, 1983). In addition, Cialdini (2001) states "that persuasion works by appealing to a limited set of deeply rooted human drives and needs and does so in predictable ways.



Persuasion in other words is governed by basic principles..." (p. 74). Dainton and Zelley (2005) regard these principles as being examples of peripheral cues described in the ELM. Cialdini (2001, p. 74-78) presents in his article six peripheral cues, namely the principles of:

Liking People like those who like them
 Authority People comply with experts

3. Reciprocity People give back what they receive

4. Social Proof People follow their peers

5. Consistency People align with their commitments6. Scarcity People want more of what is scarce

Motivation

The route to persuasion is dependent on the target's level of motivation. In order to create a strong positive attitude change the target must be highly motivated to process all the information being given. An individual's motivation can be affected by multiple factors such as (Petty & Cacioppo, 1983):

The level of involvement:

Although there are many definitions of involvement Petty, Cacioppo and Schumann (1983) follow the considerable agreement under researchers that "high involvement messages have greater personal relevance and consequences, or bring forth more personal associations than low involvement messages" (p. 136).

When targets are personally involved in a given issue and find it very important, they are more likely to process information centrally. Which means that message is put under increased scrutiny. Contrarily, in the case of low involvement, information processing is more likely to be peripheral. In this case peripheral cues such as source credibility and attractiveness will carry more weight than the actual content of the arguments (Petty et al. 1983).

The need for cognition:

Cacioppo et al. (1996, p. 198) describe individuals with a high need for cognition as "proposed to naturally tend to seek, acquire, think about, and reflect back on information to make sense of stimuli, relationships, and events in their world". On the contrary, individuals low on need for cognition are "characterized as more likely to rely on others (e.g., celebrities and experts), cognitive heuristics, or social comparison processes to provide this structure".

Thus, targets scoring high on the need for cognition are more likely to think about the content of the message (arguments) and more likely to ignore the peripheral cues (Haugvedt & Petty, 1992). Subsequently, the opposite is also true; targets scoring low on the need for cognition are less likely to think about the content of the message (arguments) and are more likely to use peripheral cues.

Ability

The route to persuasion is also dependent on the target's ability. In order to create a strong positive attitude change the target must have (in addition to high motivation) the ability to process the message cognitively. The ability of a person can be affected by multiple factors such as, the level of distraction, the complexity of the message and the level of familiarity with the topic (Petty & Cacioppo, 1983).

ELM and professional practice of internal auditing

As all of the fundamental elements of the ELM are described in more detail, it is now time to elaborate on the ELM within the work context of an internal auditor.



In his or her work, an internal auditor comes across different stakeholders, namely Audit Committee, Executive Board, Line Management, Assurance Functions and External Auditors and Supervisors (IIA Position Paper, 2008).

When the internal auditor needs to persuade one of these stakeholders (e.g. to take action in order to mediate risks) the internal Auditor would be wise to assess how motivated and able the particular stakeholder is. Dependent on the outcome of the expected level of motivation and ability, the internal auditor can focus on the relevant variables of either the central or the peripheral route.

From an ELM perspective, in case the motivation and ability of the target is low, the internal auditor should mainly focus on peripheral cues in order to create a positive attitude change, because in the peripheral route to persuasion, little attention is given to the quality of the arguments and underlying evidence. However, an internal auditor must work in accordance with the IIA International Standards for the Professional Practice of internal auditing, which defines guidelines for the effective internal auditor in respect to 'The quality of communications'. The standards prescribe that "Communications need to be accurate, objective, clear, concise, constructive, complete, and timely" (Performance standard 2420, www.theiia.org). It can be argued that simply following the guidelines for 'The quality of communications 'shall not always be sufficient for achieving attitude change.

At the same time, it is important for the internal auditor to understand, that although the peripheral route to persuasion demands focus on merely peripheral cues, they must always provide accurate, objective, clear, concise, constructive, complete, and timely communications.

2.6 Personality traits defined

"Personality traits are stable individual-difference constructs that reflect reliable and distinct habits, consistencies, or patterns in a person's thoughts, feelings, and behaviors over time and across situations" (Oswald, Hough, and Ock, 2013, p. 11). This definition suggests that personality traits can play an important role in understanding and predicting behavior in various circumstances over time.

Personality traits are relatively stable in time (De Fruyt & Rolland, 2013) and are largely dependent on a person's genes (De Fruyt & Rolland, 2013). Personality traits can be measured in a variety of ways namely, behavioral methods (observation), informant reports and self-reports (McDonald, 2008). It is advisable to use a variety of methods, in order to improve the accuracy of the measurement and increase the validity (McDonald, 2008).

The so called "Big Five" is considered to be the primary organizing structure relied upon when conducting and considering personality research in organizational settings (Oswald et al., 2013). The Five Factor Model of Personality is a hierarchical organization of personality traits in terms of five basic dimensions (Barrick & Mount, 1991, pp. 3-5):

Neuroticism (antonym to Emotional Stability): Individuals scoring low on Neuroticism are described as being anxious, depressed, angry, embarrassed, emotional, worried and insecure.

2. Extraversion:

Individuals scoring high on Extraversion are described as sociable, gregarious, assertive, talkative and active.



3. Openness to Experience:

Individuals scoring high on Openness to Experience are described as being imaginative, cultured, curious, original, broad-minded, intelligent, and artistically sensitive.

4. Agreeableness (Likability):

Individuals scoring high on Agreeableness are described as being courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted and tolerant.

5. Conscientiousness:

Individuals scoring high on Conscientiousness are described as being careful, thorough, responsible, organized, planful, hardworking, achievement-oriented and persevering.

The first two dimensions (Neuroticism and Extraversion) are also known as the "Big Two" (Barrick & Mount, 1991).

McCrae & Oliver (1992) argue that the model should be valuable for individual assessments as well as for the explanation of a variety of personality related topics of interest to scientists and psychologists. Barrick and Mount (1991, p. 23) also concluded that "the robustness of the 5-factor model provides a meaningful framework for formulating and testing hypotheses relating individual differences in personality to a wide range of criteria in personnel psychology, especially in the subfields of personnel selection, performance appraisal, and training and development". Adhering to this conclusion, the Big Five will be used to measure personality traits in this study, as this study focuses on personality traits in an organizational context (IIA practice) and the results can be of benefit in the process of selecting persuasive internal auditors and Chief Audit Executives.

2.7 Personality traits and competencies

As described in the previous section, in the past few decades scientist in the field of psychology have been extensively studying personality traits in order to better understand and predict behavior in the work context (e.g. PfPI). In work settings, information on personality traits of a possible future employee can provide valuable information for the hiring manager. However HR departments and recruitment agencies have been mainly focusing on competencies as the basis for job assessments and personal development trajectories (De Fruyt & Rolland, 2013). But what exactly is the difference between personality and competencies and how do they relate to one another?

Personality traits are relatively stable in time and are largely dependent on a person's genes (De Fruyt & Rolland, 2013). In contrast competencies are believed to be more changeable and easier to develop over time (De Fruyt & Rolland, 2013).

Hoekstra and van Sluijs (2003) developed a model that describes the conceptual relationship between personality traits and competencies. They describe competencies as the result of expertise and behavior. They view expertise as a function of intelligence, learning processes and personality traits (such as Conscientiousness and Openness to Experience). A person's behavior is viewed as a function of personality traits and learning processes. According to de Fruyt and Rolland (2013, p. 14) personality traits can be viewed as "direct or indirect, and facilitating or inhibitory building blocks of competencies". It can be concluded that personality traits and competencies are related to one another. But which personality traits are specifically related to the competence 'persuasiveness'?

2.8 Persuasion in relation to source personality traits

In section 2.4 four major models of persuasion are discussed. The Elaboration Likelihood Model proved to be the only model that explicitly described source characteristics as an important factor in the persuasion process, in particular in the peripheral route to persuasion. However, none of the models of persuasion focus directly on source specific traits in relation to the source's ability to persuade others. In line with these findings, most of the scientific research regarding the source of persuasion has primarily focused on source characteristics such as credibility, expertise and attractiveness rather than on source personality. And the main focus of these studies has been on how the target perceives those characteristics, and not so much on the characteristics themselves (Oreg & Sverdlik, 2014). However, as explored in section 2.5, a lot of research has been conducted on the Big Five. By examining the most common definitions of the five dimensions of personality, their relevance and relationship with source persuasiveness can be argued.

Furthermore, within the organizational context many studies focused on personality traits (Big Five) as predictors of job performance and behavior in a variety of occupations. Results of this line of organizational research can be very valuable for this study. Especially when the Big Five are examined as predictors of job performance in jobs that require persuasion as an important competence. The O*NET program (onetonline.org), sponsored by the US Department of Labor, has performed extensive research in the occupational field and has gathered and categorized thousands of work related competencies which have been found to be related to job performance in various occupations. When querying its database for the competence "persuasion", the O*NET database generates a list of jobs for which persuasion is considered important. It shows that sales related occupations are at the top of the list and chief executives are rated third. This supports the assumption that one of the defining characteristics of both sales and leadership is the ability to persuade others. According to O*NET's ratings persuasion is also considered to be an important competence for successful "Auditors" (ranking 172: top 18%). If persuasion is an important factor in sales and executive leadership, studies linking the Big Five personality traits to performance in those areas are likely to be indicative for the relationship between persuasion and personality. Additionally, Oreg and Sverdlik (2014) directly researched (and proved) the relationship between the Big Five and Persuasion in three studies.

It can be concluded that the link between personality traits and persuasion has been studied from multiple perspectives. Next, for each of the five dimensions of personality, a structured description of the available and relevant literature is given that (in)directly links that particular dimension of personality to source persuasiveness (sections 2.7.1 till section 2.7.5).

First, the relationship between each personality trait and persuasion is argued based upon the definition of that dimension of the Big Five. Second, organizational research regarding job performance in leadership or sales is reviewed for each personality trait, as the findings are likely to be indicative for the relationship between persuasion and that particular personality trait. Finally, an overview is given of the results of research conducted by Oreg and Sverdlik (2014), specifically regarding the direct relationship between that personality trait and persuasiveness. Subsequently, a hypothesis is formulated that will be tested in the field research (chapter 4).



2.8.1 Emotional Stability (antonym Neuroticism) and persuasiveness

Definition

Individuals scoring low on Neuroticism are described as being anxious, depressed, angry, embarrassed, emotional, worried and insecure (Barrick & Mount, 1991, pp. 4). Neuroticism is described by (Barrick et al, 2001) as a tendency towards anxiety, hostility, depression and personal insecurity. Individuals scoring high on Neuroticism express themselves with lower degrees of self-confidence (McCroskey, Heisel & Richmond, 2001). Falcione's research (1974) indicated that Emotional Stability is one of the four significant and statistically autonomous dimensions for measuring source credibility. The perceived credibility of persons scoring high on Neuroticism (anxious and insecure) is expected to be lower than the perceived credibility of emotional stable individuals being self-confident and calm. In sum, individuals scoring high on Neuroticism are therefore less likely to be effective persuaders.

Leadership and sales context

In a variety of studies personality traits are linked to leadership concepts. The results of the metaanalysis conducted by Judge, Bono, Ilies and Gerhardt (2002) show that Neuroticism correlates negatively (generalized across studies) in relation to leadership effectiveness. "Although the mean correlation for Neuroticism was distinguishable from zero, it failed to emerge as a significant predictor of leadership in the multivariate analysis, which was probably due to the fact that Neuroticism displays the highest average correlation with the other Big Five traits (Ones et al. 1996)" Judge et al, 2002, p. 774).

The results of the meta-analysis of Bono and Judge (2004) indicate that Neuroticism is linked to transformational leadership (especially the charisma dimension) with little variability in this relationship across studies. Overall however, Bono and Judge (2004) concluded that their results linking personality with ratings of transformational and transactional leadership behaviors were relatively weak.

However, Barrick, Mount and Judge (2001), found in their second-order meta-analytic study, that Neuroticism is a valid predictor of work performance across jobs. Considering the specific occupational breakdowns, Emotional Stability was related to performance in some occupations (police, skilled or semi-skilled) but not in sales and management (Barrick et al., 2001).

Research specifically regarding the relationship between Neuroticism and persuasiveness

In short, emotionally stable individuals are assumed to be more capable of persuading others. The results of the studies conducted by Oreg and Sverdlik (2014) confirm these assumptions, as they found that emotional stable individuals are better persuaders (measured by target attitude change and perceived persuasiveness) than introverted individuals. Specifically, Oreg and Sverdlik (2014) found that Emotional Stability is positively related to perceived persuasiveness and that this effect on perceived persuasiveness was moderated by the level of involvement. Additionally, Emotional Stability was found to have a significant overall positive effect on target attitude change. This overall effect for Emotional Stability suggests that being self-confident, calm and unemotional may be predominantly important for persuasion, even in situations in which involvement is higher as according to ELM is the case in the central route to persuasion (Oreg & Sverdlik, 2014).

Hypothesis

As described earlier, according to the IIA, being persuasive is a key requirement for successful and effective internal auditors. Consequently it is expected that in general internal auditors are more persuasive than their highly educated peers in other occupations.

According to the research findings, emotional stable individuals tend to be more persuasive than individuals scoring high on Neuroticism. Emotional Stability is therefore considered to be an important personality trait for internal auditors.

Based on the above mentioned research findings the following hypothesis is formulated:

H1: On average internal auditors score significantly higher on the personality dimension of Emotional Stability than the norm group.

2.8.2 Extraversion and persuasiveness

Definition

Individuals scoring high on Extraversion are described as "sociable, gregarious, assertive, talkative and active" (Barrick & Mount, 1991, pp. 3). They are also known to show signs of greater dominance in comparison to more introverted individuals (Oreg & Sverdlik, 2014). Furthermore, Caldwell and Burger (1997) found in their study significant relations between the reported use of influence strategies and personality. More specifically they found that high scores on Extraversion predicted more and also a bigger variety of influence attempts. Those qualities (sociable, gregarious, talkative, active) are expected to make extraverts more likable and attractive than their less extraverted counterparts. It can also be argued that because extraverts are more assertive and dominant, they will be more tempted to persuade others. Summarily, individuals scoring high on Extraversion are likely to be more persuasive and will more often pursue persuasion attempts than introverted individuals.

Leadership and sales context

In a variety of studies personality traits are linked to leadership concepts. Judge et al. (2002) made a qualitative review of leadership research focusing on personality traits, followed by a meta-analysis. Judge et al. (2002) used the Five Factor Model and meta-analyzed 222 correlations from 73 samples. Extraversion was found to have the steadiest link with leadership effectiveness. Bono & Judge (2004) conducted a meta-analysis of the link between personality (The Big Five) and leadership behaviors. Extraversion was the strongest and most consistent correlate of transformational leadership, especially for the 'charisma' dimension of transformational leadership. Overall however, Bono & Judge (2004) concluded that their results linking personality with ratings of transformational and transactional leadership behaviors were relatively weak.

Studies linking personality traits to sales performance show similar results. Barrick & Mount (1991) concluded that Extraversion was a valid predictor for managers and sales. Vinchur, Schippmann, Switzer & Roth (1998) concluded Extraversion predicted sales success (for both rating criteria and objective sales criteria). However, Barrick et al. (2001) have quantitavely summarized the findings of 15 prior meta-analytic studies that researched the relationship between the Big Five and job performance. They found that Extraversion did not predict overall work performance and



performance in sales, but that Extraversion did predict success for managerial performance (Barrick et al, 2001).

Research specifically regarding the relationship between Extraversion and persuasiveness

Even though there is more to sales and leadership than being persuasive, persuasion is a key competence for job performance in both occupations. As described earlier, extraverted individuals are assumed to be more capable of persuading others. The results of the studies conducted by Oreg and Sverdlik (2014) confirm these assumptions, as they found that extraverted individuals are better able to persuade others (measured by target attitude change) than introverted individuals, but only when involvement is low (peripheral route to persuasion in ELM). Moreover, the ELM suggests that source credibility also plays a role in the persuasion process as a peripheral cue, especially in the case of low involvement. The results of the study of Falcione (1974) indicate that there are four significant and statistically autonomous dimensions for measuring source credibility, namely Extraversion, Emotional Stability, competence and safety together accounting for 55% of the total variance.

Hypothesis

The IIA states in the Global internal audit Competency Framework (2013), that internal auditors need to be competent in persuasion in order to (I) comply with the IIA Standard (IPPF), (II) deliver Internal audit engagements, (III) drive improvement and innovation in an organization. In other words, being persuasive is a key requirement for successful and effective internal auditors. Subsequently, it is expected that on average internal auditors are more persuasive than their highly educated peers in other occupations. As research concludes that extraverted individuals tend to be more persuasive than introverted individuals, Extraversion should be considered an important personality trait for persuasive internal auditors.

Based on the above mentioned research findings and arguments the following hypothesis is formulated:

H2: On average internal auditors score significantly higher on the personality dimension of Extraversion than the norm group.

2.8.3 Openness for Experience and persuasiveness

Definition

Barrick et al. (2001) describe those who are high on Openness to Experience as being creative, unconventional, intellectual and broad-minded. Therefore, individuals scoring high on Openness to Experience are expected to be nonconventional in their conversations and to bring forth creative arguments for their point of view when trying to persuade others (Oreg & Sverdlik, 2014). Furthermore, their openness to others and their positions, combined with their readiness to think about several perspectives, expand the chances that they will connect with their targets, address their concerns, and simultaneously facilitate targets to see their perspective (Oreg & Sverdlik, 2014).

According to Conger (1998) the best persuaders not only listen very carefully to others, they also integrate their thoughts and ideas into a shared solution. Conger states that persuasion is closely linked to being able to make compromises. As said by Conger (1998, p. 87) "effective persuaders seem to share a common trait: they are open-minded, never dogmatic". Summarized, it can be expected



that individuals who score high on Openness to Experience will be more persuasive than individuals who score low on Openness to Experience.

Leadership and sales context

In a variety of studies personality traits are linked to leadership concepts. Judge et al. (2002) made a qualitative review of leadership research focusing on personality traits, followed by a meta-analysis. After Extraversion, Openness to Experience (and Conscientiousness) were the strongest and most consistent correlates of leadership. Openness to Experience thus seems useful in relation with leadership effectiveness. Barrick and Mount (1991) and Barrick et al. (2001) concluded that Openness to Experience was not relevant to may work-criteria. However, the results of both studies showed that Openness to Experience was a valid predictor for training proficiency.

Research specifically regarding the relationship between Openness to Experience and persuasiveness Furthermore, Oreg and Sverdlik (2014) found that Openness to Experience is positively related to perceived persuasiveness and that this effect on perceived persuasiveness was moderated by the level of involvement. However, Openness to Experience did not have a significant effect on the target attitude change. "Although the primary goal of persuasive attempts is to change targets' attitudes, there is nevertheless value in merely being perceived as persuasive. In many contexts, important decisions are made on the basis of how persuasive an individual is perceived as being, even without information about how effective the individual actually is in getting others to change their attitudes" (Oreg & Sverdlik, 2014, pp. 260-261).

Hypothesis

As described earlier (e.g. for Extraversion and Neuroticism) it is expected that in general internal auditors are more persuasive than their highly educated peers in other occupations. According to the research findings, individuals scoring high on Openness to Experience are generally perceived as being more persuasive than their less open counterparts. Openness to Experience is therefore an important personality trait for internal auditors.

Based on the above mentioned research findings the following hypothesis is formulated:

H3: On average internal auditors score significantly higher on the personality dimension of Openness to Experience than the norm group.

2.8.4 Agreeableness and persuasiveness

Definition

Individuals scoring high on Agreeableness are described as being courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted and tolerant (Barrick & Mount, 1991, pp. 4). "On the one hand, their being sympathetic elicits a positive response from their surroundings, enhancing others' willingness to listen to and consider their perspective. On the other hand, their non-confrontational and even somewhat conformist style makes them less likely to try to change others' minds to begin with. It is therefore not straightforward what the relationship between Agreeableness and persuasiveness will be" (Oreg & Sverdlik, 2014, p. 252). It is also imaginable that individuals who score high on Agreeableness will likely to be more easily persuaded themselves in the interaction with

others, because of the fact that they are flexible, cooperative, soft-hearted and tolerant. The relationship between Agreeableness and persuasiveness is therefore somewhat ambiguous, its effect can possibly work both ways (in favor of the sources persuasiveness, or in favor of the target's resistance to persuasion).

Leadership and sales context

Furthermore, the results of a meta-analytical study conducted by Barrick and Mount (1991, p. 21), indicate that Agreeableness is not an important predictor of job performance, even in sales and management. In line with the findings of Barrick and Mount (1991), Barrick et al. (2001, p. 19), found in their second-order meta-analytic study, that Agreeableness displayed a weak relationship with the work performance criteria. Furthermore, Agreeableness was not strongly related to any other criterion or occupational group.

Research specifically regarding the relationship between Agreeableness and persuasiveness

Moreover, the results of the study conducted by Oreg and Sverdlik (2014) indicate that Agreeableness does not have a significant relationship with both perceived persuasiveness and target attitude change.

Hypothesis

Given the fact that no consistent relationship between Agreeableness and persuasion can be argued, and additionally no significant effect has been found between Agreeableness and persuasion in the studies of Oreg and Sverdlik (2014), no hypothesis is formulated for the trait.

2.8.5 Conscientiousness and persuasiveness

Definition

Individuals scoring high on Conscientiousness are described as being careful, thorough, responsible, organized, planful, hardworking, achievement-oriented and persevering (Barrick & Mount, 1991, pp. 4). Oreg and Sverdlik (2014, p. 252) state that "Although the former set of characteristics suggests that conscientious individuals will work hard to persuade others (just as they work hard at anything else they apply themselves to), the latter suggests that the manner and style in which they do so may be counterproductive, given that their structured, cautious, and planful style will often be perceived as unexciting and boring. It is therefore difficult to predict what relationship Conscientiousness will have with persuasiveness". The results of their study, linking the big five personality traits to persuasion, indicate that Conscientiousness does not have a significant relationship with both perceived persuasiveness and target attitude change (Oreg & Sverdlik, 2004).

Leadership and sales context

However, the results of a meta-analytical study conducted by Barrick & Mount (1991) indicate that Conscientiousness is a valid predictor for all occupational groups. In line with the findings of Barrick and Mount (1991), Barrick et al. (2001), found in their second-order meta-analytic study, that Conscientiousness was found to be the only valid predictor of work performance across all criterion types and occupational groups, including management and sales. These results strongly suggest that Conscientiousness is overall the most important personality trait forecasting job performance. This is



also the case for those jobs in which persuasion is considered to be a key competence (e.g. sales and managers).

Research specifically regarding the relationship between Conscientiousness and persuasiveness

The research findings show that the relationship between Conscientiousness and persuasion is actually somewhat ambiguous and is therefore, based on these findings alone, somewhat difficult to predict. Let's therefore go back to the central theoretical framework of persuasion in this study (ELM) and see if the relationship can be argued, based on the characteristics of ELM and specific aspects of the internal audit profession.

ELM describes two possible routes to persuasion, namely the central and the peripheral route. The central route is the most complex of the two, and is also known as the elaborated route. In the central route the message is put under increased scrutiny (Petty et al. 1983). "Centrally routed messages include a wealth of information, rational arguments, and evidence to support a particular conclusion" (Dainton & Zelley, 2005). When the audience is both capable and motivated, persuaders should use factually based and strong arguments. When the arguments in the centrally processed message are weak or lacking underlying evidence they are likely to have a counterproductive effect, resulting in negative attitude change. (Dainton & Zelley, 2005). Summing up, it can be stated that in the central route to persuasion, the quality of the message is of vital importance for successful persuasion.

In the performance standards the IIA defines guidelines for the effective internal auditor in respect to the quality of communications (Performance standard 2420, www.theiia.org):

Accurate communications are free from errors and distortions and are faithful to the underlying facts. Objective communications are fair, impartial, and unbiased and are the result of a fair-minded and balanced assessment of all relevant facts and circumstances. Clear communications are easily understood and logical, avoiding unnecessary technical language and providing all significant and relevant information. Concise communications are to the point and avoid unnecessary elaboration, superfluous detail, redundancy, and wordiness. Constructive communications are helpful to the engagement client and the organization and lead to improvements where needed. Complete communications lack nothing that is essential to the target audience and include all significant and relevant information and observations to support recommendations and conclusions. Timely communications are opportune and expedient, depending on the significance of the issue, allowing management to take appropriate corrective action".

It can be easily argued that Conscientiousness must be an important personality trait for internal auditors, for being able to measure up to the IIA standards concerning the quality of communications, especially needed in the central route to persuasion. For communications to be accurate, objective, clear, concise, constructive, complete, and timely, the internal auditor must be very "careful, thorough, responsible, organized, planful, meticulous, achievement-oriented and persevering" (Barrick & Mount, 1991, pp. 4) when preparing and formulating the message.

Hypothesis

As described earlier (e.g. for Extraversion, Neuroticism and Openness to Experience) it is expected that in general internal auditors are more persuasive than their highly educated peers in other occupations. Despite the fact that the link between Conscientiousness and persuasion has not been



directly proved in the study of Oreg & Sverdlik, it was argued that Conscientiousness does have an important (indirect) effect on the persuasiveness of an internal auditor. Namely, through the quality of the message in the central route to persuasion.

Based on the above mentioned arguments the following hypothesis is formulated:

H4: On average internal auditors score significantly higher on the personality dimension of Conscientiousness than the norm group.

2.9 Relationships between the Big Five and persuasiveness summarized

Oreg and Sverdlik (2014) have shown that persuasion (measured by attitude change) is positively influenced by two personality traits from the "Big Five", namely Emotional Stability and Extraversion. The research conducted by Oreg and Sverdlik (2014) has also shown that persuasion (measured by perceived persuasiveness) is positively influenced by two personality traits from the "Big Five", namely Openness to Experience and Emotional Stability.

Other scientific research conducted by Barrick and Mount (1991) and Barrick et al. (2001) has shown that Conscientiousness is overall the most important personality trait predicting job performance, and is expected to be indirectly linked to the persuasion in the central route (through message quality). No consistent relationship between Agreeableness and persuasion has been found nor could be argued.

The above mentioned research findings are grouped below in terms of the Elaboration Likelihood Model. Moreover they are placed within the context of either the central route or the peripheral route. All of the findings regarding the relationships between personality traits and persuasion (applicable to the two routes of the Elaboration Likelihood Model) are shown in Figure 2.2.

Central route:

• Emotional Stability:

Emotional Stability is found to have a significant overall positive effect on target attitude change, in the peripheral route and in situations in which involvement is higher (central route) (Oreg & Sverdlik, 2014).

Conscientiousness:

The link between Conscientiousness and persuasion has not been directly proved in the study of Oreg and Sverdlik (2014). It was however argued that Conscientiousness does have an important indirect effect on the persuasiveness of an internal auditor, namely through the quality of the message in the central route to persuasion.

Peripheral Route:

• <u>Emotional Stability</u>:

Emotional Stability is found to be positively related to perceived persuasiveness (Oreg & Sverdlik, 2014). Emotional Stability is also found to be a significant and autonomous dimension of source credibility (peripheral cue) (Falcione, 1974).

• Extraversion:

Extraversion is found to have a significant overall positive effect on persuasion (measured by target attitude change), but only when involvement is low (peripheral route). (Oreg & Sverdlik, 2014). Extraversion is also found to be a significant and autonomous dimension of source credibility (peripheral cue) (Falcione, 1974).

• Openness to Experience:

Openness to Experience is found to be positively related to perceived persuasiveness, but not significantly related to target attitude change (Oreg & Sverdlik, 2014).

No consistent relationship between Agreeableness and persuasion can be argued, and additionally no significant effect has been found between Agreeableness and persuasion in the studies of Oreg and Sverdlik (2014).

Message LOW Target Peripheral ersonali Involvement? Cue? Traits NO Traits Perceived HIGH Source Credibility Persuasiveness NO YES Quality? Attitude Central Route to Persuasion: Peripheral Route to Persuasion: Internal Auditors must be "extravert" and "emotionally stable" in Internal Auditors must be "emotionally stable" and "conscientiouss" in order to be persuasive (getting positive target order to be persuasive (getting positive target attitude change) in the peripheral route to persuasion. attitude change) in the central route to persuasion. Open to **Emotionally** Conscientious Extravert Stable Experience

Figure 2.2 Relationships between personality traits and persuasion (ELM)

As explained earlier, persuasiveness is an essential attribute for an effective internal auditor (Global Internal Audit Competency Framework, 2013). Consequently, it is expected that in general the population of internal auditors can be considered as more persuasive than their highly educated Dutch peers. The personality dimensions Emotional Stability, Extraversion, Openness to Experience, and Conscientiousness are expected to have a substantial (in)direct positive influence on being persuasive and it is thus hypothesized that internal auditors shall score significantly higher on these personality traits than the norm group.



This translates into four hypotheses which shall be assessed within this thesis:

- **H1**: On average internal auditors score significantly higher on the personality dimension of Emotional Stability than the norm group.
- **H2**: On average internal auditors score significantly higher on the personality dimension of Extraversion than the norm group.
- **H3**: On average internal auditors score significantly higher on the personality dimension of Openness to Experience than the norm group.
- **H4**: On average internal auditors score significantly higher on the personality dimension of Conscientiousness than the norm group.

3 Field Research

3.1 Brief introduction

Chapter 3 contains an extensive review of the field research that has been conducted for this thesis. First the methodology is discussed (section 3.3), followed by a description of the statistical analysis (sections 3.4). Finally, the conclusions are summarized in section 3.5.

Section 3.3 'Methodology' is an illustration of the instrument used in the field research (the PfPI survey). It describes the trait measurements and scales of the PfPI survey (for more detailed information see Appendix I), the procedure of the field research, followed by a description of the population and the norm group. Section 3.4 'Analysis' describes the statistical analysis. More specifically, data-cleaning and preparation are discussed, the descriptive statistics are summed up, followed by a description of the performed statistical analyses (one-sided, right-tailed T-tests). Additionally, the T-test results per personality dimension are described and the hypotheses are tested. Finally, in section 3.5 the research findings concerning the hypotheses (acceptance or rejection) are summarized.

3.2 Methodology

3.2.1 Instrument

The Personality for Professionals Inventory (PfPI) is used in this study to measure the personality traits of Dutch internal auditors. The same survey was used for the norm group. The PfPI can be considered as a suitable instrument, because it was developed to measure traits including the Big Five traits specifically in a work-related context. The PfPI has been developed by De Fruyt and Rolland (2013) and has been extensively analyzed for social desirability in judging the statements and language differences (De Fruyt & Rolland, 2013). It can be stated that the PfPI is complementary to other instruments measuring personality traits, such as the NEO-PI-R (Costa McCrae, 1992) or the D5D (Rolland & Mogenet, 2001) which are primarily focused on a description of the overall personality, without the aim of using the results in a specific (work-related) context. Several studies (e.g. Schmitt, et al., 1995) showed that measurement scales with context-related items have a higher predictive value.

Reliability and validity of the instrument

De Fruyt and Rolland (2013) have done several statistical tests and analyses in order to establish the reliability and the validity of the instrument. Reliability is the degree to which an assessment tool produces stable and consistent results. Validity refers to how well a test measures what it is purported to measure (de Heus et al., 2003). For a test to be valid, it also needs to be reliable.

The reliability of the instrument has been tested in several ways (De Fruyt & Rolland, 2013). Firstly, an estimation of the reliability has been made using the Cronbach's alfa. The values for Cronbach's alfa vary from 1.00 (very consistent) to 0.00 (not consistent). "A commonly accepted rule of thumb for acceptable internal consistency is that Cronbach's alpha needs to be bigger than 0.70 (Nunnally, 1978)" (de Heus et al, 2003). This rule applies to fundamental research, in which normally only

statements at group level are made. De Fruyt and Rolland (2013) found that the Cronbach's alfa for 21 personality traits vary between 0.71 and 0.89, and for the Big Five Dimensions between 0.84 and 0.94. The average for all the constructs is 0.84. It can be concluded that according to the calculated Cronbach's alfa scores the internal consistency for the Dutch sample is acceptable / good.

Secondly, the lambda2-indices per construct were calculated for different norm groups in the Netherlands. All lambda2-indices were higher than the Cronbach's alfa scores, but the difference was never bigger than 0.03. It can be concluded that, according to the calculated lambda2-indices (all scores are > 0.70) the reliability of the PfPI is good (De Fruyt & Rolland, 2013).

Thirdly, 83 respondents were asked to retake the PfPI-test after a period of three weeks to three months. The re-test reliability scores were high, and the values for Cohen's D were low. This indicates that the differences between the first and the second test were indeed very small, and reliability of the test can be considered high (De Fruyt & Rolland, 2013).

Also the validity of the PfPI has been researched in various ways. De Fruyt and Rolland (2013) researched the correlations between the different personality scales and the Big Five dimensions. Additionally, the PfPI has been validated against a number of questionnaires relevant to selection- and career-guiding questions (e.g. NEO PI-R). Based on the results of the various validity-related tests, de Fruyt and Rolland (2013) concluded that the PfPI proved to be valid. As part of the extensive testing the validity of 19 sub-traits and their approximation of the five main traits was studied. It was concluded that 19 of the 21 sub-traits could be used in the approximation and subsequent analysis of the five main traits. This has also been taken into account in the current study (Paresi & Van Kuijck, 2016).

In short, the PfPI is proven to be a reliable measurement with strong correlations to other popular instruments such as the NEO-PI-R and has indeed been statistically validated. Subsequently, this study will rely on these conclusions regarding the reliability and validity of the PfPI, and will therefore not be specifically tested again in this study.

3.2.2 Trait measurements and scales

The PfPI describes the position of a person on several personality traits specifically relevant within a work-related context. Additionally a person is described in terms of the Big Five dimensions Extraversion, Emotional Stability, Openness to Experience, Conscientiousness and Agreeableness (de Fruyt & Rolland, 2013). The survey exists of 183 statements, divided among the 19 personality traits, being represented by seven to ten statements. The nature of the statements are work-related. The respondents were asked to score the statements on a Likert scale, ranging from "not at all characteristic", to "completely characteristic". The definitions used by De Fruyt and Rolland (2013) for the 19 personality traits and the Big Five Dimensions will be described below. A more detailed description can be found in Appendix I.

Emotional Stability

Emotional Stability relates to whether individuals are calm and confident about the outcome of an event. It was measured as a combination of the subscales sensitivity, self-confidence, susceptibility to stress and frustration tolerance (De Fruyt & Rolland, 2013);

- 1 Sensitivity relates to the worrisomeness of individuals.
- 2 Self-confidence relates to the confidence of individuals.



- 3 Susceptibility to stress relates to the level of stress an individual can bear.
- 4 *Frustration tolerance* relates to an individual's sensitivity towards various forms of negative judgment and interference.

Extraversion

Extraversion relates to whether individuals move easily among others without standing out or explicitly stepping into the foreground. It was measured as a combination of the subscales enthusiasm, sociability, energy and assertiveness (De Fruyt & Rolland, 2013);

- 5 Enthusiasm relates to an individual's level of cheerfulness.
- 6 Sociability relates to whether an individual likes being with others.
- 7 Energy relates to the pace an individual feels comfortable at.
- 8 Assertiveness relates to the level an individual explicitly steps into the foreground.

Openness to Experience

Openness to Experience relates to whether individuals are creative and love to think outside the box. It was measured as a combination of the subscales innovation-oriented & creativity, intellectual versus action-oriented, self-reflection and openness to change (De Fruyt & Rolland, 2013);

- 9 Innovation-oriented & creativity relates to the level an individual is open to new approaches.
- 10 Intellectual versus action-oriented relates to the level in which an individual prefers to think about problems or just wants to get a job done.
- 11 Self-reflection relates to the level in which an individual searches for feedback on their own functioning.
- 12 Openness to change relates to the level in which an individual likes variation.

Agreeableness

Agreeableness relates to whether individuals easily strike a balance between cooperation and competition with others. It was measured as a combination of the subscales competitiveness, being other-oriented, trusting others and willingness to accommodate (De Fruyt & Rolland, 2013);

- 13 Competitiveness relates to the level an individual feels the need to win.
- 14 Being other-oriented relates to the level an individual wants to understand the opinion of others.
- 15 Trusting others relates to the level an individual trusting the people they work with.
- 16 Willingness to accommodate relates to the level an individual wants to avoid confrontations.

Conscientiousness

Conscientiousness relates to whether individuals usually work very methodically and systematically and are ambitious and orderly. It was measured as a combination of the subscales systematic and organized approach, self-discipline, and motivation to perform (De Fruyt & Rolland, 2013);

- 17 Systematic and organized approach relates to the level an individual is organized.
- Self-discipline relates to the level an individual is in-control of tasks.
- 19 *Motivation to perform* relates to the level an individual wants to excel.

3.2.3 Procedure

Procedure

The IIA ("Institute of Internal Auditors") in cooperation with the University of Amsterdam (UVA) performed an exploratory research into personality traits of internal auditors in relation to specific aspects of their work. The general research question concentrates on the characteristics of internal audit activities and what the preferable personality is to perform tasks more effective. The research focuses mainly on the three phases of the internal audit process, information search, decision making and reporting. During the project, additional researchers were invited to join the project with a viable research topic of their own. The research conducted for this thesis is part of the above-mentioned wider research project and is therefore based on the same dataset. It must be noted that part of the procedure was for researchers to conduct a thorough literature study to formulate hypotheses, before the data-set was provided to them. In the case of this thesis, the data-set was received only after the project leader of the broader exploratory research had given his formal approval on chapter 2.

The data for this research was gathered by sending out the PfPI survey to all members of the Dutch division of the IIA. It must hence be noted that only those internal auditors who are members of the Dutch IIA are included in this research. However this does not automatically mean that all subjects were Dutch or work in the Netherlands. Furthermore, the survey was issued in Dutch, as the respondents were all members of the Dutch IIA division. TalentLens started the data-collection on January the 27th 2015. The survey was conducted online by sending out an email request to each IIA member. The email contained a link to the survey accompanied by a letter of explanation signed by the chairman of the IIA and the project leader (see Appendix II). After the first email, two reminders were sent out by TalentLens and one last reminder was sent by the IIA. The latter was done because of the fact that not all the members had received the emails from TalentLens because they were presumably blocked by spam filters. On the 22nd of May 2015 the survey was officially closed. Each subject who had completed the PfPI received a personal report.

Because of the fact that self-reports are prone to social desirability and other biases, the research design was strengthened in a number of ways in order to minimize these biases. Firstly, participating in the research was made beneficial to the subjects, as they were promised to receive a full report after completion. Additionally, the respondents were also given the opportunity to receive personal feedback on their results. Finally, the subjects were given a clear explanation of the purpose of the research and a guarantee of the anonymous nature of the survey.

3.2.4 Population and Norm group

Population of internal auditors

As stated earlier, the PfPI survey was sent out to all 2,518 members of the Dutch IIA division. A response rate of 12,4 % was achieved, as 313 respondents filled out the survey. Almost all of the 313 respondents were Dutch (97,8%) and the large majority indicated their education as HBO (college) or higher (86,2%). A group of 12,2% indicated having completed another form of higher education. Thus it can be concluded that the educational level of the sample is high. On average the respondents have 12 years of working experience.

Norm group

Talentlens conducted a study on the personality traits of the Dutch labor force in 2012-2013, using the PfPI to measure their personality traits. The study conducted by TalentLens was performed among 1,021 Dutch subjects. The results were categorized into a number of norm groups, including males, females, low-, medium- and high educational level.

Because of the fact that highly educated Dutch individuals would be most similar in level of education to the subjects in the population of internal auditors, the results from highly educated Dutch peers were used as the norm group in this study. TalentLens defines high education as; "having obtained a college degree, university degree and education leading to promotion" (De Fruyt & Rolland, 2013, p.43). The aggregated results of the norm group "Educational Level High Netherlands" (De Fruyt & Rolland, 2013) are used in this study as a benchmark against which the scores of the internal audit group are compared. The norm group consists of 311 respondents, who indicated their educational level as being high.

3.3 Analysis

3.3.1 Data cleaning and preparation

As described earlier in section 3.4 the data was collected by Talentlens using the PfPI web survey. The results of the population of internal auditors were exported into Excel. After the data was received from TalentLens, the dataset was inspected to detect any outliers and abnormalities in the data. One abnormality was found for age (-943) and this person was removed from the dataset. Subsequently, the remaining analyses were conducted on the 312 remaining respondents.

Due to Talentlens' intellectual property rights on the detailed data concerning the scores of the norm group, only the aggregated results of the 311 respondents (containing e.g. averages and standard deviations) were provided by Talentlens.

The field research (survey by Talentlens) was conducted with the purpose of providing the data necessary for answering the hypotheses. The hypotheses were formulated in the following form: The average score of the internal auditors on personality dimension X, is expected to be significantly higher than the average score of the norm group on personality dimension X. In order to test the 4 formulated hypotheses, the average scores (means) of both groups need to be compared. The independent samples t-test is a suitable procedure for testing whether the means in two populations are equal, when the underlying following three assumptions of the T-test are met (de Heus et al, 2003, p. 106):

1. The interval-variable is normally divided in both populations;

Due to the fact that only the aggregated results for the norm group were provided to the students by Talentlens an analysis on the normal distribution could not be performed in this research. However, de Heus et al. (2003, p. 106) state that in general the T-test procedure is robustly resistant to deviations in normality, except when the samples are very small. In this study the sample-sizes for both the internal audit group as the norm-group are considered to be sufficiently large (N> 300) to uphold the assumption of normal distribution.



2. The variances are homogenous (the same in both populations).

De Heus et al. (2003, p. 106) state that the assumption of homogenous variances can be uphold, when the sample-sizes of both groups are rather equal to one another. In other words, when the largest sample is at least one and a half times bigger than the smallest sample, the homogeneity of the variances cannot be assumed and additional analysis is needed. In this study the largest group, that of internal auditors (N= 312), is almost exactly equal to the smaller norm group (N=311). Therefore it can be concluded that it is scientifically safe to assume that the variances in both populations are the same.

3. The observations are independent of each other.

The last assumption is inherent to the research design. De Heus et al. (2003, p. 106) state that when respondents are approached independently (no repeated measures), and filled out the questionnaire on their own (not together), the assumption of independence can be uphold. In this study, the respondents (in both groups) were individually approached to participate in the research in two separate timeframes (IA in 2015, norm group in 2012-2013). All surveys were filled out in the secured online test platform from Talentlens. Additionally, the respondents in the norm group were supervised by an employee of Talentlens during the test. Hence, it can be stated that the research design offers sufficient support to uphold the assumption that the observations are indeed independent of each other.

Following from the above-mentioned analyses regarding the three T-test assumptions, it can be concluded that the T-test is indeed a suitable procedure for testing the hypotheses in this study. As the aggregated data (group means per personality trait) from the norm group must be compared with data of the internal auditor group, the individual scores of the internal auditors were aggregated (to a group means) in order to perform the independent sample t-tests. Unfortunately, without the underlying raw data of the norm group, SPSS is unable to perform an independent samples T-test. Therefore, the calculations (means, variances etc.) as well as the T-test itself had to be conducted manually in Excel.

3.3.2 Descriptive Statistics

The internal auditor group contained 72% males and 28% females, with an overall average age of 44 (ranging from 25 to 72). In total 86,2% has indicated to have obtained a degree of the level college or higher, with most of the remaining 13,8% (who indicated "other") having a another form of higher Education. The norm group consists of 51,5% males and 48,5% females, with an overall age of 36 years. All of the respondents within the norm group have obtained a form of higher education.

De Fruyt and Rolland (2013) calculated a standardized score (position) per personality trait for each individual respondent (standardized scores ranging from 0 up and to including 10). De Fruyt and Rolland (2013, p.97) translated these scores into 3 possible labels. These labels are defined as follows:

Low: = Scores 0 - 1 - 2 - 3.
 Medium: = Scores 4 - 5 - 6.
 High: = Scores 7 - 8 - 9 - 10.

The above mentioned standardized scores (per personality trait) for each respondent within the internal audit group were calculated and provided by TalentLens. After receiving the data from Talentlens, the mean standardized scores (per personality trait) for the entire internal audit group were manually calculated in Excel. The mean standardized scores and the corresponding labels per

personality trait for the entire internal auditor group are presented in table 4.1. The labels in table 4.1 provide a first impression of the personality traits of an internal auditor within the sample of Dutch IIA members. It shows that on average the internal auditors scored "High" on one of the Big Five Dimensions namely Openness to Experience. The internal auditors scored "Medium" on the other 4 Big Five Dimensions (Emotional Stability, Extraversion, Agreeableness and Conscientiousness).

Personality Trait	Standardized Mean Score	Label
Emotional Stability	6	Medium
Sensitivity	4	Medium
Self-Confidence	6	Medium
Susceptibility to Stress	4	Medium
Frustration Tolerance	6	Medium
Extraversion	6	Medium
Enthusiasm	5	Medium
Sociability	5	Medium
Energy	6	Medium
Assertiveness	6	Medium
Openness to Experience	7	High
Innovation-oriented & creativity	7	High
Intelectual versus action-oriented	7	High
Self-reflection	6	Medium
Openness to Change	7	High
Agreeableness	5	Medium
Competitiveness	5	Medium
Being other-oriented	5	Medium
Trusting others	6	Medium
Willingness to accomodate	4	Medium
Conscientousnouss	6	Medium
Systematic approach	6	Medium
Self-discipline	6	Medium
Self-control	6	Medium
Motivation to perform	6	Medium
Proactiveness	6	Medium

Table 4.1: Mean standardized scores (and labels) of personality traits of the Internal Audit Group

3.3.3 Statistical Analyses

The mean 'standardizes scores' and labels do not provide the adequate insights needed to answer the formulated hypotheses. In order to test the hypotheses (internal auditors score *higher* on personality dimension "X" than the norm group) one-sided *right-tailed* T-tests were performed on the scores of the Big Five Dimensions. When performing the T-test the confidence levels were set at 97,5% and 99%. This was done to emphasize the fact that the differences between the scores of the internal audit population and the norm group are significant under very high levels of reliability. The results of the T-tests at a confidence level of 95% can be found in Appendix III. An infinite degrees of freedom (Df) was used to determine the critical T-values for the T-tests. The critical T-values were respectively T>1, 96 corresponding with a 97,5% confidence level, and T>2, corresponding with 99 % confidence level.

In order to test whether the differences between the sub-traits are significant, one-sided *right-tailed* T-tests were performed for 18 of 21 the sub-traits. (r < 0.025, T > 1, 96; r < 0.01, and T > 2, 33).

An exception was made for three sub-traits, namely 'Sensitivity', 'Susceptibility for Stress' and 'Competitiveness'. Contradictory to the other 18 sub-traits, a low score on one of these sub-traits lead to a higher score on the corresponding dimension. For example, a person with a high score on the sub-trait 'Sensitivity' will have a lot of negative thoughts, anxiety and sadness, which will have a negative impact on a person's 'Emotional Stability'. Therefore, for these two sub-traits it is expected that internal auditors will score significantly lower than the norm group. Therefore these sub-traits were tested with a one-sided *left-tailed* T-test. The critical values (based on infinite degrees of freedom) were T< -1,96 corresponding with a 97,5% confidence level, and T < -2,33 corresponding with 99% confidence level.

The results of these T-test on the level of the Big Five dimensions are represented in Table 4.2 and will be described in more detail in the following sections (3.3.4 till 3.3.8).

Personality Trait	Interna	l Audit	Group	No	rm Gro	oup			T-Test results	
	μ	σ	σ^2	μ	σ	σ^2	Δμ	Т	Reliabilty 97,5%*	Reliability 99%**
Emotional Stability	122,76	16,50	272,41	113,49	18,88	356,49	9,27	6,52	Significant	Significant
Sensitivity	24,19	5,99	35,86	27,41	6,70	44,82	-3,22	-6,33	Not Significant	Not Significant
Self-Confidence	27,78	2,93	8,58	26,03	3,80	14,43	1,75	6,45	Significant	Significant
Susceptibility to Stress	23,39	5,60	31,42	25,86	5,94	35,28	-2,48	-5,35	Not Significant	Not Significant
Frustration Tolerance	22,56	5,01	25,13	20,74	5,65	31,91	1,81	4,24	Significant	Significant
Extraversion	107,16	13,61	185,12	104,54	14,46	209,18	2,62	2,33	Significant	Not Significant
Enthusiasm	25,42	4,37	19,05	25,81	4,23	17,85	-0,39	-1,13	Not Significant	Not Significant
Sociability	23,93	5,11	26,09	23,32	5,45	29,71	0,61	1,44	Not Significant	Not Significant
Energy	34,44	4,31	18,61	33,09	4,92	24,20	1,35	3,63	Significant	Significant
Assertiveness	23,38	4,00	15,98	22,32	4,62	21,34	1,05	3,03	Significant	Significant
Openness to Experience	127,61	12,58	158,24	121,66	13,46	181,04	5,95	5,70	Significant	Significant
Innovation & creativity	27,41	3,62	13,09	25,79	4,07	16,55	1,62	5,24	Significant	Significant
Intelectual vs. Action	36,83	5,23	27,31	35,05	5,51	30,36	1,79	4,15	Significant	Significant
Self-reflection	26,24	3,09	9,58	25,73	3,57	12,73	0,51	1,92	Not Significant	Not Significant
Openness to Change	37,13	4,82	23,19	35,10	5,52	30,43	2,03	4,90	Significant	Significant
Agreeableness	122,33	11,96	142,92	122,56	13,18	173,82	-0,23	-0,22	Not Significant	Not Significant
Competitiveness	30,17	5,17	26,71	30,63	5,69	32,40	-0,47	-1,07	Not Significant	Not Significant
Being other-oriented	32,29	2,95	8,71	32,02	3,67	13,46	0,28	1,05	Not Significant	Not Significant
Trusting others	37,49	5,00	25,03	37,01	5,44	29,57	0,48	1,14	Not Significant	Not Significant
Willingness to accomodate	22,71	5,26	27,62	24,16	5,75	33,06	-1,45	-3,28	Not Significant	Not Significant
Conscientousnouss	106,44	11,81	139,41	101,09	14,55	211,80	5,35	5,04	Significant	Significant
Systematic approach	35,70	5,48	30,01	33,36	6,28	39,46	2,34	4,95	Significant	Significant
Self-discipline	37,13	5,03	25,32	34,95	6,04	36,48	2,18	4,89	Significant	Significant
Self-control	35,81	4,54	20,61	33,50	5,08	25,84	2,32	6,00	Significant	Significant
Motivation to perform	33,61	5,08	25,80	32,77	5,88	34,53	0,84	1,90	Not Significant	Not Significant
Proactiveness	30,00	3,80	14,42	28,40	4,47	20,00	1,60	4,83	Significant	Significant

Table 4.2: N (IA-Group) =312; N (NormGroup) = 311; Df= ∞ ; * ρ < 0.025 and T > 1,96 (right-sided); ** ρ < 0.01 and T>2,33 (right-sided)

3.3.4 T-test results on Emotional Stability (H1)

H1: On average internal auditors score significantly higher on the personality dimension of Emotional Stability than the norm group.

The first hypothesis regarding Emotional Stability can be accepted at both confidence levels. For Emotional Stability the T-test showed that internal auditors indeed score significantly higher on this dimension than the norm group (ρ < 0.025 and ρ <0.01).

When looking at the underlying sub-traits 'Self-Confidence' and 'Frustration Tolerance', it can also be concluded that internal auditors score significantly higher than the norm group (ρ < 0.025 and ρ <0.01). Additionally, the internal auditors scored significantly lower on the sub-traits 'Sensitivity' and 'Susceptibility for Stress' than the norm group (ρ < 0.025 and T< -1,96 left-sided; ρ <0.01, T< -2,33 left-tailed).

3.3.5 T-test results on Extraversion (H2)

H2: On average internal auditors score significantly higher on the personality dimension of Extraversion than the norm group.

The second hypothesis regarding Extraversion can be accepted at a confidence level of 97, 5%. For Emotional Stability the T-test showed that internal auditors indeed score significantly higher on this dimension than the norm group (only for ρ < 0.025 and not for ρ <0.01). It is worth mentioning that the difference for the internal audit group and the norm-group was indeed very close to significant at a 99% confidence level. The T-test delivered a T-value of 2,326 while the critical T-value at 99% confidence level was 2,330 (delta 0, 05).

Furthermore, it can be concluded that the underlying sub-traits 'Energy' and 'Assertiveness' were significant at both levels (ρ < 0.025 and ρ <0.01). Meaning that the internal auditors scored considerably higher on these sub-traits than the norm group. However the differences between the sub-traits 'Enthusiasm' and 'Sociability' were not significant, even though on average the internal auditors were slightly less enthusiastic (25,42 < 25,81) and slightly more sociable (23,93 > 23,32) than their highly educated peers.

3.3.6 T-test results on Openness to Experience (H3)

H3: On average internal auditors score significantly higher on the personality dimension of Openness to Experience than the norm group.

The third hypothesis regarding Openness to Experience can be accepted at both confidence levels. For Openness to Experience the T-test showed that internal auditors indeed score significantly higher on this dimension than the norm group (ρ < 0.025 and ρ <0.01).

Moreover, the differences between the sub traits 'Innovation-orientated & Creativity', 'Intellectual versus Action orientated' and 'Openness to Change' were all significant at both confidence levels (ρ < 0.025 and ρ <0.01). Meaning that the internal auditors scored considerably higher on these sub-traits than the norm group. Only the difference between the scores on the sub trait 'Self-reflection' was not significant, although on average the internal auditors were slightly more likely to reflect on themselves than their highly educated peers (26,24 > 25,73). It is worth mentioning that the difference between the average scores for the sub trait 'Self reflection' was indeed significant at a confidence level of 95% (Appendix III).

3.3.7 T-test results on Agreeableness (No hypothesis)

No hypothesis formulated on Agreeableness

Given the fact that no consistent relationship between Agreeableness and persuasion can be argued, and additionally no significant effect has been found between Agreeableness and persuasion in the studies of Oreg and Sverdlik (2014) no hypothesis is formulated for Agreeableness. The research result showed no significant difference between the scores of the internal audit group and the norm group.

3.3.8 T-test results on Conscientiousness (H4)

H4: On average internal auditors score significantly higher on the personality dimension of Conscientiousness than the norm group.

The fourth hypothesis regarding Conscientiousness can be accepted at both confidence levels. For Conscientiousness the T-test showed that internal auditors indeed scored significantly higher on this dimension than the norm group (ρ < 0.025 and ρ <0.01).

Additionally, the differences between the sub traits 'Systematic approach, 'Self-Discipline', 'Self-Control' and 'Proactiveness' were all significant at both confidence levels (ρ < 0.025 and ρ <0.01). It can thus be stated that the internal auditors scored substantially higher on these sub-traits than the norm group. The difference between the scores on the sub trait 'Motivation to perform' was proved not significant, although on average the internal auditors were slightly more likely to be motivated to perform than their highly educated peers (33,61 > 32,77). It is worth mentioning that the difference between the average scores for the sub trait 'Motivation to perform' was indeed significant at a confidence level of 95% (Appendix III). The sub-traits 'Self-Control' and 'Pro-activeness' are not part of the calculation of the overall score on Conscientiousness (De Fruyt & Rolland, 2013).

3.4 Summarizing the results

In the previous sections the results of the T-tests were described in detail and the four hypotheses formulated in this study (H1-H4) were tested. Table 4.3 summarizes these outcomes. The table shows that the results of the field research confirm all four hypotheses. In other words, none of the hypotheses in this study are rejected.

Hypothesis	Accepted	Rejected	Confidence	Confidence
			level 97,5%	level 99%
H1: On average internal auditors score significantly higher on the dimension of Emotional Stability than the norm group.	ð	-		
H2: On average internal auditors score significantly higher on the dimension of Extraversion than the norm group.	V	-		×
H3: On average internal auditors score significantly higher on the dimension of Openness to Experience than the norm group.	4	-	₹	
H4: On average internal auditors score significantly higher on the dimension of Conscientiousness than the norm group.	V	-		

Table 4.3; Summary of the T-test results and the acceptance (♥) or rejectance (ヾ) of the hypotheses at 2 confidence levels.

4 Conclusion and Discussion

4.1 Introduction

According to section 1.3 the main question to be answered in this thesis is as follows:

Are persuasion related source personality traits significantly represented within the population of internal auditors?

In order to being able to provide an answer for this problem definition, the main question was divided into three underlying research questions:

- 1) What is persuasion and what are personality traits?
- 2) Which personality traits are related to persuasion?
- 3) To what degree are these source personality traits significantly represented within the population of internal auditors?

In this last chapter, the three questions will first be answered in section 4.2. Subsequently in the next section 4.3 the main question will be answered and the results will be discussed, providing a final conclusion to this study. Thereafter, the implications (section 4.4) and limitations (section 4.5) & recommendations for future research (section 4.6) will be described.

4.2 Answering the research questions

1) What is persuasion and what are personality traits?

The first question actually consists of two questions. Therefore, it will be answered in two steps, (a) what is persuasion and (b) what are personality traits.

1a) Persuasion

Persuasion can be viewed as part of an overarching concept called social influence and represents just one way to influence others. As discussed earlier, persuasion fundamentally differs from other forms of social influence such as compliance and authority. In contrast to compliance and authority, when using persuasion the source tries to change the way a target views the situation, and thus persuasion ultimately leads to attitude change.

The basic elements of persuasion were derived from the Yale communication-persuasion paradigm (Hovland et al. 1953). The paradigm states that in the case of persuasive communication, a communicator (source) delivers a message over some medium to an audience (target) with the intent of producing some desired effect. These above-mentioned elements such as source, message, target & effect form the basic elements of persuasion. Thus a comprehensive definition of persuasion should to some extent capture all four basic elements of persuasion.

In this study therefore the following definition of persuasion is used:

"Persuasion is an activity or process in which a communicator (source) attempts to induce a change in the belief, attitude, or behavior (effect) of another person or group of persons (target) through the transmission of a message (message) in a context in which the persuadee has some degree of free choice (non-coercive)." (Perloff, 1993, p. 15).

In the past decades a number of theoretical perspectives on the persuasion process have been developed. Among the more prominent and mostly used models within scientific literature are the Elaboration Likelihood Model, the Social Judgment Theory, the Cognitive Dissonance Theory and the Narrative Paradigm. In the literature study all four of the above mentioned models of persuasion have been reviewed. The Elaboration Likelihood Model proved to be the most suitable theory for this study, as it was the only model that covered all four elements of persuasion including the source characteristics. Therefore, the Elaboration Likelihood Model was used as the theoretical framework for persuasion.

1b) Personality traits

"Personality traits are stable individual-difference constructs that reflect reliable and distinct habits, consistencies, or patterns in a person's thoughts, feelings, and behaviors over time and across situations" (Oswald et al., 2013, p. 11).

The so called "Big Five" is considered to be the primary organizing structure relied upon when conducting and considering personality research in organizational settings (Oswald et al., 2013). The Big Five were used to measure personality traits in this study. The Five Factor Model consist of five basic dimensions (Barrick & Mount, 1991, pp. 3-5):

1. Neuroticism (antonym to Emotional Stability):

Individuals scoring low on Neuroticism are described as being anxious, depressed, angry, embarrassed, emotional, worried and insecure.

2. Extraversion:

Individuals scoring high on Extraversion are described as sociable, gregarious, assertive, talkative and active.

3. Openness to Experience:

Individuals scoring high on Openness to Experience are described as being imaginative, cultured, curious, original, broad-minded, intelligent, and artistically sensitive.

4. Agreeableness (Likability):

Individuals scoring high on Agreeableness are described as being courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted and tolerant.

5. Conscientiousness:

Individuals scoring high on Conscientiousness are described as being careful, thorough, responsible, organized, planful, hardworking, achievement-oriented and persevering.

2) Relation between personality traits and persuasion

The second question "Which personality traits are related to persuasion" will be answered using the Big Five as the construct for personality traits. Four of the five dimensions of the Big Five were found to be related to source persuasiveness. The research findings per dimension of the Big Five are described below;

1. Emotional stability:

Emotional stability is found to have a significant overall positive effect on target attitude change, in both the peripheral route as in the central route to persuasion (Oreg & Sverdlik, 2014). Furthermore, Emotional Stability is found to be positively related to perceived persuasiveness (Oreg & Sverdlik, 2014). Emotional stability is also found to be a significant and autonomous dimension of a peripheral cue called source credibility. (Falcione, 1974).

2. Extraversion:

Extraversion is found to have a significant overall positive effect on persuasion (measured by target attitude change), but only when involvement is low (peripheral route). (Oreg & Sverdlik, 2014). Extraversion is also found to be a significant and autonomous dimension of source credibility (Falcione, 1974).

3. Openness to experience:

Openness to Experience is found to be positively related to perceived persuasiveness, but not significantly related to target attitude change (Oreg & Sverdlik, 2014).

4. Agreeableness:

No consistent relationship between Agreeableness and persuasion has been found nor could be argued.

5. Conscientiousness:

No direct link between Conscientiousness and persuasion was found in the study of Oreg and Sverdlik (2014). It can however be argued that Conscientiousness does have an important (indirect) effect on the persuasiveness of an internal auditor, namely through the quality of the message in the central route to persuasion.

3) Personality traits of the population of internal auditors?

In order to answer the third question, four hypotheses were formulated based on the outcomes of the second research question. Based on scientific persuasion-related-literature, it was expected that internal auditors score significantly higher on the personality dimensions Emotional Stability, Extraversion, Openness to Experience and Conscientiousness. The results of the field research confirmed all of the four hypotheses. The research findings will now be described in more detail.

Emotional Stability

The research results show that internal auditors score significantly higher on the dimension of Emotional Stability than the norm group. Therefore the hypothesis (H1) is accepted. In other words, at a confidence level of 99%, Emotional Stability is significantly represented within the Dutch internal audit Population when compared to the norm group. It should be noted that although the internal auditor score is significantly higher than the norm group, the internal auditor's scored in the medium range of the overall spectrum.

When looking at the underlying sub-traits 'Self-Confidence' and 'Frustration Tolerance', it can be concluded that internal auditors score significantly higher than the norm group. Additionally, the internal auditors scored significantly lower on the sub-traits 'Sensitivity' and 'Susceptibility to Stress' than the norm group. This means that internal auditors appear to be more self-confident, less quickly frustrated with negative feedback, more carefree (in other words less anxious and less sad), and experience less stress when encountering problems or a high workload, than their highly educated peers.

As described earlier, Emotional Stability was found to have a significant overall positive effect on source persuasiveness in terms of getting the other to change their mind in both the central and the peripheral route (Oreg & Sverdlik, 2014). This suggests that for internal auditors being self-confident, calm and unemotional may be predominantly important for persuasion, even in the central route to

persuasion leading to strong and positive attitude change. In other words, being Emotionally Stable is equally important to an internal auditor's ability to persuade others as the quality of the message and the underlying facts and evidence (central route) (Oreg & Sverdlik, 2014).

Furthermore, Emotional Stability was also found to be a significant and autonomous dimension of perceived source credibility (Falcione, 1974). A high score on Emotional Stability was related to perceived persuasiveness (Oreg & Sverdlik, 2014). In other words, an emotionally stable internal auditor will be perceived as a credible and persuasive collocutor. Although the key objective of a persuasive attempt is to change a targets' attitude, there is nevertheless value for the internal auditor in merely being perceived as credible and persuasive. In many contexts (mostly peripheral), important decisions are made on the basis of how credible and persuasive a person appears to be.

Extraversion

The research results show that internal auditors score significantly higher on the dimension of Extraversion than the norm group. Therefore the hypothesis (H2) is accepted. In other words, at a confidence level of 97,5%, Extraversion is significantly represented within the population of internal auditors when compared to the norm group. It should be noted that although the internal auditor score is significantly higher than the norm group, the internal auditor's scored in the medium range of the overall spectrum.

When looking at the underlying sub-traits 'Energy' and 'Assertiveness, it can be concluded that internal auditors score significantly higher than the norm group. This means that internal auditors appear to be more energetic (have a powerful pace), more assertive and dominantly present and have a higher social visibility than their highly educated peers. It can be argued that because the internal auditors are more assertive and dominant, they will be more tempted to persuade others.

The results also showed that the internal auditors scored the same on the sub-traits 'Enthusiasm' and 'Sociability' as the norm group. This means that internal auditors are not significantly more enthusiastic and optimistic, and also not more sociable than the norm group.

As stated earlier, Extraversion is found to have a significant overall positive effect on persuasion (measured by target attitude change), but only in the peripheral route (Oreg & Sverdlik, 2014). Extraversion is also found to be a significant and autonomous dimension of the peripheral cue called source credibility (Falcione, 1974). This suggests, that the higher score on Extraversion, is particularly beneficial to the internal auditor's persuasiveness, in the peripheral route when the target is unmotivated, unable to cognitively process the information being given and the target has low involvement with the topic. Furthermore, it is worth noting that persuasion via the peripheral route will lead to relatively weak and mostly temporary attitude change.

Openness to Experience

The research results show that internal auditors score significantly higher on the dimension of Openness to Experience than the norm group. Therefore the hypothesis (H3) is accepted. In other words, at a confidence level of 99%, Openness to Experience is significantly represented within the population of internal auditors (when compared to the norm group). It should be noted that the internal auditors scored in the high range on the dimension Openness to Experience.

When looking at the underlying sub-traits 'Innovation-oriented and creativity', 'Intellectual versus action-oriented' and 'Openness to Change', it can be concluded that internal auditors score significantly higher than the norm group. This means that on average internal auditors are more willing to try new methods, are more keen to analyze the bigger picture and like change more than their highly educated peers in the norm group. The results also showed that the internal auditors scored almost the same on the sub-trait 'Self-Reflection' as the norm group. This means that internal auditors are not significantly more open to feedback regarding their own functioning than the norm group.

As discussed before, Oreg and Sverdlik (2014) found that Openness to Experience is positively related to perceived persuasiveness. In other words, an internal auditor who is 'Open to Experience' will be perceived as a persuasive collocutor. However, Openness to Experience did not have a significant effect on the ability of the source to actually persuade others (Target Attitude Change). As stated earlier, although the key objective of persuasion is Target Attitude Change, there is nevertheless value for the internal auditor in merely being perceived as persuasive. It might for example function as a peripheral cue, comparable to source expertise credibility, source attractiveness. All of which are important in the peripheral route to persuasion.

Agreeableness

Because of the fact that no consistent relationship between Agreeableness and persuasion has been found nor could be argued, no hypothesis was formulated for Agreeableness. The research results show that internal auditors do not score significantly higher on the dimension of Agreeableness than the norm group.

It can be discussed, however that on the one hand, being 'Other oriented' and their 'Willingeness to accommodate' elicits a positive response from their surroundings, enhancing others' willingness to listen to and consider their perspective. On the other hand, their 'Competitive' style makes individuals more likely to try to change others' minds. It is also imaginable that individuals who score high on Agreeableness will likely to be more easily persuaded themselves in the interaction with others, because of the fact that they are more willing to accommodate. Although, no hypothesis was formulated for the trait Agreeableness, further research into the effects of the underlying sub-traits on persuasiveness could possibly provide new and valuable insights.

Conscientiousness

The research results show that internal auditors score significantly higher on the dimension of Conscientiousness than the norm group. Therefore the hypothesis (H4) is accepted. In other words, at a confidence level of 99%, Conscientiousness is significantly represented within the population of internal auditors when compared to the norm group. It should be mentioned that while the internal auditor score is significantly higher than the norm group, the internal auditor's scored in the medium range of the dimension.

When looking at the underlying sub-traits 'Systematic Approach', 'Self-Discipline' it can be concluded that internal auditors score significantly higher than the norm group. This means that on average internal auditors are more predictable and well-organized, and are better able to motivate themselves to finish their tasks than their highly educated peers in the norm group. This should enable the internal auditor to produce accurate, clear, concise, complete, and timely communications which will have a



positive effect on the message quality. The results also showed that the internal auditors scored almost the same on the sub-trait "Motivation to Perform" as the norm group. This means that internal auditors are not significantly more motivated to perform than the norm group.

Despite of the fact that the link between Conscientiousness and persuasion has not been directly proved in the study of Oreg and Sverdlik (2014), it was argued that Conscientiousness does have an important indirect effect on the persuasiveness of an internal auditor. Namely, through the quality of the message in the central route to persuasion.

4.3 Conclusion and discussion

In the previous sections the research questions have been answered. Therefore, the central question in this study can now be answered:

Central Question:

Are persuasion related source personality traits significantly represented within the population of internal auditors?

Overall Conclusion: YES

The research results proved that all of the four persuasion related personality traits are indeed significantly represented within the population of internal auditors, when compared to a norm group of highly educated peers.

Moreover, because of the fact that the internal auditors in this sample scored significantly higher on Emotional Stability, Extraversion, Openness to Experience and Conscientiousness than their highly educated peers, it can be stated that the personality traits of the internal auditors make them naturally well-equipped being persuasive, being perceived as persuasive and creating a persuasive message of high quality.

Below, the overall conclusion will be described in more detail for each of the four persuasion related personality traits (or dimensions of the Big Five).

Emotional Stability

Overall, it can be concluded that the significantly higher score on Emotional Stability (in comparison to the norm group) will positively contribute to the (perceived) persuasiveness of the internal auditors, both in the central and the peripheral route.

Oreg and Sverdlik (2014) have shown that Emotional Stability has a significant overall positive effect on source persuasiveness in terms of getting the other to change their mind in both the central and the peripheral route. Moreover, a high score on Emotional Stability was also related to perceived persuasiveness (Oreg & Sverdlik, 2014). Furthermore, Emotional Stability was also found to be a significant and autonomous dimension of perceived source credibility (Falcione, 1974), mainly important in the peripheral route to persuasion.

Extraversion

Overall, it can be concluded that the significantly higher score on Extraversion (in comparison to the norm group) will positively contribute to the persuasiveness of the internal auditors in the peripheral route to persuasion.

Oreg and Sverdlik (2014) have shown that Extraversion is found to have a significant overall positive effect on persuasion (measured by target attitude change), but only in the peripheral route to persuasion. Extraversion is also found to be a significant and autonomous dimension of the peripheral cue called source credibility (Falcione, 1974), mainly important in the peripheral route to persuasion.

Openness to Experience

Overall, it can be concluded that the significantly higher score on Openness to Experience (in comparison to the norm group) will positively contribute to the perceived persuasiveness of the internal auditors.

Oreg and Sverdlik (2014) found that Openness to Experience is positively related to perceived persuasiveness. In other words, an internal auditor who is 'Open to Experience' will be perceived as a persuasive collocutor. However, Openness to Experience did not have a significant effect on the ability of the source to actually persuade others (Target Attitude Change).

Conscientiousness

Overall, it can be concluded that the significantly higher score on Conscientiousness (in comparison to the norm group) will indirectly, yet positively contribute to the internal auditor's persuasiveness. Namely, through the quality of the message in the central route to persuasion.

Despite of the fact that the link between Conscientiousness and persuasion has not been directly proved in the study of Oreg & Sverdlik (2014), it was argued that Conscientiousness must be an important personality trait for internal auditors, for being able to measure up to the IIA standards concerning the quality of communications, especially needed in the central route to persuasion. For communications to be accurate, objective, clear, concise, constructive, complete, and timely, the internal auditor must score high on Conscientiousness.

4.4 Implications

The overall conclusion is that the internal auditors in this sample scored significantly higher on Emotional Stability, Extraversion, Openness to Experience and Conscientiousness than their highly educated peers in the norm group. All of these personality traits were found to be positively related to (perceived) source persuasiveness. These findings provide indications of a desirable personality profile for a 'persuasive' internal auditor. It must be noted that the personality traits that were found to be positively related to persuasion in this particular study, could possibly have other (opposite) effects on other competencies important for internal auditors.

As mentioned earlier in section 1.2, when reviewing several job vacancies for internal auditor positions it became apparent that in nearly every vacancy 'persuasiveness' is mentioned as a required key competence for the candidate. Also the IIA underlined the importance of the competence of persuasion. They state that the internal auditor must be competent in persuasion, in order to drive improvement and innovation in an organization" (IIA, 2013, p.3). Therefore, the results of this explorative study can be very valuable for recruiters, human resource departments and Chief Audit Executives (CAE) when recruiting new internal auditors with the required ability to persuade others.

When interviewing a candidate for the position of internal auditor, a candidate can come across as being persuasive. As mentioned earlier in this thesis perceived persuasiveness is related to a high score on Openness to Experience and / or Emotional Stability. In general the internal auditors scored 'High' on Openness to Experience and 'Medium' on Emotional Stability. However according to the research findings, individuals scoring high on Openness to Experience are generally perceived as being more persuasive but in fact they are not more capable of actually achieving Target Attitude Change (Oreg & Sverdlik, 2014). Therefore it would be advisable, in addition to the job interview and other selection methods, to measure the candidate's personality using the PfPI. The individual test results could help predict whether or not the candidate has the right profile to actually achieve attitude change (due to high scores on Emotional Stability, Extraversion and Conscientiousness).

The research results could also be valuable for developmental purposes on both individual and team level. For example, the results of a PfPI report could help an internal auditor to identify those personality traits that hinder the development of his or her persuasion skills. This would enable the internal auditor (and relevant other parties such as HRD) to determine what a suitable individual development program should entail. For example, an internal auditor with a low(er) score on Emotional Stability (negative effect on persuasiveness), could possibly benefit from a mindfulness-training to better cope with stress and anxiety.

Additionally, the CAE could also benefit from the personality profiles of the internal auditors within the audit team. These personality profiles for example can help the CAE to make practical day-to-day decisions about which team member best to assign to a particular task or activity. When confronted with situations that require persuasion, a few practical guidelines from a combined personality- and ELM-perspective could assist the CAE in making such decisions. Such practical guidelines will now be discussed in more detail.

4.5 Practical persuasion-related guidelines for the CAE

There are a variety of stakeholders the internal auditor has to engage with when performing audit activities. For example (members of) the Audit Committee, Executive Board, Line Management, Assurance Functions, External Auditors and Supervisors (IIA Position Paper, 2008). When the CAE needs to persuade (measured in target attitude change) one of the above-mentioned stakeholders, for example regarding the need to take immediate action in order to mediate a high risk, the CAE must thoroughly prepare the process of persuasion. The first step is to make an assessment of the stakeholder's motivation and ability. The second step is to anticipate on that route to persuasion that, given the circumstances, is most likely to occur. These steps of preparation are now discussed in more detail.



Step 1: Assess the stakeholder's level of 'motivation' and 'ability'

The first step is to assess how motivated and able the stakeholder is to elaborate on the message. In this light it becomes apparent, that it is of vital importance for the CAE to maintain personal relationships with all of his stakeholders. The CAE must have an understanding of what the particular stakeholder finds important, what he or she personally has to gain or lose depending on the topic at hand and which fields of interest and expertise he or she has. In other words, continuous effective stakeholder management is a vital part of preparing a persuasive process for delivering a message because it can provide the CAE with the information needed to make a proper assessment on the motivation and ability of any stakeholder regarding any audit object or topic.

Additionally, other sources as legislation, reward structures and specific focus of regulatory bodies (e.g. DNB or AFM in the Netherlands) on the topic may also provide valuable clues that can be useful in the assessment of the stakeholder's level of motivation.

Information about the education and the career path of a stakeholder could provide additional information about their field of expertise, which could help in the assessment of the stakeholder's ability to cognitively process the information being given in the Audit Report.

Step 2: Anticipate on the route to persuasion that is likely to be followed

Dependent on the outcomes of the expected stakeholder's level of motivation and ability, the CAE can actively anticipate on the route to persuasion that is likely to be followed. In case the elaboration likelihood of the stakeholder is high (stakeholder has a high motivation and high ability), it is most likely that the central route to persuasion will be followed. On the other hand, the peripheral route is likely to occur when the target is unmotivated and unable to cognitively process all of the information being given (Dainton & Zelley, 2015). It should be mentioned that the central and peripheral route are not mutually exclusive, but that they represent positions on a continuous dimension ranging from low to high elaboration likelihood. This means that although the characteristics of one route might be dominant, that doesn't automatically mean that the characteristics of the other route are not important. In fact, in reality characteristics of both routes will play a role in the process of persuasion. Only the extent to which they bare weight to the actual persuasion process can differ.

The next steps '2a' and '2b' will describe the implications of the two distinct routes in more detail (either completely central or completely peripheral). By doing that, the choices the CAE has to make regarding the selection of team members (most suitable for each end of the persuasion continuum) will become more apparent.

2a: Central route: Select team members scoring high on Conscientiousness and Emotional Stability In case the elaboration likelihood of the stakeholder is high (stakeholder has a high motivation and high ability), it is most likely that the central route to persuasion will be followed. In the central route to persuasion the actual content and the quality of the audit report is what leads to attitude change. It is however important to realize that neurotic behavior (low Emotional Stability) while presenting the Audit Report may undermine the process of persuasion, leading to limited or even no attitude change regardless of the content and quality of the message.

When anticipating on the central route to persuasion, the CAE should make absolutely sure that the audit report includes strong arguments, contains all the information that could be relevant to the stakeholder and provides hard evidence to support the advocated position. In terms of the Performance Standard 2420 (www.theiia.org) qualitative communications need to be accurate, objective, clear, concise, constructive, complete and timely. An internal auditor scoring high on the dimension of Conscientiousness will be most suitable to deliver an audit report that meets all of those requirements. Furthermore, research results show that a high score on Emotional Stability will positively contribute to the persuasiveness of the internal auditor. In order to increase the chance that stakeholders will be persuaded into taking action, the CAE should therefore ensure that an emotionally stable internal auditor presents the audit report and discusses any decisions regarding follow-up of the audit-findings with the stakeholder.

2b: Peripheral route: Select team members scoring high on Emotional Stability and Extraversion

On the other hand, the peripheral route is likely to occur when the target is unmotivated and unable to cognitively process all of the information being given (Dainton Zelley, 2015). In this case, the CAE should focus more on peripheral cues when trying to persuade the stakeholders. These peripheral cues (e.g. the appearance, credibility and expertise of the internal auditor) lead to attitude change through the peripheral route (Oreg & Sverdlik, 2014). The less motivated and able the stakeholder, the lower the value of the actual message and its quality in the process of persuasion.

Research has shown that Emotional Stability and Extraversion are found to be significant and autonomous dimensions of source credibility (Falcione, 1974). It is likely that an internal auditor with a high score on both Emotional Stability and Extraversion will be perceived as credible. This will increase the chance of being persuasive in the peripheral route. Additionally, the research results have also shown that besides these peripheral cues, the personality of the internal auditor is an important factor for achieving Target Attitude Change (Oreg & Sverdlik, 2014). Research has shown that internal auditors scoring high on both Emotional Stability and Extraversion are actually more likely to achieve Target Attitude Change in the peripheral route, than their less emotionally stable and less extraverted counterparts. Therefore, it is advisable that the CAE ensures that an emotionally stable and extraverted internal auditor presents the audit report and discusses any decisions regarding follow-up of the audit-findings with the stakeholder. It must be mentioned that although the peripheral route to persuasion demands focus on merely peripheral cues, the CAE must always make sure that the audit report is in accordance with the Performance Standard 2420. Therefore communications must always be accurate, objective, clear, concise, constructive, complete, and timely (www.theiia.org).

Conclusion

It can be concluded that it is advisable for the CAE, to thoroughly prepare the persuasion process. First, continuous effective stakeholder management is a vital part of preparing a persuasive process, because it can provide the CAE with the information needed to make a proper assessment on the motivation and ability of any stakeholder regarding any audit object or topic. Second, the CAE should anticipate on the route to persuasion that is likely to be followed. By doing this, the CAE can optimally benefit from the personality profiles of the internal auditors within the audit team.

As shown in the previous steps, regardless of the route to persuasion, the persuasive message must always be accurate, objective, clear, concise, constructive, complete and timely. Therefore the CAE

would be wise to assign an internal auditor scoring high on the dimension of Conscientiousness to deliver the audit report. Furthermore, it is highly advisable that the CAE ensures that a highly emotionally stable and highly extraverted internal auditor presents the audit report and discusses any decisions regarding follow-up of the audit-findings with the stakeholder. This combination of personality traits will yield the bests chances for being persuasive (measured in target attitude change) within the persuasion continuum.

4.6 Limitations

The research that has been conducted for this thesis is not without limitations. These limitations will now be discussed, together with related suggestions for future research.

First, the personality traits were only measured in one way, in this study using the PfPI survey. As described in section 2.6, personality traits can be measured in a variety of ways namely, behavioral methods (observation), and informant reports and self-reports (McDonald, 2008). It is advisable to use a variety of methods, in order to improve the accuracy of the measurement and increase the validity (McDonald, 2008). For future research it is recommended to use a multi-method design to measure the personality traits of internal auditors and the norm-group. This could be done by, for example, combining the survey-results with interviews and observations or reports from co-workers.

Second, in line with the first limitation, a survey or self-report is prone to social desirability and other biases. However, the research design was strengthened in a few ways in order to minimize these biases. The fact that it is possible that the respondents answered in a socially desirable way must be kept in mind when interpreting the results of this study.

Finally, the expected relationships between the Big Five dimensions and persuasion were merely based on scientific literature. The study conducted by Oreg and Sverdlik (2014) was the only study that tested the direct relationship between the Big Five and source persuasiveness. Their research was conducted in an educational environment and the respondents were all students of the same University. Although this is not necessarily a limitation, it would be wise to consider the possibility, that the research results of Oreg and Sverdlik (2014) could be different under dissimilar circumstances. Therefore, future research is recommended in order to test the direct relationship between the personality traits of an internal auditor and his or her actual ability to actually change their stakeholders' minds (measured in Target Attitude Change).

4.7 Recommendations for future research

First, in this study the scores of the internal auditors were compared to the scores of a norm group of highly educated peers. For future research it could be very interesting to compare the scores of internal auditors to other norm groups, such as "High performers in Sales" or "Executives" where persuasion is an obvious core requirement.

Second, an interesting question for future research is whether internal auditors with very little work experience differ from those with a wide experience, when it comes to persuasion-related personality traits. Previous research (Mol, 2014) showed significant differences between starting and experienced internal auditors. The research findings of Mol (2014) showed that experienced internal auditors score higher on the Big Five dimensions Emotional Stability, Openness to Experience and Extraversion

compared to starting internal auditors. Future research regarding the differences between starting and experienced internal auditors, with specific focus on the level of persuasiveness, is therefore highly recommended.

Third, this study focuses on the relation between the Big Five dimensions and the level of persuasiveness. That is, only hypotheses regarding the relationship between the Big Five dimensions and persuasion have been formulated and tested. In this study, no literature study has been conducted to specifically explore the relationship between the underlying sub-traits and the level of persuasiveness. Future research, focusing on the direct effects of the underlying sub-traits and the level of persuasiveness, could possibly provide new and valuable insights. For example, in this study no hypothesis was formulated for the relationship between Agreeableness and persuasion. However it could be that i.e. one of the underlying sub-traits of Agreeableness such as 'Competitiveness' could have a positive effect on persuasiveness. While some of the other sub-traits of Agreeableness such as 'Willingness to Accomadate' and 'Being other-oriented' could possibly have a negative effect on persuasiveness.

Finally, "the element of gender is not specifically analyzed in this study and should be topic of further investigation. Preliminary analysis of the current internal auditor subject group also showed significant differences between men and women, most notably on emotional stability/Neuroticism. Analyzing these differences is essential if a personality survey would be used as an essential part of recruitment". (Paresi & Van Kuijck, 2016).



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Appendices

Appendix I: Measurement Scales

The given definitions below are a translation of the definitions provided by De Fruyt and Rolland (2013; pp. 22-26). These translations correspond with the translations made by Mol (2014). Each of the Big Five Traits is shortly described, and the combination of subscales the trait was measured by will be briefly discussed.

Emotional Stability

Emotional Stability relates to whether individuals are calm and confident about the outcome of an event. They can handle stressful situations and keep their footing in a busy work environment. However, surprises and difficult situations can upset and worry them. It was measured as a combination of the subscales sensitivity, self-confidence, susceptibility to stress and frustration tolerance which will be discussed below.

Sensitivity relates to the worrisomeness of individuals. Individuals scoring high on this trait usually have more negative emotions and feelings (e.g. fright, sadness, fear) and worry more than others. Individuals scoring low on this trait usually go through life more carefree and are better able to place problems into perspective. Items include "I rarely worry about problems at work (R)".

Self-confidence relates to the confidence of individuals. Individuals scoring high on this trait are self-confident, trust their own decisions and approach. Individuals scoring low on this trait usually more often think they are not able to accomplish something. Items include "I like who I am".

Susceptibility to stress relates to the level of stress an individual can bear. Individuals scoring high on this trait are more sensitive to stress. Setbacks can put them off faster and they find it harder to relax after a busy working day. Individuals scoring low on this trait usually know how to deal with stressful work situations and are usually quite good at handling whatever comes up. Items include "I am more sensitive to stress than others".

Frustration tolerance relates to an individual's sensitivity towards various forms of negative judgment and interference. Individuals scoring high on this trait can deal with negative judgment or criticism easily and feel that those comments should not be taken personally. Individuals scoring low on this trait are more sensitive than others to various forms of negative judgment and interference, and they take it personally when others have criticisms or negative comments about their work. Criticism or frustration can have a paralyzing effect on them or strongly affect them or stir them up emotionally. Items include "Criticism or frustration can have a paralyzing effect on me (R)".

Extraversion

Extraversion relates to whether individuals move easily among others without standing out or explicitly stepping into the foreground. They like to work with others but also find it easy to work alone. Sometimes they take more of a leadership 101e, but at other times they are happy to leave the initiative to others. It was measured as a combination of the subscales enthusiasm, sociability,

energy and assertiveness which will be discussed below.

Enthusiasm relates to an individual's level of cheerfulness. Individuals scoring high on this trait are cheerful and enthusiastic, and contribute to the mood and atmosphere in a group without taking the lead or setting the tone. They sometimes give spontaneous and visible expression to their enthusiasm. Individuals scoring low on this trait do not see themselves as contributing to a good mood. They can be portrayed as somewhat boring. Items include "My enthusiasm has a positive effect on others".

Sociability relates to whether an individual likes being with others. Individuals scoring high on this trait like getting to know new people. They need people around them and have vast social network. Individuals scoring low on this trait are happy on their own and function well alone. They are not keen on large groups, and it takes a while before they feel comfortable in a new group. They are rather tentative in making new contacts or meeting strangers. Their social network is quite stable, rather limited and includes primarily people they have known for a long time. Items include "I need other people around me".

Energy relates to the pace an individual feels comfortable at. Individuals scoring high on this trait have a lot of energy and keep a fast pace in life. They do not like to sit still and enjoy physical effort. Individuals scoring low on this trait keep a slower pace, enjoy quieter activities and relaxation and have less urge to put in great physical effort. Items include "I am energetic and like to keep a high pace".

Assertiveness relates to the level an individual explicitly steps into the foreground. Individuals scoring high on this trait take a leadership position in groups spontaneously and want to be heard. Individuals scoring low on this trait do not like to be on the foreground. They will express their opinion only when asked explicitly and would not intend it to carry a lot of weight. Items include "I am easily surpassed by others (R)".

Openness to Experience

Openness to Experience relates to whether individuals are creative and love to think outside the box. They like to reflect and readily engage in abstract and conceptual analyses. They have a wide range of interests and are open to new approaches, ideas, methods and innovation. They frequently contribute an original perspective. It was measured as a combination of the subscales Innovation-oriented & Creativity, Intellectual versus action-oriented, self-reflection and openness to change which will be discussed below.

Innovation-oriented & creativity relates to the level an individual is open to new approaches Individuals scoring high on this trait are creative and often contribute an original perspective. They have a rich imagination and like to experiment with new approaches and methods. They enjoy discovering and exploring new methods. They shun repetitive work, and welcome variation and innovation. Individuals scoring low on this trait prefer addressing issues for which they have common solutions. They prefer applying methods they are accustomed to. Items Include "I have little imagination (R)".

Intellectual versus action-oriented relates to the level an individual prefers to think about problems or just wants to get a job done. Individuals scoring high on this trait have interest in more abstract approaches and conceptual analyses. They like abstract and philosophical discussions and approach problems analyticity. Individuals scoring low on this trait are more practical and hands-on persons and focus less on the how's and why's. Items Include "I find philosophical discussions boring and a waste of time".

Self-reflection relates to the level an individual searches for feedback on their functioning. Individuals scoring high on this trait regularly consider what impression they make on others and reflect about themselves and their approach. They are open to suggestions from others and frequently ask for feedback. They try to implement these suggestions, adjust their behavior and develop themselves further. Individuals scoring low on this trait are less prone to ask for feedback or adjusting behavior to develop themselves further. Items include "When doing something I always think about how to do this differently and more efficient".

Openness to change relates to the level an individual likes variation. Individuals scoring high on this trait like variation and change in their (work) environment. They respond flexibly to innovations and can easily adapt their habits and ways of acting. They follow changes closely; even entirely new environments (e.g. working abroad) do not stare them off. Individuals scoring low on this trait prefer the status quo and prefer working in known environments. Items include "I prefer to apply known methods and techniques as best as possible over learning new methods and techniques".

Agreeableness

Agreeableness relates to whether individuals easily strike a balance between cooperation and competition with others. They try to understand the other's position but can defend their own interest when necessary. They take their work environment into account, but they can also go against the group. It was measured as a combination of the subscales competitiveness, being other-oriented, trusting others and to accommodate which will discussed below.

Competitiveness relates to the level an individual feels the need to win. Individuals scoring high on this trait tend to competition and compare themselves to (the results of) others. They would do almost anything to win and are tenacious. Individuals scoring low on this trait tend more towards cooperation with others than to competing with them. They feel no urge to win or do better than others. They are not easily challenged or provoked and in conflict situations, they are not out to prove that they are light. Items include "I do not necessarily need to win".

Being other-oriented relates to the level an individual wants to understand the opinion of others. Individuals scoring high on this trait are highly interested in the people around them, and they generally try to understand their thoughts and feelings. They share easily with others, listen to their views, and regularly show their appreciation. They find a good, open and companionable atmosphere (at work) very important and contribute actively to its creation. Individuals scoring low on this trait are more egocentric and perceive things from perspective. Items Include "I take time to listen to the thoughts of others".

Trusting others relates to the level an individual trust the people they work with. Individuals scoring high on this trait have much faith in others and assume others are reliable and honest. Individuals scoring low on this trait are somewhat wary of the people around them and assume that others have a hidden agenda or will use them when they get the opportunity. They are generally on their guard, and it can take a long time before they come to trust someone. When someone does betray their trust, they see this as proof that, indeed, no one can be trusted. Items include "I assume others have a hidden agenda".

Willingness to accommodate relates to the level an individual wants to avoid confrontations. Individuals scoring high on this trait avoid getting involved in heated discussions or conflicts. They do not like calling others to order or confronting them. In conflicts, they tend to play more of a mediating role. Individuals scoring low on this trait will defend themselves and argue for their point of view. They do not avoid getting into heated discussions or confrontations. Items include "I do not avoid discussions or conflicts".

Conscientiousness

Conscientiousness relates to whether individuals usually work very methodically and systematically and are ambitious and orderly. They set high standards for themselves and know how to motivate themselves in order to attain their objectives and fulfil their commitments. They highly value effort and hard work. It was measured as a combination of the subscales systematic and organized approach, self-discipline, self-control and motivation to perform and proactivity. All subscales will be discussed below.

Systematic and organized approach relates to the level an individual is organized. Individuals scoring high on this trait follow their plans meticulously and are well-organized which makes them reliable and predictable for their own environment. They are always well prepared as well as make sure to adhere strictly to schedules and deadlines. There is an effortless and natural alignment between their agenda and actions. It rarely or never happens that they fail to have something ready on time or have to do something at the last moment. Individuals scoring low on this trait are less-organized and methodical and sometimes loose time looking for documents or other things they need. Items include "I am known for being well-organized".

Self-discipline relates to the level an Individual is in-control of tasks. Individuals scoring high on this trait are excellent at controlling themselves in order to complete tasks on time or persisting even when difficulties or obstacles arise along the way. Once committed to a task, they always see it through to a successful end, despite obstacles along the way. They have strong self-discipline. Individuals scoring low on this trait find it more difficult to work harder when situations call for extra efforts. They are more prone to procrastination. Items include "I can motivate myself easily to complete tasks".

Self-control relates to the level an individual is in-control of feelings. Individuals scoring high on this trait can easily control themselves and their impulses and are able to focus well. They come across as composed, even in charged and risky discussions. They generally think carefully about how they will say something or deal with something, and consider all available alternatives. Individuals scoring low on this trait are more led by emotions and feelings. They sometimes do or say things they later



regret. Items include "I usually can compose myself'.

Motivation to perform relates to the level an individual wants to excel. Individuals scoring high on this trait set the bar high for themselves and strive for perfection. They work hard and quickly feel guilty when they are doing nothing for a few days. They want to excel and like to raise the standard of what can be achieved. They enjoy the recognition that goes with excellent work. Individuals scoring low on this trait are less driven and certainly do not strive for perfection. They choose targets which can be accomplished easily and usually do not use their full potential. Items include "I enjoy my better accomplishments".

Proactiveness relates to the level an individual thinks ahead to address potential problems. Individuals scoring high on this trait always think a few steps ahead and generally stay ahead of problems. They are far-sighted and strategic and, when a problem arises, quickly come up with a solution or, at least, will immediately know what to do. They have an overview of the whole and act from a long-term perspective. They regularly undertake actions or steps whose usefulness, significance or impact only become obvious later. Individuals scoring low on this trait address problems when they present themselves. They take a more or wait-and-see or short-term approach which regularly leads them to be surprised by problems. Items include "I prevent problems through proactiveness".



Appendix II: Invitation web survey PfPI (Dutch internal auditors)

Beste collega,

Graag uw aandacht voor een onderzoek ten behoeve van ons internal auditing vakgebied. Vorming en training van persoonlijke vaardigheden worden steeds meer medebepalend om succesvol te zijn in ons vakgebied. Vandaar dat het IIA een onderzoek sponsort naar de persoonlijkheid van internal auditors. Dit onderzoek wordt namens het IIA uitgevoerd door Lime Tree Research en TalentLens (Pearson).

De resultaten uit dit onderzoek worden o.a. gebruikt om de inzichten te vergroten in de persoonlijkheid die nodig is om effectief te kunnen zijn in de beroepspraktijk. Op deze wijze willen wij u als IIA lid ondersteunen in het effectiever uitoefenen van de functie van auditor.

Wij vragen u daarom mee te werken aan dit grootschalige onderzoek door middel van het invullen van de vragenlijst via deze link. Deze vragenlijst is een gevalideerd, wetenschappelijk onderbouwd instrument.

Uw bijdrage is van enorm belang voor het onderzoek. Vanzelfsprekend krijgt u uw persoonlijke resultaten in de vorm van een individuele rapportage toegestuurd. Mocht u vragen hebben over de rapportage of een persoonlijke terugkoppeling wensen, dan kunt u op vrijdagen tussen 10:00 en 12:00 uur contact opnemen met Sjoerd Pieters op 020-581 5512.

Wellicht ten overvloede, maar wij verzekeren u ervan dat uw gegevens strikt vertrouwelijk zullen worden behandeld. Bovendien draagt uitsluitend het aggregaat van gegevens bij aan het onderzoek.

Uw bijdrage zal ongeveer 30 minuten in beslag nemen. Om te starten met het invullen van de vragenlijst, klikt u op deze link (of plak onderstaande link in uw browser):

https://www.p2online.nl/limetreeresearch2/

Met vriendelijke groet,

drs. V. Moolenaar Voorzitter bestuur IIA dr. J.R.H.J. van Kuijck RA RC Projectleider onderzoek namens IIA

Appendix III: T-test results at the confidence levels of 95%, 97,5% and 99%

Personality Trait	Internal Audit Group	Audit	Group	S	Norm Group	dn			T-Tes	T-Test results	
	⊐.	ь	σ ₂	ュ	ь	σ^2	дΔ	-	Reliability 95%	Reliabilty 97,5%*	Reliabilty 97,5%* Reliability 99%**
Emotional Stability	122,76 16,	16,50	272,41	113,49	18,88	356,49	9,27	6,52	Significant	Significant	Significant
Sensitivity	24,19	5,99	35,86	27,41	6,70	44,82	-3,22	-6,33	Not Significant	Not Significant	Not Significant
Self-Confidence	27,78	2,93	8,58	26,03	3,80	14,43	1,75	6,45	Significant	Significant	Significant
Susceptibility to Stress	23,39	5,60	31,42	25,86	5,94	35,28	-2,48	-5,35	Not Significant	Not Significant	Not Significant
Frustration Tolerance	22,56	5,01	25,13	20,74	5,65	31,91	1,81	4,24	Significant	Significant	Significant
Extraversion	107,16 13,	13,61	185,12	104,54	14,46	209,18	2,62	2,33	Significant	Significant	Not Significant
Enthusiasm	25,42	4,37	19,05	25,81	4,23	17,85	-0,39	-1,13	Not Significant		Not Significant Not Significant
Sociability	23,93	5,11	26,09	23,32	5,45	29,71	0,61	1,44	Not Significant	Not Significant	Not Significant
Energy	34,44	4,31	18,61	33,09	4,92	24,20	1,35	3,63	Significant	Significant	Significant
Assertiveness	23,38	4,00	15,98	22,32	4,62	21,34	1,05	3,03	Significant	Significant	Significant
Openness to Experience	127,61 12,	12,58	158,24	121,66	13,46	181,04	26'5	5,70	Significant	Significant	Significant
Innovation & creativity	27,41	3,62	13,09	25,79	4,07	16,55	1,62	5,24	Significant	Significant	Significant
Intelectual vs. Action	36,83	5,23	27,31	35,05	5,51	30,36	1,79	4,15	Significant	Significant	Significant
Self-reflection	26,24	3,09	9,58	25,73	3,57	12,73	0,51	1,92	Significant	Not Significant	Not Significant
Openness to Change	37,13	4,82	23,19	35,10	5,52	30,43	2,03	4,90	Significant	Significant	Significant
Agreeableness	122,33	11,96	142,92	122,56	13,18	173,82	-0,23	-0,22	Not Significant	Not Significant Not Significant	Not Significant
Competitiveness	30,17	5,17	26,71	30,63	5,69	32,40	-0,47	-1,07	Not Significant		Not Significant Not Significant
Being other-oriented	32,29	2,95	8,71	32,02	3,67	13,46	0,28	1,05	Not Significant	Not Significant Not Significant	Not Significant
Trusting others	37,49	5,00	25,03	37,01	5,44	29,57	0,48	1,14	Not Significant	Not Significant Not Significant Not Significant	Not Significant
Willingness to accomodate	22,71	5,26	27,62	24,16	5,75	33,06	-1,45	-3,28	Not Significant	Not Significant	Not Significant
Conscientousnouss	106,44 11,	11,81	139,41	101,09	14,55	211,80	5,35	5,04	Significant	Significant	Significant
Systematic approach	35,70	5,48	30,01	33,36	6,28	39,46	2,34	4,95	Significant	Significant	Significant
Self-discipline	37,13	5,03	25,32	34,95	6,04	36,48	2,18	4,89	Significant	Significant	Significant
Self-control	35,81	4,54	20,61	33,50	2,08	25,84	2,32	9,00	Significant	Significant	Significant
Motivation to perform	33,61	5,08	25,80	32,77	5,88	34,53	0,84	1,90	Significant	Not Significant	Not Significant Not Significant
Proactiveness	30,00	3,80	14,42	28,40	4,47	20,00	1,60	4,83	Significant	Significant	Significant

Table 4.2: N (IA-Group) =312; N (NormGroup) = 311; Df= ∞ ; * ρ < 0.025 and T > 1,96 (right-sided); ** ρ < 0.01 and T>2,33 (right-sided)