

Conclusions

In this final chapter of this thesis we conclude with a discussion on our main findings, the theoretical implications of our study as well as the implications for internal auditors and management. We furthermore discuss the limitations of our study and give recommendations for further research. This chapter ends with a brief reflection by the author of this thesis about the research as a whole.

6.1 DISCUSSION OF THE MAIN FINDINGS

In chapter 2 throughout 5 of this thesis we studied different factors influencing deaf effect for risk warning as indicator for IA effectiveness. We answered the research questions of each individual study thereby providing important findings. In this Chapter we discuss these findings in relation to the objective of this study being as follows.

1. Identifying and recommending additional approaches and factors from the 'demand-side' perspective of IA effectiveness for reducing deaf effect and hence improving IA effectiveness;
2. Examining the main causal effects including additional contingency factors such as organization power of the internal auditor operationalized through top management support, nudging concepts including descriptive social norms and their interaction effects from the collaborative partner vs. opponent perspective. Additionally, we examined what constitutes the right 'timing' for communicating the risk warning message by the internal auditor and its main causal effects on IA effectiveness;

3. Combining both the 'supply' and the 'demand' side perspective of the IA effectiveness for finding better ways for meeting customer expectations.

In Chapter 2 and 3 a manager acts in the role of project owner who is not willing to listen to the risk warning message that continuation of an information systems project is not reasonable and the project should be redirected or discontinued. In Chapter 4 and 5 a manager acts in the role of an auditee (management) who is not willing to listen to the risk warning message related to risks involved in management's decision making in the organization in general. The messenger providing the risk warnings in our study is the internal auditor who is a credible source that makes true assertions based on thorough investigation in conformity with the internal auditing standards and requirements.

In Chapter 2 we demonstrated our 2x2 laboratory study on how organization power through top management support of internal audit influences deaf effect on escalating information systems project as an indicator of IA effectiveness. In the following 2x2 laboratory study described in Chapter 3 we included nudging concepts through descriptive social norm and investigated how this could be of influence on the IA effectiveness. In both studies we included the collaborative partner vs opponent relationship between the internal auditor (the messenger of risk warnings (bad news)) and the project owner (management – decision maker). In Chapter 4 we described our exploratory study that examined what determines the right timing for communicating of the risk warning message by the internal auditor. Chapter 5 describes the follow up of the previous study by applying a Q methodology (a mix of qualitative and quantitative approach) investigating what are the views of internal auditor and the auditees about the importance of timing to the IA effectiveness. Most prior academic research on IA effectiveness investigated factors influencing IA effectiveness from the 'supply-side' perspective. The 'demand-side' perspective is less examined. The contribution of our studies to existing academic research is that we centred our studies around the 'demand-side' perspective of IA effectiveness. Furthermore, by using (to our knowledge) different approaches to address IA effectiveness, we contributed to existing research by identifying additional factors of IA effectiveness, linking the 'supply-side' and 'demand-side' with each other.

Combining the findings of our studies we draw the following conclusions:

Conclusion 1: Being a collaborative partner and highly supported by top management is not always an advantage for the internal auditor

Chapter 2 studied the effect of organization power through top management support on the deaf effect for risk warnings (as an indicator for IA effectiveness) by the internal auditor in escalating information systems-projects. In an experiment setting we examined the main effects of the partnership relation of the auditor with management and the organization power variables on the deaf effect for risk warnings. We also manipulated

organization power of the internal auditor through top management support as a moderator variable to examine whether this influence of the partnership relation on the deaf effect is made stronger or weaker by either a high or a low organization power through top management support. Although one may think the hypotheses in our experiment were not difficult to predict, yet our results were surprising and brought originality in this area of academic research. More specifically, our results showed that top management support does not necessarily have a positive influence on the deaf effect (and hence IA effectiveness) as there were no significant main effects of organization power on the deaf effect. While it may seem to be logical that in the high organization power conditions decision makers are more likely to follow any advice, regardless whether the message comes from a collaborative partner or an opponent, our findings suggested this can even be contra-productive when the internal auditor is seen as a collaborative partner. However, our study provides evidence that high organization power through top management support is helpful and even necessary for reducing the deaf effect on risk warnings when the internal auditor is seen as an opponent.

Conclusion 2: Nudging can be a new way to increase IA effectiveness especially when the internal auditor is a collaborative partner to management

The internal auditors focus more on enforced adherence by management to pre-defined rules and regulations rather than using non-forced compliance ways to influence decision makers. Previous studies have shown that that small changes in the way how information about choices is presented (commonly referred to as "choice architecture") can alter people's behaviour in a predictable way while preserving freedom of choice. Drawing on research from behavioural economics, in Chapter 3 we examine the concept of nudging with descriptive social norms as a technique that internal auditors could use to help overcome deaf effect on risk warnings. As such, this study extends existing research on deaf effect and IA effectiveness by being presumably a first attempt to apply nudging concepts in relation to IA effectiveness. We conducted an experiment to investigate the main effects of descriptive social norms on deaf effect and the interaction of messenger-recipient relationship (collaborative partner vs opponent) and descriptive social norms. We furthermore provided more evidence for the main effect of the messenger-recipient relationship on the deaf effect. The findings of this empirical study indicate that nudging through descriptive social norm can be used by the internal auditor to increase IA effectiveness by overcoming the deaf effect response to their risk warnings to management. Including a descriptive social norm as part of the risk warning message of the internal auditor in our experiment appeared to be useful as it significantly reduced the deaf effect response by the message recipient. Descriptive social norm can be even more useful when the messenger is seen as a collaborative partner. When the internal auditor is seen as an opponent, nudging with a descriptive

social norm is ineffective, so there is no guarantee that providing a descriptive social norm will work as intended. To conclude on this section, nudging with social descriptive norms can be used by the internal auditors to improve effectiveness.

Conclusion 3: The timing of the communication of the risk warning message by the internal auditor influences IA effectiveness

Chapter 4 extends existing research on timing. To our knowledge timing has not been addressed as a factor influencing IA effectiveness in academic research. In our study we hypothesized that the right timing of the communication of the risk warning message by the internal auditor (not too early, not too late) could be of influence on the willingness of the auditees to listen or not to listen to the auditors message (deaf effect) and hence on the IA effectiveness. Our study was exploratory in its nature, which involved focus groups interviews aiming at firstly identifying the factors that determine the right timing. Based on analysis of the focus groups interviews, our results revealed multiple and diverse factors that determine the right timing for communicating the risk warning message by the internal auditor, dependable whether these were indicated by the auditees or the internal auditors. Based on the results, in our study we proposed grouping of the identified timing factors in three groups:

1. Standard timing factors emerging from regular 'business as usual' situations. Examples are timing factors related to alignment, audit procedures, auditee's agenda;
2. Mandatory timing factors emerging from regulator's requests that are unavoidable and cannot be postponed;
3. Special timing factors emerging from exceptional (more complex) situations that require special attention by the auditees and auditors. Examples are timing factors related to incidents, audit issue risk classification, change, strategic events, projects, audits abroad, soft controls audits.

Although it will require further research, we assume these various timing factors could have an important impact on the future internal auditor's skills required for most effectively execution of the audit assignments. We suggest that higher professional skills would be required from an internal auditor performing special, more complex assignments related to unanticipated events, compared to standard, more predictable assignments whereby 'ticking the box' may be done by less skilled internal auditors.

Interestingly, that the timing can be an important factor for IA effectiveness was unknown issue till we addressed it in our interviews (the participants experienced our interviews as an 'eye opener' as they acknowledged to have not thought of the timing factors in relation with IA effectiveness before). The information we identified in our study could be of use to the internal auditors and the auditees to enter into a discussion with each other and align their understanding as to when is the right timing for communicating risk warning message by the internal auditor so that the auditees will

be willing to listen more to this risk warning message. Hence, this will have a favourable effect on IA effectiveness.

Conclusion 4: There is no recipe for the right timing for communication of the risk warning by the internal auditor

Chapter 5 extends on the results of Chapter 4 by ranking the identified timing factors in the previous study from important to unimportant. In this study we applied a Q-methodology as we aimed at providing insights into the heterogeneity and the subjectivities in views of internal auditors and auditees about the timing factors relevant to the IA effectiveness. Our study identified five distinct views of auditors and auditees about the importance of the factors that determine the right moment (i.e. not too early, not too late) for the internal auditor to communicate the risk warning message to the auditee. While in the first viewpoint the auditors and auditees consider that important issues should be communicated immediately to auditees, no matter of other conditions such as e.g. the stage of the audit investigation and having collected sufficient factual evidence, in the second viewpoint the most important precondition for the right timing is to establish good relation with the auditees first. The former was less expected to be found among the internal auditors given the independent role of the internal auditor. In this respect, we feel there is in a way some tension between the independent role of the internal auditor in the organization and their emphasize on having a good relation with management. The third viewpoint clearly states that the right timing for communication of the risk warning messages in project/change situations is during the project/change and not afterwards when taking corrective actions are not possible or will cost more money. The fourth viewpoint was about having sufficient evidence by the internal auditor before the risk warning message is communicated to the auditees, which is in line with the internal auditor's standards and audit procedures. Finally, the fifth viewpoint emphasizes the importance of communicating the risk warnings immediately, but still independently of preferences of others. This viewpoint emphasized that the internal auditor should be and remain independent when choosing the right timing for the communication of the risk warning message.

We cannot link any of these five viewpoints specifically to the group of internal auditors or the group of auditees as they were all shared among the internal auditors and the auditees. Based on the results of this study, we can point out that the early communication of risk warnings, immediately when the issue is observed stands central to all identified viewpoints shared between the internal auditors and the auditees. As each viewpoint in our study outlines different conditions which determine the right timing, our study cannot neither give recommendation to the internal auditors to always communicate the risk warning messages to the auditees immediately nor recipe for determining when is the time right to communicate the risk warning to the auditee. However,

the five viewpoints resulting from our study are now available and can be used by both the internal auditors and auditees to determine the right timing of the risk warnings messages communication and hence contribute to increase of IA effectiveness.

6.2 IMPLICATIONS FOR INTERNAL AUDIT

Our studies have implications for the effectiveness of internal audit from the perspective of communication of the risk warnings. It is not our aim to issue a recipe to the internal auditor on how to maximize IA effectiveness, but we give some recommendations to internal audit that could positively contribute to the IA effectiveness.

Recommendation 1: Build a collaborative partnership relation with management

Our empirical studies described in Chapter 2 and 3 provided supporting evidence to previous research that an internal auditor who has a history of being a collaborative partner to management can increase IA effectiveness by reducing the deaf effect of the risk warnings communicated by the internal auditor. The results of our studies show that organization power through top management support and nudging have greater effect on reducing deafness to risk warnings and hence increasing IA effectiveness when the internal auditor has a collaborative partnership relation with management. Besides, our studies described in Chapter 4 and 5 showed that the right timing for communication of the internal auditor's risk warning message can be best determined in dialogue with management, which enhances the collaborative partnership relation between the internal auditors and their auditees. Next to the results of our studies, the importance of this collaborative partnership relation with management can also be illustrated with one example from practice. One senior audit manager from a large bank in The Netherlands had an interesting idea for an audit approach that fosters the collaborative partnership principles on the basis of nudging. Namely, senior management of the audited department was invited in a closing meeting session that was set up as a 'story walk' fashion. In this session, the internal auditors presented their risk warning messages i.e., the audit findings and identified risks. Looking for new ways to show the collaborative partnership, the senior audit manager decided to organize the closing meeting in an unconventional way i.e., not in an office at a table where management sits at one side and internal auditors at the opposite side, but a session in which audit findings (risk warning messages) were illustrated on posters hanging on the wall. In this session, management was taken through each poster by the audit team members discussing the audit issues. Thereafter, management was asked to define actions and put these on a post it, while the audit team was walking around to take up any additional questions or concerns of

participating management. Actions were defined and agreed with management at the spot and management showed strong commitment to resolve the issues. At the end of this session we received a very positive feedback from the auditee about the way how this closing meeting was set up and how the internal auditors guided them throughout the process. Our example illustrates how the deaf effect for the risk warnings can be reduced or eliminated in a creative way. We therefore encourage the internal auditors to invest in advancement of the collaborative partnership relation with management as this relation is important for the IA effectiveness.

Recommendation 2: Make use of top management support

While our study did not provide strong empirical evidence that the organization power of Internal Audit through top management support has a significant positive influence on the deaf effect (and hence IA effectiveness), still there are important practical implications for the internal auditors, especially in conditions when the internal auditor is seen as an opponent by management. In this condition, top management support is helpful and even necessary for reducing the deaf effect on risk warnings. Our findings suggest that top management support can even be contra-productive when the internal auditor is seen as a collaborative partner resulting in increase of the deaf effect for risk warnings. With this study we aim to increase awareness of the internal auditors that when their organization power through top management support is strong, it does not always mean that management is more likely to follow any advice, regardless whether the message comes from a collaborative partner or an opponent. By increasing awareness of internal auditors about the effects on top management support on deaf effect and hence IA effectiveness, we aim to help internal auditors to identify and avoid situations where well intended actions could have adverse effects on IA effectiveness.

Recommendation 3: You can use contingency approach on collaborative partnership vs opponent roles

Another suggestion for increasing IA effectiveness provided by our study relates to the contingency approach with regard to the collaborative partner vs opponent roles, that the internal auditor can use in different circumstances. As elaborated earlier in this thesis, great top management support is most helpful when the internal auditor is seen as an opponent. When the internal auditor is seen as a collaborative partner by management, the deafness for the internal auditor's risk warning will be reduced; however this is not always a guarantee that management will listen to the risk warning of the internal auditor. As our study showed, the combination of a great top management support and being a collaborative partner to management does not make management to listen more to the risk warnings by the internal auditor, but this combination can even backfire and bring opposite effect than desired. Although we have not investigated how much

top management support is enough for a collaborative partner to be most effective, we assume that these undesired effects will occur when top management support appears to be too much in combination with the collaborative partnership of the internal auditor. We assume this could also potentially have implications for the internal auditor who is seen as a collaborative partner and as such uses nudging by including descriptive social norm in the communication of the risk warnings. Although we need to further investigate, this could imply that in circumstances of combination of having too much top management support and use of nudging with social descriptive norm by the internal auditor who is seen as a collaborative partner, the great top management support may also have adverse effects on the nudging as it will presumably not work as intended.

With our study we aim to increase awareness of internal auditors that being a collaborative partner in combination with other factors will not always increase IA effectiveness and that there is a contingency approach regarding their roles in the organization (collaborative partner vs opponent). That the contingency approach is needed for effective corporate governance in organizations is also recognized and recommended by Davis et al, (1997) who suggest the Agency and Stewardship approaches to be complementary and Sundaramurthy and Lewis (2003) claim that these two theories need each other. Knowing this and based on the results of our studies, we recommend internal auditors to look for possibilities to use these two roles effectively (e.g. switch from one to another role or combine both roles) in different circumstances (e.g. high versus low top management support with or without nudging) to decrease deafness for the risk warnings of the internal auditor.

Recommendation 4: Make use of nudging

One recommendation for increasing management's willingness to listen more to the risk warning message of the internal auditor is related to the nudging concepts. Our study showed the internal auditors can nudge auditees through inclusion of a descriptive social norm as part of their risk warning message. Nudging in a positive way by including a descriptive social norm in the risk warning message is useful as it could prevent management continuing course of action in spite of risks. It is important internal auditors to be aware that nudging can be used in the communication of their risk warnings to management and that nudging in combination with collaborative partnership by the internal auditor reduces deaf effect and thus has positive effects on IA effectiveness. We encourage internal auditors to start experimenting with nudging not only by including descriptive social norms in their communication but also try out other nudging ways to influence management to listen more to their risk warnings in risky situations. We suggest nudging is something that needs more attention in the professional practices of internal auditors as it could have a lot of untapped potential for increasing impact.

Recommendation 5: Discuss 'the right timing' with Auditees with help of the identified five viewpoints

Our study introduced 'timing' as a factor that influences IA effectiveness. We first identified what factors determine the 'right timing'(thus, not too early, not too late) for the internal auditor to communicate the risk warning message so that management (auditees) will be most willing to listen to this risk warning message. Based on ranking of these timing factors from important to unimportant we identified five different subjective viewpoints supported by both the internal auditors and the auditees as to what timing factors they find important and unimportant with respect to the right timing for the communication of the risk warning message by the internal auditor. In all viewpoints the early communication of risk warnings, no matter of other conditions (e.g. sufficient audit evidence, finalised phases in the audit, personal preferences of others etc.) takes central place in all identified viewpoints by both parties. The results of our study indicate that different conditions determine the right timing for communicating the risk warning by the internal auditor. Additionally, we noticed a certain tension between what auditees consider to be important with regard to timing and the auditing standards and procedures (objectivity, quality) that the internal auditor is required to comply to. Our study cannot provide a straightforward recipe to the internal auditors for finding the right timing of communication of the risk warning, but we recommend internal auditors to use our five viewpoints in their dialogue with the auditees in determining this right timing and by doing so making a bridge and better alignment between the 'supply'-side and 'demand'-side of the IA effectiveness. Our study did not investigate this, but perhaps developing an audit approach for conducting a timing analysis comparable to the risk analysis the internal auditors must do as part of their audit procedures could be of benefit to determine the right timing and hence increase IA effectiveness.

Recommendation 6: Adapt the IA organization to fit the 'demand-side' of IA effectiveness

The results of our study may have an impact on the current IA organizations and can be used as a stepping stone for the IA organizations of the future. Our studies described in Chapter 2 and 3 indicated that combining the collaborative partnership vs opponent roles of the internal auditor could have the most positive effect on the IA effectiveness. This will potentially have consequences for the auditor's communication skills in such a way that the internal auditor should be capable of switching these roles when necessary to be most effective. Furthermore, applying of nudging concepts as described in Chapter 3 of this thesis may imply different skills from the internal auditor (in terms of communication and behavioural skills) than the standard auditing skills, which will potentially lead to different audit approach. The timing factors identified in our studies described in Chapter 4 and 5 may also impact the internal auditor's skills as well as the type of engagements

that will be executed. More precisely, our study suggests that there are standard timing factors related to standard, procedural, or repetitive events in the organization for which auditors could be employed that have less demanding skills compared to other timing factors arising from more complex strategic decisions and changes in the organization for which other, more demanding internal auditor's skills would be more appropriate. Our findings related to the favourable effect of top management support on the IA effectiveness as well as the views of the internal auditors and the auditees about what constitutes the right timing for communicating the risk warnings by the internal auditor, indicate that the relation between the internal auditor and the auditee is important for the IA effectiveness. As the IA organizations are becoming smaller in terms of resources, but larger in terms of demand by management and other parties, we recommend internal auditors to consider the findings of our studies and start looking outside the box (i.e. outside the existing internal auditing standards) to find other (more) effective ways of auditing. This way, the IA organization of the future will be capable of meeting the increasing demand from management and other stakeholders ('demand'-side perspective of IA effectiveness).

6.3 IMPLICATIONS FOR MANAGEMENT

We summarize below the most important recommendations to management about how they could use the results of our study to positively contribute to the IA effectiveness.

Recommendation 1: Give support to internal audit - but do not overdo

Our results showed that top management support helps management to listen more to the internal auditor's risk warnings leading to improvements in the organization. So, top management support is not only useful for the IA effectiveness but top management in organizations benefits as well as risks are being eliminated or mitigated as a result of the greater impact of the internal auditor. Therefore, we stimulate top management in organizations to give support to IA, but would like to draw the attention that too much top management support combined with the collaborative partnership of the internal auditor will presumably not make management to listen more to the risk warnings of the internal auditor. Although we do not know yet what constitutes too much top management support, our study indicates there may be a turning point when top management support will even increase deafness.

Recommendation 2: Address the expectations with regard to timing to the internal auditor to manage expectations

As discussed earlier in this study, the timing of the risk warning message of the internal auditor was recognized by both the internal auditors and the auditees as an important

factor for IA effectiveness. From our interviews we learned that timing of the risk warning message is not something that is determined by the internal auditor alone, but it is also influenced by the organization dynamics and its management. Also we noted that till we did not address timing in our interviews, it was recognized by both the internal auditors and auditees they have not thought of it before as an important matter for IA effectiveness. We think that addressing timing in discussion between internal auditors and auditees to share views about the importance of timing, can help manage expectations with regard to when the is right moment to hear about the risks identified by the internal auditors. By doing so, management will be able to take corrective measures timely and consequently IA will be more effective.

Recommendation 3: Embrace the new ways of communication of the risk warnings by the internal auditors

The results of our studies revealed additional factors that may be of positive influence to the extent the auditees listen to the risk warning messages of the internal auditor. When deployed adequately top management support, nudging and timing can be of a great help to the internal auditors to decrease deafness to their risk warning messages by the auditees and hence increase IA effectiveness. While we recommend internal auditors to start experimenting with new audit approaches 'outside the box' that include these additional factors investigated in our study, we also like to raise awareness of the auditees about the application of these new approaches by the internal auditors in near future. We invite auditees to embrace these new ways of communication of the risk warnings by the internal auditors for the benefit of both parties. With these new approaches management may be able to better listen to the internal auditors' risk warnings and take timely the necessary corrective measures. Hence this will help to increase IA effectiveness.

Recommendation 4: Use descriptive social norms to your own benefit

As our study showed, descriptive social norms in organizations, used as nudges by the internal auditors in their risk warning messages, can be useful as these increase the willingness of management to listen more to these risk warnings and thus influence their decision making towards the desired behaviour. We want to raise awareness of management that there are various descriptive social norms in the organization that can be positively deployed to influence their management decision making. When they are already present, management can use them to make right management decisions, and presumably by doing so, management can take corrective measures ahead of the internal auditor's risk warnings.

6.4 IMPLICATIONS FOR THEORY

Our studies described in this thesis not only further validated some existing but also developed some additional measurement instruments that can be of use for future experiments in the area of IA effectiveness and broader. We demonstrated that even a previously known and studied factors of IA effectiveness (such as top management support) can have different way of influencing deafness to the risk warnings by the internal auditor.

In our experiments we examined the main causal effects of additional contingency factors such as organization power of the internal auditor operationalized in top management support and nudging concepts including descriptive social norms and their interaction effects from the collaborative partner vs. opponent perspective. Additionally, we examined what constitutes the right 'timing' for communicating the risk warnings by the internal auditor as a new contingency factor for IA effectiveness.

Below we elaborate on the theoretical implications of our study.

The 'demand-side' perspective of IA effectiveness and its link with the 'supply-side' need attention in IA effectiveness research

As mentioned earlier in this thesis, earlier research on factors influencing IA effectiveness has tended to focus predominantly on factors such as the acceptance and implementation of the audit recommendations, the size of the audit department, compliance with the auditing standards, the positioning of the Internal Audit department in the organization and relation with the Audit Committee, and interaction with line managers (Arena and Azzone, 2009), top management support (Cohen and Sayag, 2010; Van Peursem, 2005; Mihret and Yismaw, 2007), staff expertise, executing the audit plan, audit communication (Mihret and Yismaw, 2007), organizational support' (Sarens and De Beelde, 2006a; 2006b). When providing a review of the existing empirical literature on IA effectiveness, Lenz and Hahn (2015) distinguished two different streams, the 'supply-side' perspective, i.e. empirical studies based on self-assessments of internal auditors, and the 'demand-side' perspective, i.e., empirical studies based on other stakeholders' perspectives. In this thesis, we identified causal factors of IA effectiveness (such as nudging and timing), which, to our knowledge have received no attention in the field of deaf effect and IA effectiveness literature. In academic research, in the area of IA effectiveness, most academic studies focused on the 'supply-side' perspective of the IA effectiveness. The stakeholders ('demand-side') perspective is under examined area, which was already reported by Lenz and Hahn (2015). By focusing on the 'demand-side' factors of IA effectiveness our study contributes to the literature of IA effectiveness by providing more knowledge to better understand these factors and their influence on IA effectiveness. On the top of that, our study identified some additional factors that may influence IA effectiveness (such as nudging and timing).

To our knowledge, our study is the first that connects the 'supply-side' and 'demand-side' perspective of IA effectiveness with each other by identifying the shared views of the internal auditors and management about the importance of timing for IA effectiveness.

Our examined causal factors of IA effectiveness enrich the interpersonal relations dimension of IA effectiveness

In Chapter 1 of this thesis we referred to Lenz et al, (2014) who based on a literature review, derived four key dimensions or categorical blocks of effectiveness of the IA function: organizational factors, IA personality factors, IA processes and IA interpersonal relationships. Lenz et al, (2014) regarded the interpersonal factors (such as the relationship between IA and senior management and the board/Audit Committee and other third parties) as being critical in determining IA effectiveness and consider these to represent a new important research field. Based on the results of our study we assume that top management support, nudging and timing as causal factors of IA effectiveness reside within the IA interpersonal relations dimension, reflecting the 'demand-side' perspective (expectations from stakeholders) as well as the linkage between the 'supply- side' (Internal Audit) and 'demand-side' perspective of the IA effectiveness. Our contribution to the interpersonal relations dimension of the existing model of building blocks of IA is shown in Figure 6-1 below.

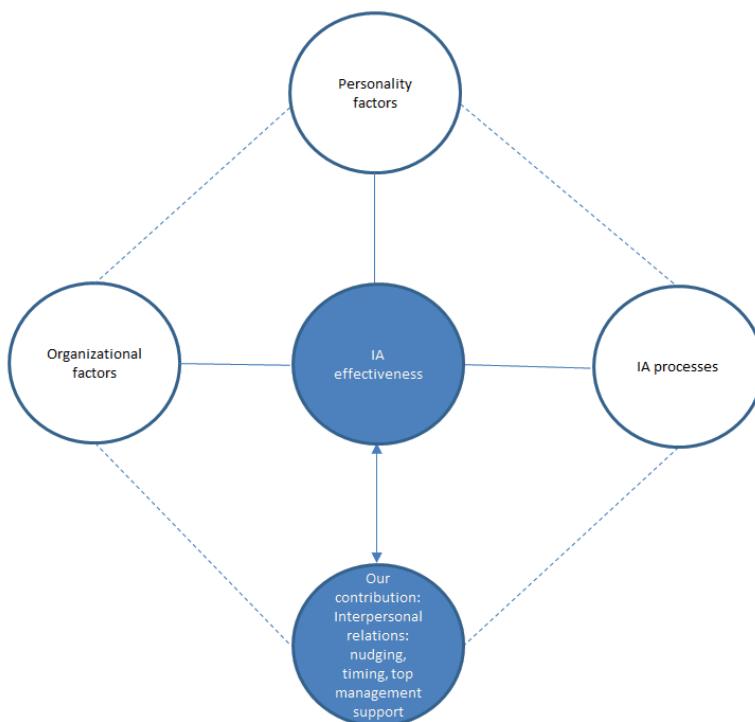


Figure 6-1. Contribution to existing model of building blocks of IA characteristics

Agency Theory and Stewardship Theory principles strengthen each other in favour of IA effectiveness

Our study further examined the choice between Agency and Stewardship relationships by including interaction effects between the relationship and other organizational or psychological factors such as top management support, nudging and timing. By investigating how other factors influence IA effectiveness in combination with the collaborative partnership vs opponent roles of the internal auditor, our study indicates that the collaborative partnership and opponent roles could be combined by IA organizations to become more effective. This is supported by our two experiments described in Chapter 2 and 3 of this thesis that use the principles of Agency and the Stewardship Theory, focusing on the deaf effect as a measurable exhibition of IA effectiveness. Previous research empirical research provided evidence that managers (project owners) are more likely to listen to the risk warnings from an internal auditor who is seen as a collaborative partner but they are less motivated intrinsically to listen to the risk warning, when the messenger is seen as an opponent. Our study described in Chapter 2 demonstrated that when the internal auditor is seen as a collaborative partner by management in combination with (too)high organization power through top management support, this is not always a guarantee that deafness to the risk warnings of the internal auditor will be reduced, but in contrary, it can have adverse effect on deafness and hence on the IA effectiveness. In this case, our study showed the it would be most useful the internal auditor to have the opponent role. Although it needs further investigation, the results of our study described in Chapter 2 in combination with the results of the study described in Chapter 3, presumably indicate that in circumstances when the internal auditor obtains great top management support, the nudging through descriptive social norm by the internal auditor who is seen as a collaborative partner will also be ineffective because of this great top management support. So, our studies indicated that the collaborative partnership and opponent roles should be considered as complementary to each other and be combined by the internal auditor in favour of the IA effectiveness. From a theoretical perspective, this confirms that the Agency and Stewardship Theory are complementary and need each other for building effective organizations, which supports the theory assumptions of Davis et al, (1997) and Sundaramurthy and Lewis (2003).

Next, the results of our the study on timing factors described in Chapter 4 and 5 support the concepts of the Stewardship Theory. As discussed earlier in this thesis, instead of rules and control mechanisms applied in the Agency Theory, Stewardship Theory is based upon collaboration and trust among actors in organizations, clarity of the organizational strategy and intrinsic motivation, which in turn, results in actors acting in service to the organization (Hernandez, 2008). Resulting in several viewpoints about the importance of timing for IA effectiveness that were supported by both internal auditors and the auditees, our study indicates that the internal auditor should look for collabora-

tion and congruencies with the auditees with respect to the timing when a risk warning should be communicated (risks must be shared with and not thrown to the auditees over the fence). This foresters the interpersonal relations of the internal auditor with management, which ultimately will lead to increased IA effectiveness.

Behavioural aspects can influence IA effectiveness

Further, our study delivers important contribution to the literature of IA effectiveness from the perspective of the communication of the risk warning messages by internal auditors. Prior research on factors influencing IA effectiveness has tended to focus predominantly on factors such as 'organizational support' (Sarens and De Beelde, 2006a; 2006b); the acceptance and implementation of the audit recommendations, the size of the audit department the positioning of the IA department in the organization and relation with the Audit Committee (Arena and Azzone, 2009), top management support (Cohen and Sayag, 2010; Van Peursem, 2005; Mihret and Yismaw, 2007). Research on other additional factors from a human behaviour perspective influencing effectiveness of IA is limited. In our experiment described in Chapter 3 we included nudging with descriptive social norm in the risk warning message of the internal auditor to influence the project owner in taking the decision to continue or redirect an IT-project. With this, we contributed to the literature of IA effectiveness by providing some evidence that human behavioural aspects could be of benefit to Internal Audit and its effectiveness.

Timing is a causal factor of IA effectiveness and should be further explored

Finally, our studies described in Chapter 4 and 5 are to our knowledge, the first that explored what factors constitute the right timing for the internal auditor to decrease deafness by management on the risk warnings and hence increase IA effectiveness and how is the importance of these factors viewed by both the internal auditors and auditees. If timing is not properly managed this could result in deaf effect for the risk warning messages of the internal auditor. We assume our study on timing provided important material that could be potentially used in further research of timing issues based on the concepts of Music Theory, similar to the study of Albert and Bell (2002). Next, our study on timing could open up interesting research questions for further empirical studies on the skills and competencies of the internal auditor related to specific types of timing factors that are required within the IA function to manage expectations with management and meet the required level of IA effectiveness. Also the question 'what constitutes right timing for communicating risk warnings by the internal auditor' could be explored in different settings, such as other financial or non-financial organizations, other countries and cultures.

Summary of our theoretical contribution

Figure 6-2 depicts an overview the theoretical contribution of our study.

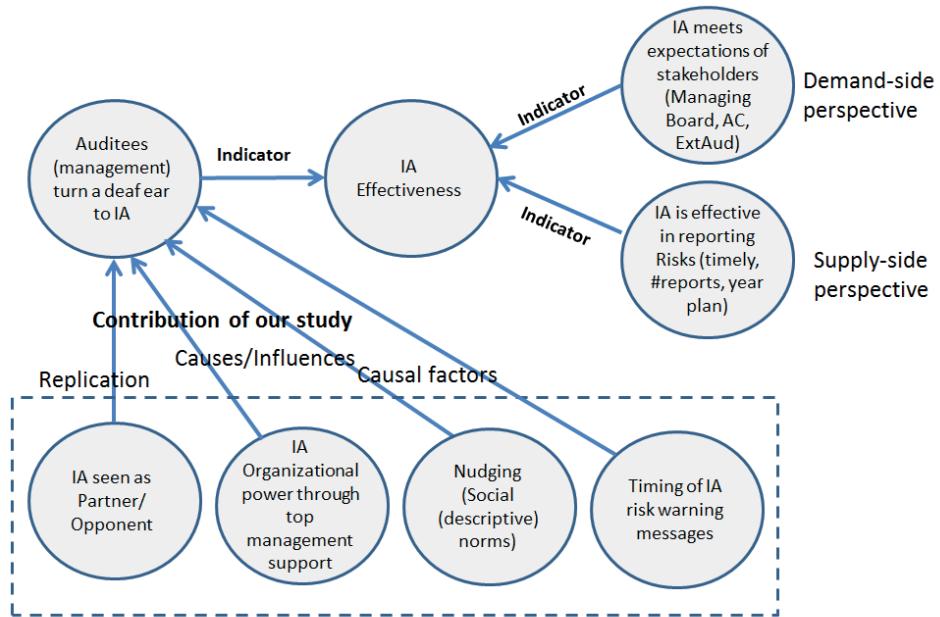


Figure 6-2. Overview the theoretical contribution of our study

In table 6-1 below we show a refined description the contribution of our study to existing literature.

Table 6-1. Contribution of this study

Contribution	Replication	Extension	Innovation
Theory	Stewardship Theory (C2, C3)	-	-
Methodology	Deaf effect (C2, C3)	Nudging (C3)	Timing (C4)
Application	Collab Partner/ Opponent relation (C2, C3) Deaf effect (C2, C3)	Top management support (C2) Nudging (C3)	Timing (C4)

6.5 LIMITATIONS & FURTHER RESEARCH

Our study has several limitations and therefore any generalization of the findings of this study to other settings should be treated with caution. In the separate Chapters of this thesis we described the limitations comprehensively. In this paragraph we elaborate the most important limitations applying to our study and give several recommendations for further research.

One limitation refers to the choice for a laboratory experiment in the studies described in Chapter 2 and 3 of this thesis. Conducting a laboratory experiment allowed us to test causal relationships and achieve high internal validity, but at some cost for the external validity. To achieve a high level of internal validity and high degree of control, our studies took a necessarily narrow focus and involved a small number of variables. Hence, in our experimental approach we were unable to include all the complexities of real work situations and the effects observed in the laboratory settings may not occur in real live situations. This trade-off of higher internal validity for lower external validity is common in laboratory experiments and should not be considered to be a flaw. At the same time, any generalization of the findings of this study to other settings should be done with caution.

We compensated for the above limitation by using a multi-method approach in our study, consisting of a combination of quantitative and qualitative research. We studied the IA effectiveness phenomenon from various perspectives and hence used a convergent research methodology, called triangulation (Webb et al, 1966). Jick (1979) promotes the idea that quantitative and qualitative research could be complementary. He also suggested that triangulation, in addition to bringing validation and reliability, also enables researchers to capture a more complete, holistic, and contextual portrayal of the units under study. To achieve triangulation in research methods we combined two laboratory experiments, exploratory study by Focus Groups and a Q methodological study (combination of qualitative and quantitative method) in order to obtain insight into how the deaf effect for risk warnings could be influenced. The two laboratory experiments provided us with methodological strength with regard to the precision of measurement and deduction by testing a set of theoretically determined hypotheses (Nuijten, 2012). The qualitative study with Focus Groups provided more insight into the factors influencing deafness. The Q methodological study provided further insight from the interviews, delivering interesting viewpoints about the importance of timing for the IA effectiveness that could be interesting for further research.

Another limitation relates to the use of student participants in these two studies that could also limit the external validity of our results. Although students often serve as valid surrogates for managers in this type of research, we conducted further research to determine if these findings can be replicated with more experienced participants.

To replicate our nudging experiment with practitioners described in Chapter 3 of this thesis, we first conducted a pilot with managers from real organizations through Qualtrics. In our pilot we tested with 44 managers. We defined selection criteria and filtered the results on these criteria (native English speaker, country of origin United States, role manager, limitation of time for completing the questions, attention filter, control questions). Prior to launching the pilot with the requested 44 participants, we tested with 15 participants in order to check the set-up of the experiment and take out any mistakes. As we concluded that 15 participants did not provide for sufficient information to be able to decide to conduct the real experiment or not, we proceeded with the execution of the pilot with 44 participants. Despite the filters and several testing attempts with Qualtrics, the quality of data was poor leading us to the decision not to proceed with the experiment. This decision was also supported by the results of the moderation analysis we performed in SPSS showing that the interaction effect between SocNorm and Continue was not only inconsistent with our expectations but also not logical (e.g. the deaf effect was significantly increased when the message including descriptive social norm was communicated by an internal auditor who is seen as a collaborative partner but when the message including descriptive social norm was communicated by internal auditor who is seen as an opponent, the deaf effect was significantly reduced).

Based on our experience with this pilot, we think online providers could not be appropriate for laboratory experiments with practitioners due to the risk of poor data quality, the required level of control and the required internal and external validity. Therefore we recommend in further research to replicate our experiments on the organization power and nudging part in different experimental conditions with more experienced participants, although it may be difficult to have large number of practitioners in a lab at one time and one place.

The next limitation refers to our measures of the OrgPower and SocNorm constructs in the studies described in respectively Chapter 2 and 3 of this thesis in the context of internal auditor – project owner relationship. These constructs were self-developed given our particular level (inter personal) and context. Although they were derived from literature, tested and improved in the preparations of this study and shared with experts, refinement and testing is recommended in further research.

As elaborated earlier in this thesis, our study on organization power of the internal auditor through top management support suggested that there is turning point when top management support can have undesired effects and even increase deafness to the risk warnings of the internal auditor. In future research it would be interesting to confirm these findings by replicating the experiment with practitioners from the field. Also in future research it would be interesting to investigate what constitutes high top management support and at what turning point top management support will be contra effective. Further, in future research it could be interesting to investigate the long

run effects of top management support on the relation between the internal auditor and management and hence on the effectiveness of IA. As discussed earlier in Chapter 2 of this thesis, our study investigated how the opponent and collaborative partner role interact with organization power of the internal auditor. Knowing the effects thereof on deaf effect, the internal auditor could consider the possibilities for switching between these two roles to achieve less deaf effect on the risk warnings and hence increase internal audit effectiveness. We assume, the results of our study could help internal auditors to upgrade the internal audit profession by improving their skills and expertise to be able to deploy the collaborative partnership versus opponent roles in communication of the risk warnings more effectively. We encourage other researches to further explore this challenging area of internal audit effectiveness.

Further, in our study we used top management support to internal auditors in the organization as an operational measure of organization power of the internal auditor. Next to the support from superiors, Near and Miceli (1995) measure the whistle-blower's power variable by other several operational measures such as position in hierarchy, pay grade, value congruence power, professional status, education level, tenure, minority influence, lack of retaliation, and individual power membership in majority group. In future research it could be investigated how these operational measures of organization power can influence deaf effect on risk warnings as an indicator of IA effectiveness.

As to the study described in Chapter 3, we limited our experiment to using a social descriptive norm as a nudge included in the risk warning message of the internal auditor. From literature we know that other forms of nudging could be deployed to change human behavior (Thaler and Sunstein, 2009). In future research, in an experimental design, it could be investigated for example, how nudging with implementation plans or how sequence of the auditor's recommendations or timing factors influence deafness of management to risk warnings of the internal auditor. In addition, based on the EAST (Easy, Attractive, Social and Timely) assumptions for influencing human behaviour, we assume timing may also be effectively deployed to nudge auditees into the right direction (i.e. to better listen to the internal auditor's risk warnings) and we encourage future research of this topic as well. Similarly to our study in Chapter 2, in future research it could be interesting to investigate whether the effects of nudging management by the internal auditor on long run would be still effective and favourable for the relation between the internal auditor and management and hence for the effectiveness of IA.

There are also limitations related to our exploratory studies described in Chapter 4 and 5 of this thesis. The interviews conducted as part of these studies were held with participants with Dutch nationality working within one large bank in The Netherlands. This choice is defendable given the focus of these two studies. We did not expect to identify different results in comparable larger banks in The Netherlands as these, similarly to our selected bank, at the time of our study, were subject to important strategic

developments resulting in increased attention to the timing issues. Still, we recommend further study with respondents from other large banks in The Netherlands, but also abroad to confirm this expectation. The results could be different in other settings and generalization of our findings to other companies and countries should be done with care. Other factors may also affect the effectiveness of the internal auditor's communication of the risk warning message, like for instance cultural aspects, type of audits, type of company etc. and we recommend further research taking into account these aspects.

Our studies on the timing factors described in Chapter 4 and 5 revealed that the timing factors determining the right moment for communicating the risk warning message by the internal auditor may also impact the internal auditor's skills and competencies. Identifying the right timing for communicating the risk warning message to management in complex and unanticipated events (e.g. strategic changes) would presumably require other skills and competencies from the internal auditor compared to other less complex situations (e.g. mandatory or repetitive events). Therefore, an interesting future research in this respect could be to investigate what specific skills and competencies are required from the internal auditor so that he will be able to identify the right timing for communicating the risk warning message.

Our studies will potentially have consequences for the auditor's communication skills in such a way that the internal auditor should be capable of switching the collaborative partner vs opponent roles when necessary to be most effective. Furthermore, applying of nudging concepts as described in Chapter 3 of this thesis may imply different skills from the internal auditor (in terms of communication and behavioural skills) than the standard auditing skills, which will potentially lead to different audit approach. In this respect, it could be interesting for others to investigate further what will be the required skills set of the internal auditor to achieve greater IA effectiveness.

In our study we focus on communication of 'bad news' messages i.e. messages about risks that threaten the organization. Communication of positive messages by the internal auditor were not part of our study as we considered these kind of messages do not impair the effectiveness of the IA. We assume there are different timing factors for communicating of 'good news' that could potentially be an interesting future research.

As mentioned before in this thesis, our study focussed on the 'demand-side' perspective of IA effectiveness. Our study is perhaps a first study in the area of IA effectiveness that connected the 'supply-side' with the 'demand-side' perspective of the IA effectiveness by asking auditors and auditees to discuss timing in order to arrive together at shared views on the importance of timing for IA effectiveness. We believe this topic has a lot of potential for future research and we support researches in investigating more factors of IA effectiveness from both the 'supply-side' and demand-side' perspective and all together.

As mentioned in Chapter 1 of this thesis, we situated our studies within the interpersonal relations dimension of the IA effectiveness (Lenz et al, 2014). The findings of our studies enrich this dimension with additional factors influencing the IA effectiveness, which could potentially have important influence on the other three dimensions of the IA effectiveness (IA organization, IA personality factors (resources), and the IA processes). In this thesis we made several assumptions about what these influences could be and we consider this as an important research field for future researchers.

In our study we focused on the decision making processes at inter-personal (individual) level: with the internal auditor as provider of the risk warning message and with the decision taker's view on the messenger (as a collaborative partner or an opponent). We did not study the possible effects of decision making at a department-level or at an organizational level. To obtain more insight into the dynamic processes of group decision making and consequences thereof, we would recommend further research based not only on behavioural theories but also making use of Sociological theories.

One final remark we want to make here with respect to research implications of our study, is that from our literature review we noticed that Agency Theory is a dominant paradigm used in academic research of IA effectiveness and therefore we encourage further academic research of IA effectiveness from a Stewardship Theory perspective. Additionally, the findings of our study showed that Agency and the Stewardship principles cannot be always used isolated of each other and a combination of both could be necessary to achieve greater IA effectiveness. We encourage others to further investigate whether this combination is possible, what are the consequences of this combination for the IA effectiveness and the IA organization in general and the way of auditing in particular.

6.5 EPILOG

By studying IA effectiveness through deaf effect our study aimed at not only identifying additional causal factors influencing IA effectiveness, but also finding out whether deaf effect for risk warning messages of the internal auditor can be studied by applying different approaches. Studies on IA effectiveness have focused mostly on the 'supply-side' perspective (the internal auditors) of IA effectiveness and the 'demand-side' perspective (stakeholders expectations) is not very much examined area. While most of the studies in the area of IA effectiveness have focussed on factors influencing IA effectiveness such as e.g. realization of the audit plan, number of issued reports, implemented recommendations and the like, our study made a first step towards investigating how other, more behavioural related factors may be of benefit to the IA effectiveness. Our study found evidence that such factors like organization power of the internal auditor through

top management support, nudging and timing can be important for IA effectiveness and that internal auditors should look outside the box (i.e. outside the 'dominant logic' based on the auditing standards) to find other ways to increase effectiveness. While top management support has been addressed by few researches in the field of IA effectiveness, we think our study provided interesting and surprising results from the interaction effects, indicating that top management support is not always a guarantee for reducing deafness on risk warnings of the internal auditor. From our studies it appeared that there is a contingency approach with regard to the collaborative partner vs opponent role of the internal auditor and the internal auditor should be smart in combining these roles in achieving greater effectiveness. Further, based on literature review we think our study is the first attempt to link nudging to deaf effect and hence IA effectiveness. Our study provided evidence that internal auditors can include nudging with descriptive social norms in their risk warning message communication to management and this can be helpful to reduce deaf effect. We encourage academic researchers as well as internal auditors to investigate how other ways of nudging affects the willingness of management to listen or not to listen to the risk warnings of the internal auditor. Furthermore, to our knowledge, our study is a first study within the IA effectiveness research that investigated timing in relation to IA effectiveness, thereby linking the 'supply-side' and the 'demand-side' perspective of the IA effectiveness with each other. We are happy to see timing is recognized by both internal auditors and management as an important factor for IA effectiveness. Although the effects of timing needs further research, we encourage internal auditors to use the five viewpoints we made available through this study, to find out the right timing to communicate the risk warning messages. A lot of work has been invested in our studies aiming at providing reliable and hopefully, interesting results that can be used by academics and practitioners. We believe that the studies in this thesis open up challenging venues for further research and provide a valuable input to both internal auditors and management to help achieve the best of IA.

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SUMMARY

The effectiveness of Internal Audit obtains growing importance in both practice and academic research. The tension between the value that IA believes to provide and the value perceived by some of its customers is increasing. In many occasions audit issues addressed by the internal auditor are not always accepted by management and even though audit issues are accepted by management and corrective actions have been agreed, management turns a deaf ear to the internal auditor's risk warning and is continuing the 'wrongdoing'. As an illustration, we often hear about organizations experiencing large projects that are not successful but not stopped by management despite the risk warnings reported by the internal auditor. While the question arises whether IA acts effectively in deaf effect situations, in circumstances of disastrous business failures, this could go even worse, followed by the inevitable question 'where was the auditor again?'. This could raise the question if the IA is effective and its services are beneficial to management.

In this thesis, several factors influencing deaf effect as indicator for IA effectiveness are studied which were (mostly) unexplored in the academic literature. In an experiment (Chapter 2) it was tested what are the main causal effects of additional contingency factors - the organization power of the internal auditor translated in top management support and the interaction effects from the collaborative partner vs. opponent perspective. In another experiment (Chapter 3) we included nudging with descriptive social norm to test the main causal effects and interaction effects from the collaborative partner vs opponent perspective. The results of these experiments were surprising and brought originality in this area of academic research. Our study provided interesting and surprising results from the interaction effects, indicating that top management support is not always a guarantee for reducing deafness on risk warnings of the internal auditor. While it may seem to be logical that in the high organization power conditions, decision makers are more likely to follow any advice, regardless whether the message comes from a collaborative partner or an opponent, our findings suggested that great top management support can even be contra-productive when the internal auditor is seen as a collaborative partner. Based on our study results, top management support appeared to be most useful for IA effectiveness when the internal auditor is seen as an opponent. The findings of the second experiment indicate that nudging through descriptive social norm can be used by the internal auditor to increase IA effectiveness by overcoming the deaf effect response to their risk warnings to management. Including a descriptive social norm as part of the risk warning message of the internal auditor in our experiment appeared to be useful as it significantly reduced the deaf effect response by the message recipient. Descriptive social norm can be even more useful when the messenger is seen as a collaborative partner. When the internal auditor is seen as an opponent, nudging

with a descriptive social norm is ineffective, so there is no guarantee that providing a descriptive social norm will work as intended. To our knowledge, our study is a first study within the IA effectiveness research that investigated timing in relation to IA effectiveness, thereby linking the 'supply-side' and the 'demand-side' perspective of the IA effectiveness with each other (Chapter 4 and Chapter 5). By applying Focus Groups interviews (Chapter 4) and Q methodological approach (Chapter 5), we identified what determines the right moment for the internal auditor to communicate the risk warning messages to management. The results of these studies showed that timing is recognized by both internal auditors and management as an important factor for IA effectiveness. From these studies five 'viewpoints' were derived that may help internal auditors to find out the right timing to communicate the risk warning messages and hence increase IA effectiveness.

By studying IA effectiveness through deaf effect our study aimed at not only identifying additional causal factors influencing IA effectiveness, but also finding out whether deaf effect for risk warning messages of the internal auditor can be studied by applying different approaches. While most of the studies in the area of IA effectiveness have focussed on factors influencing IA effectiveness such as e.g. realisation of the audit plan, number of issued reports, implemented recommendations and the like, our study made a first step towards investigating how other, more behavioural related factors may be of benefit to the IA effectiveness. The studies in this thesis demonstrate that such factors like top management support, nudging and timing can be important for IA effectiveness and that internal auditors should look 'out of the box' to look for other, innovative ways to increase effectiveness.

NEDERLANDSE SAMENVATTING (SUMMARY IN DUTCH)

Effectiviteit van Internal Audit (IA) wordt steeds belangrijker voor organisaties. De waarde van de Internal Audit functies binnen organisaties wordt steeds meer uitgedaagd door het management. In de praktijk komt het vaak voor dat de audit issues, gerapporteerd door de internal auditor, niet worden geaccepteerd door het management. Het komt ook voor dat het management de audit issues weliswaar accepteert, maar niet luistert naar de risico waarschuwing van de internal auditor en doorgaat met 'wrongdoing'. Dit soort gedrag komt bijvoorbeeld vaak voor bij grote projecten binnen organisaties die niet succesvol zijn en de projecten gaan door ondanks de risico waarschuwingen van de internal auditor. De vraag ontstaat of de internal auditors effectief zijn in deze omstandigheden. Vooral in situaties waarbij grote projecten zijn mislukt kan er nog een vervolgsvraag gesteld worden: 'waar was de auditor weer?' Dit soort situaties zorgt ervoor dat de effectiviteit van Internal Audit in twijfel wordt getrokken en de toegevoegde waarde van Internal Audit functie voor het management ter discussie wordt gesteld.

Dit proefschrift richt zich op een aantal factoren die van invloed kunnen zijn op het 'deaf effect' als een indicator voor de IA effectiviteit die tot dusver niet of nauwelijks onderzocht is in de academische literatuur. In het eerste experiment (Hoofdstuk 2) worden de main causal effecten van factoren zoals organization power van de internal auditor vertaald in top management support van de internal auditor en de interactie effecten collaborative partner vs. opponent perspectief onderzocht. In het tweede experiment (Hoofdstuk 3) wordt nudging met descriptive social norm getest voor de main causal effects and interaction effects vanuit de collaborative partner vs opponent perspectief. Deze twee experimenten hebben verrassende en originele resultaten voortgebracht. De uitkomsten geven aan dat organization power van de internal auditor via top management support niet per se een garantie is voor verminderen van het deaf effect op de risico waarschuwingen van de internal auditor, en dat top management support niet altijd een positief effect op het deaf effect (en daardoor op IA effectiviteit) kan hebben. Het zou logisch zijn dat in 'high organization power' condities, management meer de neiging zou hebben om elk advies van de internal auditor op te volgen ongeacht of de risico boodschap vanuit een collaborative partner of een opponent komt. Echter, de bevindingen van onze studie geven aan dat dit tegenovergestelde effecten kan hebben wanneer de risico boodschap vanuit een internal auditor als een collaborative partner komt. De resultaten van het tweede experiment geven aan dat nudging met descriptive social norms kan gebruikt worden door de internal auditor als onderdeel van de risico boodschap om het deaf effect te verminderen en zo de IA effectiviteit te vergroten. In ons experiment bleek het toevoegen van een descriptive social norm in de risico boodschap van de internal auditor te helpen om het deaf effect van de boodschap ontvanger te verminderen. De studie duidt aan dat descriptive social norm kan

nog meer bijdragen om het deaf effect te verminderen als de risico boodschap van een internal auditor die gezien wordt als collaborative partner komt. De resultaten geven aan dat wanneer de internal auditor gezien wordt als een opponent, de nudging met descriptive social norm niet effectief is. Verder, is voor zover wij weten, deze studie de eerste binnen het academisch onderzoek van IA effectiviteit die timing in relatie tot het deaf effect en IA effectiviteit onderzoekt. Daarbij worden de 'supply kant' en de 'demand kant' perspectieven van IA effectiviteit met elkaar verbonden (Hoofdstuk 4 en Hoofdstuk 5). De resultaten van de derde en de vierde studie laten zien dat timing belangrijk wordt gevonden door de internal auditors en management als een belangrijke factor voor de IA effectiviteit. Deze studies resulteerden in vijf 'viewpoints' die de internal auditors samen met management kunnen gebruiken om de juiste timing te vinden voor het communiceren van de risico boodschap zodat management meer luistert naar deze boodschap. Hierdoor wordt de IA effectiviteit vergroot.

De studies in dit proefschrift laten zien dat ook andere, meer gedragsgerelateerde factoren wel degelijk de IA effectiviteit kunnen vergroten. Zelfs factoren die niets met internal auditing te maken hebben, lijken in staat om het deaf effect op risico waarschuwingen van de internal auditor te beïnvloeden. Dit onderstreept het belang voor de internal auditors om buiten de box te gaan denken om te zoeken naar andere, innovatieve manieren voor het vergoten van de IA effectiviteit.

ABOUT THE AUTHOR



Violeta Verbraak-Kolevska was born on February 13, 1967 in Skopje, Macedonia. She moved to The Netherlands in February 1997 to continue with her private and professional life. She graduated cum laude at the University of Skopje 'Kiril and Methodij' for her university degree in Economics & Banking & Accounting in 1991. In 2005 she continued her education and became a Certified Internal Auditor at the Institute of Internal Auditors. In 2012 she graduated at the Erasmus School of Accounting & Auditing for her degree Executive Master of IT Auditing. Thereafter in 2013 she obtained her degree Executive Master of Internal Auditing. Her interest in (research on) effectiveness of internal audit was formed during the finalization of her post master education at the ESAA. After defending her thesis related to monitoring of IT projects for the purpose of finalization of her Executive Master of IT Auditing, mentored by Dr. Arno Nuijten, she got the opportunity to proceed with further research as part of her PhD. This PhD research was under supervision of Dr. Arno Nuijten who became the co-promotor for this thesis.

In 2014, after presenting her research idea at the 11th European Academic Conference on Internal Audit and Corporate Governance in Oslo, Violeta started her PhD research at the Erasmus University Rotterdam as a part-time PhD student being full time employed as an internal auditor at ABN AMRO Bank in Amsterdam. During her PhD research, she attended and presented her work at several conferences such as the European Conference on Internal Audit and Corporate Governance in 2013 throughout 2017 and the SABE/IAREP conference in 2016. In 2014 she obtained the 'best paper award' for her first paper at the European Conference on Internal Audit and Corporate Governance in Italy. Violeta is currently part of the E-Bridges research team at the Erasmus School of Accounting & Assurance (ESAA).

Violeta is married to Guido and together they have a son Victor who is 15 years old. In her free time she likes shopping and as soon as she can, she visits her family in Macedonia.

PORTFOLIO

Publications

Articles under review:

Verbraak, V, Nuijten, A.L.P., Keil M. Nudging with Descriptive Social Norms to Overcome the Deaf Effect for IT Project Risk Warnings, under review at EJIS.

Articles in progress:

Verbraak, V, Nuijten, A.L.P. Does the Organization Power through Top Management Support help Internal Auditors to Reduce the Deaf Effect for Risk Warnings?, in preparation to be resubmitted in AJTP.

Verbraak, V, Nuijten, A.L.P., van Exel J. Q Method study: The influence of timing on IA effectiveness, in preparation to be submitted in AJTP.

Ph.D. Studies, Workshops and Courses:

Self-studies and Training on the Job

Self-study on Experimental and Quasi-Experimental Design (September 2013 throughout March 2014 and September 2014 throughout March 2015).

Self-study on Focus Groups methodology (October 2015 throughout March 2016).

Self-study over Q Methodological research (June – September 2016) for the purpose for the purpose of the Q Method study on Timing factors conducted starting September 2016 throughout April 2017.

Training on the job: academic writing by prof Mark Keil (Georgia State University), May 2016.

Training on the job: Q-method by prof Job van Exel (ESE), October-December 2016.

Workshops

Workshop Moderation Analysis by Professor Mark Keil from Georgia State University (May 20, 2015).

Workshop PhD research approach by Professor Mark Keil from Georgia State University (May 18, 2016).

Workshop writing a paper for a journal by Professor Mark Keil from Georgia State University (May 19, 2016).

Courses

Limberg course on Experimental Research in Accounting in Tilburg by Professor Kristy Towry from Goizueta Business School, Emory University (April 22, 2014 – April 23, 2014 and May 19 – May 23, 2014).

SPSS course by dr. Arno Nuijten (December 19, 2014 and December 23, 2014).

PLS course by dr. Arno Nuijten (March 6, 2015).

Altas.ti course by dr. Nick Benschop (March 4, 2016 and March 21, 2016).

Specific Integrity training:

Scientific Professionalism and Integrity session by prof. dr. Marius van Dijke (RSM) and prof. dr. Patrick Groenen (ESE): Registered for February 23, 2017.

Conference paper presented at:

11th European Academic Conference on Internal Audit and Corporate Governance in Oslo (by Norwegian Business School), April 24, 2013 – April 26, 2013.

12th European Academic Conference on Internal Audit and Corporate Governance in Milan (by Politecnico di Milano University), April 9, 2014 – April 11, 2014.

13th European Academic Conference on Internal Audit and Corporate Governance in London (CASS Business School), April 9, 2015 – April 11, 2015.

14th European Academic Conference on Internal Audit and Corporate Governance in Rotterdam (by the ESAA), April 6, 2016 – April 8, 2016.

15th European Academic Conference on Internal Audit and Corporate Governance in Athens, April 19, 2016 – April 21, 2017.

“Behavioural Insights in research and Policy Making” SABE/IAREB Conference in Wageningen, July 8, 2016 – July 10, 2016.

IIA Congress ‘Where on Earth Are We?, IJmuiden, June 23, 2014 – June 24, 2014.