

Client-consultant collaboration

The elements of client-consultant collaboration that influence the successful completion of the consultancy project.



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Client-consultant collaboration: The elements of client-consultant collaboration that influence the successful completion of the consultancy project.

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Abstract

Client-consultant collaboration is a concept that often is taken for granted by practitioners but also by researchers. This is especially the case when it comes to the effects of client-consultant collaboration on the successful completion of the consultancy project. This research is performed to give a better insight into the under exposed concept of client-consultant collaboration and its effect on the successful completion of the consultancy project.

This research therefore elaborates on the concept of client-consultant collaboration by examining the facets of client-consultant collaboration and dividing these facets into different elements. After constructing these elements, it is examined what effect these elements have on the successful completion of the consultancy project. Through this in-depth analysis it is possible to draw detailed conclusions regarding the effects of the elements in client-consultant collaboration on the successful completion of the consultancy project.

The results in the first part of this research show that nine elements can be constructed: the process of information exchange, comprehensiveness of the information, examination of present resources, application of present resources, dedication, involvement, active learning, outsider's perspective and objectivity. When analyzing their effects on the successful completion of the consultancy project, it is clear that only three elements have a significant effect.

The process of information exchange has the strongest and a positive effect on the successful completion of the consultancy project. The objectivity of the consultant, perceived by the client, has the second strongest, and also a positive effect on the successful completion of the consultancy project. The comprehensiveness of information has the weakest and a negative effect on the successful completion of the consultancy project. For the other elements included in this study it can be stated that they do not have a significant effect on the successful completion of the consultancy project.

Preface

This product is written as a Master Thesis in Organization Studies, and therefore is the final part of the Master of Science program in Organization Studies at Tilburg University.

During the last five months of the Master program of Organization Studies, I have been fully dedicated to write this Master Thesis. I was attracted to the Master Circle on consultancy since this is the direction in which I would like to start my career. This probably also was the reason why I really enjoyed the content of the client-consultancy literature. Especially the relationship between client-consultant collaboration and the successful completion of the consultancy project drew my attention.

Writing this Master Thesis was one of the best learning experiences during the final year at Tilburg University. The diversity of the work, the analytical insights and the contact with managers that helped me to collect respondents for this research are a few aspects that gave me this learning experience. Moreover, I really enjoyed coming up with new findings of the relation between client-consultant collaboration and the successful completion of the consultancy project.

I would like to thank the supervisor of this Master Circle, Annemieke Stoppelenburg, for her help and guidance during the period of writing this Master Thesis. Furthermore I would like to thank Roel Rutten for his critical note on the content of this thesis as well the students of the Master Circle that provided me feedback during the circle meetings. Moreover I also would like to thank Ad Vossen for his help with the statistical analysis in this research. Also, many thanks to the respondents that filled in the questionnaire for this research. Finally I would like to thank my friends and family for their ongoing support.

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1 Introduction

This section addresses the research problem, the research question and the relevance of the research. The last paragraph of this chapter will give a clear overview of the structure of this research.

1.1 Research problem

External management consultants are more and more used by management in almost all major industry sectors, in which they provide services to a diverse range of areas such as logistics, human resource management, marketing and project planning (Jang & Lee, 1998). Management consulting is a fast growing business with an average growth rate of more than 15% over recent years which make it a global consultancy business of more than 200 billion dollar (Kennedy Information, 2008). Because of the growing industry, consulting organizations are facing several problems like the increased required sophistication of managing the project in the client organization and the greater insistence by clients that the completion of the consultancy project has to be a success (Jang & Lee, 1998).

The success factors of consultancy projects from the client side, as well as the consultant side, are a widely studied area in the client-consultancy literature. Some of the directions in which client-consultant success is examined are relationship success (Appelbaum & Steed, 2004; Fincham, 1999; Fullerton & West, 1996), engagement success (Gable, 1996; McLachlin; 2000), experiences (Poulfelt & Payne, 1994), perceptions (Wright & Kitay, 2002), performance indicators (Kumar et al., 2000; Kumar & Simon, 2001), and client-consultant collaboration (Smith, 2009; Sweem, 2009). The latter, client-consultant collaboration seems to be a research area which not yet fully is explored and not much attention is given to. According to Katz & Martin (1997) the concept of collaboration nowadays is largely taken for granted because everybody knows what is meant by it. Or as Czerniawska & May (2006) state: “it would be easy for collaboration to become another of those terms that become devalued by overuse and under practice” (p. 21).

Even when looking to the definitions of management consultancy, there is no form of collaboration between client and consultant included. In the definition of management consulting by Greiner & Metzger (1983) the emphasis is on the identification of management problems, analyze the problems, recommend solutions, and implementing the solutions (when recommended), all in an independent manner. According to Kubr (2002), management consulting is: “an independent professional advisory service assessing managers and

organizations to achieve organizational purposes and objectives by solving management business problems, identifying and seizing new opportunities, enhancing learning and implementing changes” (p. 10). A possible reason for the lack of attention on client-consultant collaboration could be found in the research by Schaffer (2002). He argues that most of the consultants that are hired, and the majority of the clients that hire a consultant, operate under a model that does not allow both of them to achieve full collaboration. Also it is often said that consultants work for the client, not with the client, although according to Mercer (1981), they should do the latter to gain a successful project. According to Kubr (2002) “there is no effective consulting without client-consultant collaboration” (p. 66). Next to that, Smith (2009), states that collaboration between both parties is highly valuable, as long as the consulting does not cross the boundary of independency.

The limited elaboration in the client-consultant literature on the concept of client-consultant collaboration and its effects on the successful completion of the consultancy project, is the trigger for this study. The term „client-consultant collaboration’ is commonly used in studies, but most of the time there is no attention paid to the concept itself. Especially since client-consultant collaboration could be of importance for the client and consultant to successfully complete a consultancy project (Appelbaum & Steed, 2004; Kubr, 2002; Smith, 2009), it is interesting to study what effects the underlying elements of client-consultant collaboration have on the successful completion of a consultancy project.

Since an elaborated theory on the concept of client-consultant collaboration cannot be found, it is necessary to first elaborate on the concept of client-consultant collaboration, before it is possible to look at the effects of the underlying elements of client-consultant collaboration on the successful completion of the consultancy project. As result, this research is twofold: first it elaborates on the concept of client-consultant collaboration to determine out of which elements the concept of client-consultant collaboration could exist. Secondly it is investigated what effects the elements of client-consultant collaboration have on the successful completion of the consultancy project.

It is not the purpose of this research to create a new concept of client-consultant collaboration, but rather to identify possible elements out of which client-consultant collaboration could exist and what their effects are on the successful completion of the consultancy project. As result of the tight time schedule for writing this thesis, the research is limited to only execute the research from the clients’ point of view. Since the client is the end user, and therefore is

the one who determines whether the consultancy project is a success, it is the most interesting group to do research on. Furthermore it is the question whether consultants can objectively assess their own project. The clients were selected to participate in the study on the condition that they had been key person, from the client side, in a consultancy project occurred and completed in the last five years. In this „definition’, the key person can be described as „the contact client’, „the intermediate client’, or „the primary client’ as described by Schein (1997). These clients are typically directly involved and work directly with the consultant. An overview of all clients defined by Schein (1997) is presented in Appendix 1.

1.2 Research question

As prior research showed, there have been various studies that examined the factors that affects the successful completion of a consultancy project. Surprisingly, little research is done on client-consultant collaboration and its effect on the successful completion of the consultancy project. Most researchers seem to take this for granted, and are more focused on the relationship and/or engagement between these two parties. The focus of this research is on the effects that the elements present in the concept of client-consultant collaboration have on the successful completion of the consultancy project, looking at the clients’ experience. It is currently unclear which elements of client-consultant collaboration cause the more successful completion of the consultancy project, and which elements of client-consultant collaboration have a stronger effect on the successful completion of the consultancy project than others. Therefore this research first elaborates the concept of client-consultant collaboration into different elements, before it is possible to look at the effects of these elements on the successful completion of the consultancy project. This is essential since there seems to be no elaborated concept of client-consultancy collaboration in the client-consultant literature, and also there seems to be no detailed explanation for the successful completion of the consultancy project due to client-consultant collaboration.

The elaboration on client-consultant collaboration will make it possible to draw detailed conclusions regarding the effects of the elements in the concept of client-consultant collaboration on the successful completion of the consultancy project, which is the main goal of this thesis. Therefore, the following research question is used in this study:

“What are the effects of the elements present in client-consultant collaboration on the successful completion of the consultancy project, seen from a client point of view?”

Note that it is necessary to elaborate client-consultant collaboration into different elements in order to give a detailed explanation of their effect on the successful completion of the consultancy project, but that the elaboration of the concept is not the main goal of the thesis. The main goal of the thesis is to investigate how the possible elements that are present in client-consultant collaboration affect the successful completion of the consultancy project.

1.3 Relevance of the research

When thinking of a consultant that fulfills an assignment for the client, collaboration may not be the first thought that comes to mind. This is true because commonly the characteristics of a consultant are described as objective, independent, external and less sensitive for political issues (Buono, 2009). Researchers as Buono (2009); Kubr (2002) and Smith (2009) however, indicate that client-consultant collaboration could lead to a more successful completion of the consultancy project. There however is no detailed description of the success factors that improves the successful completion of the consultancy project due to client-consultant collaboration. This study therefore tries to give a clear overview of the elements of client-consultant collaboration and their effects on the successful completion of the consultancy project. Since this subject is underexplored in the client-consultancy literature, the outcomes can generate new insights. Also it can make clear on what aspects clients and/or consultants should focus to gain a more successful completion of the consultancy project. Next to that, this research can confirm parts of the theory on client-consultancy literature that are obtained with inductive research. This, according to Appelbaum & Steed (2005), is needed since in the client-consulting literature “much of the theoretical framework described is derived from anecdotal evidence” (p. 69) and there is a lack of empirical data (Appelbaum & Steed, 2005).

1.4 Structure of the research

The structure of this research is presented in figure 1.1 below. In the first chapter the introduction of this research is highlighted. Because this research is twofold, the theoretical framework, the methodology and the result section are included twice. The first time these chapters are performed in order to construct the elements of client-consultant collaboration. This means that the first theoretical framework encloses the content and the elaboration of the concept client-consultant collaboration. In the methodology chapter, the research design, the questionnaire construction, the data collection and data analysis for constructing the elements of client-consultant collaboration are given. In the result section, the construction of the elements of client-consultant collaboration is executed.

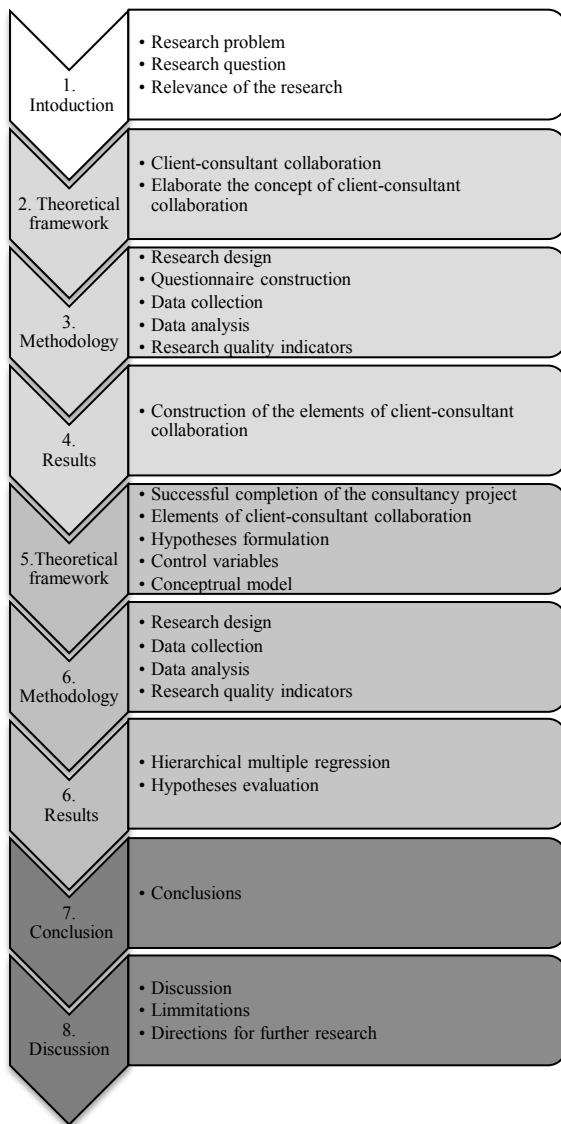


Figure 1.1: Structure of the research

The second time the theoretical framework, the methodology and the result section are performed in order to examine the effects of the elements of client-consultant collaboration on the successful completion of the consultancy project. The theoretical section first discuss the variable successful completion of the consultancy project. Next, the elements of client-consultant collaboration, their effects on the successful completion of the consultancy project, the corresponding hypotheses, the control variables and the conceptual model are presented. The methodology section concerns the research design, the data collection, the data analysis, the sample strategy and the research quality indicators. The results section presents the outcome of the hierarchical multiple regression and the hypotheses evaluation.

The last two chapters concern the conclusion and discussion in order to give an answer to the research question. In the chapter conclusions, the conclusions and direction for further research are given. The discussion concerns the reflections of the findings and limitations of the research.

2 Theoretical framework

This section will give an overview of the current state of the literature according to client-consultant collaboration and the aspects that are used to elaborate the concept of client-consultant collaboration.

2.2 Independent variable: Client-consultant collaboration

In this research, the variable client-consultant collaboration accounts for the collaboration between the client and the consultant. Client-consultant collaboration however, is a concept that is not fully elaborated in the client-consultant literature. According to Katz & Martin (1997) nowadays it seems that the concept of collaboration is largely taken for granted because everybody seems to know what is meant by it. But Katz & Martin (1997) also question whether the concept of collaboration is as unproblematic and obvious as it seems. According to Huxham (1993), client-consultant collaboration is probably a concept that is forever evolving and believes that there is not one proper definition or conclusion regarding the issues involved in client-consultant literature. Both the reasoning of Huxham (1993) and Katz & Martin (1997) indicate why there possibly is no elaborated theory of collaboration in the client-consultant literature.

Researchers like Block (2000), Buono (2009), Cortada & Woods (1999), Nikolova et al. (2009), Smith (2009) and Turner (1982), all uses the concept of client-consultant collaboration in their research, but without fully elaborating on this concept. Kubr (2002) however, gives four facets of client-consultant collaboration in the modern concept of consulting methodology: information exchange, awareness of resources, commitment and learning. Herein information exchange stands for the exchange of information between client and consultant (Kubr, 2002). The awareness of resources stands for the consultant that makes the clients aware of the resources that already (partly) are present in the organization (Kubr, 2002). Commitment stands for the commitment of the client to the project and that the client will not put all the responsibility on the consultant (Kubr, 2002). Learning stands for the learning of the client from the consultant by joint work at all stages of the consultancy project (Kubr, 2002).

When taking a closer look at the client-consultancy literature and in particular the literature about client-consultant collaboration, a remarkable number of researchers confirm the facets of client-consultant collaboration defined by Kubr (2002) and give an indication of the effect to the successful completion of the consultancy project (which is the dependent variable in

this study and will be further defined in chapter 5.1). Smith (2002) for example underpins Kubr's (2002) theory by saying that information exchange between client and consultant leads to a more successful completion of the project since it helps to create a mutual understanding of the real problems. And Appelbaum & Steed (2004) state that the consultant should collaborate more with the client to make the client aware of the knowledge in the organization so that it could enhance the performance of the organization. According to Margerison (2001), the absence of commitment in the client-consultant collaboration often is a major reason for a less successful completion of the consultancy project. And Block (2000) states that through collaborative learning the client can deal with similar future problems by itself.

Additionally, independency might be another facet of client-consultant collaboration. This facet is not named by Kubr (2002), but regularly emerges in the client-consultant literature as an important facet of client-consultant collaboration. Often a client hires a consultant because it does not have certain required skills, competences, knowledge, capabilities, itself, but perhaps even more importantly: because it wants an objective advice, from someone that is independent, from outside the organization or is less sensitive for political issues (Buono, 2009). Buono (2009) also states that independence is an important characteristic of the client and consultant working together, since it could have a strong influence on the success of a project. According to Huxham (1993), it is more effective to work together, than work independently. But when the client and consultant are working regularly together, this results in dependency which can have a negative effect on the success of the project (Kubr, 2002). Or to borrow a quote of Smith (2009): "Collaboration with consultants is most valuable when consultants are able to behave, relate and be known as insiders, but without losing the perceived "magic" of an outsider's fresh perspective and challenging edge" (p. 175).

Because there is no comprehensive definition or description of the concept client-consultant collaboration in the client-consultant literature, the first part of the research tries to elaborate the concept of client-consultant collaboration. In order to get a clear picture of the elements that are involved in client-consultant collaboration, the facet method and internal method of questionnaire construction and scale construction (chapter 3.2) are used. Therefore, the five facets mentioned in this paragraph will be used to set the basis for this concept. The facets information exchange, awareness of resources, commitment and learning have their origin in the literature on client-consultant collaboration from Kubr (2002). The facet independency is added since several researchers in the client-consultant literature indicate that independency

also is an important facet of client-consultant collaboration. In figure 2.1 below, the five facets of client-consultant collaboration for this study are presented.

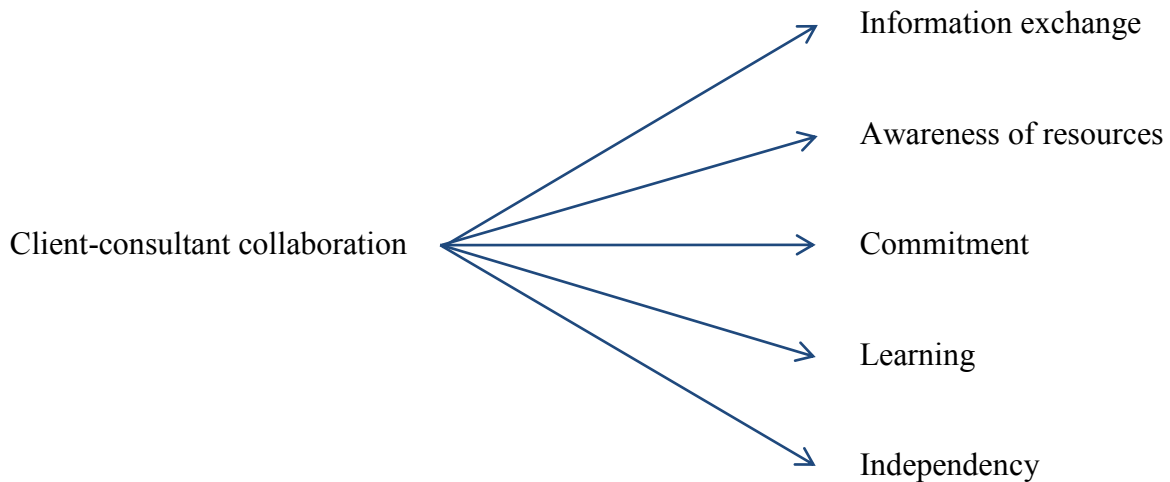


Figure 2.1: Client-consultant collaboration divided in five facets

Since the facet method and internal method are used to elaborate on the concept of client-consultant collaboration, another step still has to be taken to get a clear picture about the elements that might be present in client-consultant collaboration. This step is to further divide each facet into different underlying elements that are distinctive for the facet. According to Oosterveld & Vorst (1998), this is essential to get a detailed description of the concept and to reach the whole domain of the concept. In order to realize this, the client-consultant literature is consulted for each facet, in order to find aspects that are representative for this facet. This is done until the information for each facet is saturated, and with this information the questionnaire is constructed and performed. Thereafter, the output derived from the questionnaire will be used to form the elements in each facet by the use of principal component analysis in chapter four: results. In chapter three a more detailed description of the facet method and internal method is given.

In the upcoming sections, each facet used in this study is illustrated and an overview of the aspects involved in each facet is presented. These aspects reflect the things that might be involved in each facet and therefore are used to construct the questionnaire, to eventually (in chapter four) construct the elements that are present in each facet of client-consultant collaboration. But before doing this, a definition of client-consultant collaboration, based on the theory in the client-consultant literature, is constructed:

“Client(s) and consultant(s) that are not employed in the same organization and work together to achieve a shared goal which meet the needs of the client organization.”

2.2.1 Information exchange

The facet information exchange stands for the exchange of information between the client and the consultant (Kubr, 2002). According to Kubr (2002), the exchange of information by the client is important for the consultant to do his work properly. A client that is reluctant to collaborate on the exchange of information therefore will hinder the consultant (Kubr, 2002). This makes it much harder or even impossible for the consultant to gather all the information necessary for a successful completion of the project (Kubr, 2002). According to Turner (1982), both the consultant and the client should work together and exchange information in both ways to get to the real problem. Also, Smith (2002) says that it is important to exchange information in both ways to ensure a successful completion of the project, but also that the consultant should be kept on for helping with the implementation phase of the project. According to the PAL model of Sweem (2009), which incorporates the actions and characteristics for a successful alignment from a dual role perspective, there must be a partnership between the client and consultant. This means that both client and consultant are responsible for the outcome(s) and it must be a joint effort to address the issues and disclose all information so that an appropriate action can be recommended (Sweem, 2009).

According to Armbrüster & Kipping (2002), clients often label management consultancies as “knowledge-intensive” because they assuming that the consultant has a knowledge-related superiority to his/her clients. But before coming up with suggestions, the first task of the consultant often is to gather information about the client organization to gain enough knowledge (Armbrüster & Kipping, 2002). The exchange of information is not only for the client to give the consultant information about his/her organization, but the information must be honest and accurate to realize successful solutions (Sweem, 2009). The exchange of information also reduces the chance of information asymmetry, which implies that the client does not exactly know what the consultant does (Ernst & Kieser, 2002).

Of course it is not always possible for the client to provide all the information the consultant is asking for. According to Kubr (2002), the client’s reluctance should not always be interpreted as unwillingness to exchange information. It could also be the management of the organization that instruct staff to withhold information, or as sometimes is the case, it concerns strictly confidential information (Kubr 2002). Also there should be the belief that

both client and consultant will not behave opportunistically (Lee & Kim, 1999). Next to that, there should be enough top management support, so that the top management is willing to provide all the necessary information and authority (Jang & Lee, 1998). One of the statements in the questionnaire to measure one of these aspects is formulated as: *“The exchange of information with the consultant was a joint effort”*.

2.2.2 Awareness of resources

The awareness of resources stands for the consultant that makes the clients aware of the resources that already (partly) are present in the organization (Kubr, 2002). It often happens that resources already are present in the organization, but that employees in the organization are not aware of those resources (Kubr, 2002). When working together, the consultant is in a better position to discover and mobilize the resources than without collaboration between both organizations (Kubr, 2002). Also Cortada & Woods (1999) confirmed that if the awareness of knowledge in the clients' organization is increased, this could enhance the performance of the organization. According to Appelbaum (2004), the consultant should collaborate more with the organizational resources of the client organization to leverage in-house knowledge and expertise. Smith (2009) says that the consultant as outsider should challenge the insiders to think about their routines, so that the client can overthink his/her own resources and make the process better. For the consultant this is easier since he/she is an outsider and can ask “stupid questions” (Smith, 2009). But according to Turner (1982) it also can be a good thing to collaborate with people which show resistance to the project. He states that: “wise consultants learn that resistance [from people in the client organization] often indicates sources of especially important and otherwise unobtainable insight” (p. 5). One of the statements in the questionnaire to measure one of these aspects is formulated as: *“The consultant made me aware of present resources in the organization”*.

2.2.3 Commitment

Commitment stands for the commitment of the client to the project and that the client will not put all the responsibility on the consultant (Kubr, 2002). When client and consultant are working more closely together, it is more likely that the client will get committed to the solution and not all the responsibility will be put on the consultant (Kubr, 2002). The absence of strong commitment from the client often is a major reason for a less successful completion of a project (Margerison, 2001). According to Foote (2003) it is important that the client and consultant can place themselves in the position of the other, so that the client is more

committed and the collaboration will be a greater success. Block (2000) states that the client who is more committed will implement the solutions itself.

Commitment can be created when client and consultant collaboratively search for the real concerns of the client organization and both parties together search for suitable answers (Turner, 1982). Therefore, a two-way reporting on the progress after the last meeting is important (Turner, 1982). Moreover it is important that both parties are satisfied when working together. Therefore it is better to come to a win-win situation in a negotiation, because this leads to a more lasting commitment and successful completion of the project (Margerison, 2001). Furthermore it is important to not confuse commitment with agreement, since according to Margerison (2001) "agreement only means that employees will verbally acknowledge what you say, while commitment means action" (p. 52).

To ensure that projects that are started will be accomplished, the consultant must obtain the commitment of the senior managers from the start of the project (Margerison, 2001). Jang & Lee (1998) state that if top managers are committed to the consultancy project, they will mobilize resources from the client organization and support its employees. This increases the likeliness of a positive client attitude and a better participation during the consultancy project (Jang & Lee, 1998). One of the statements in the questionnaire to measure this is formulated as: "*The management was dedicated to the consultancy project*".

2.2.4 Learning

Learning stands for the learning of the client from the consultant by joint work at all stages of the consultancy project (Kubr, 2002). According to Kubr (2002), learning occurs when the client and consultant work together and therefore learning is embedded in the context of consulting. This counts for both the client and the consultant. In the framework of consulting, client learning in consultancy projects is only rarely considered as an objective of the consulting assignment (Werr & Linnarsson, 2002). This is in line with the model of Turner (1982), in which learning is an additional goal, and not a traditional purpose of the consultancy project. Research by Fullerton & West (1996) showed that more than half the consultants find it important that the client is open to learn from the project, but concluded that this is most of the time not the case.

Turner (1982) said that the consultant should facilitate client learning so that the client can resolve similar problems that may occur in the future. This can be done by including members of the organization in the project process and helping the members to identify their learning

needs (Turner, 1982). Nikolova et al. (2009) state that through the help of reflective conversations, the client will be engaged in the cooperative learning process. According to Werr & Linnarsson (2002), the most important factors for client learning are intense and repeated interaction between the client and consultant. In this repeated interaction, the use of formal and distanced control of consultants will form a barrier for learning between the client and consultant (Werr & Linnarsson, 2002). Therefore clients should strive to manage their own learning process in the consultancy project (Werr & Linnarsson, 2002). But according to Kubr (2002), “learning only occurs by joint work at all stages of the project, from problem definition and diagnosis, to implementation and the assessment of results” (p. 67).

The result of the client that learns from the consultant is that the client can deal with similar organizational problems by itself (Block, 2000). Also Gable (1996) argues that through better understanding, the client could deal with a similar future project with reduced external assistance. Next to that, “improved client understanding can facilitate more effective implementation” (Gable, 1996, p.1180). One of the statements in the questionnaire to measure one of these aspects is formulated as: *“Learning from the consultancy project was one of the goals that were set beforehand”*.

2.2.5 Independence

Independency stands for the independency between client and consultant and that the consultant gives an objective advice and is less sensitive for political issues (Buono, 2009). Consultants most often are hired for objective advice, for being someone that is independent, from outside the organization and/or less sensitive for political issues (Buono, 2009). This is confirmed by Fincham (1999), who states that client and consultant should be seen as a division of internal and external expertise and should therefore operate independently. Sobel (2003) argues that the consultant should be sensitive to the interests of the client, but also must be able to give an objective advice. Since consultants are outsiders, they can challenge the insiders to think about their routines and ask “stupid questions” to let the client think why they actually do those things (Smith, 2009).

According to Huxham (1993), it is more effective to work together, than to work independently. But when the client and consultant are working regularly together, this can result in dependency and therefore have a negative effect on the success of the project (Kubr, 2002). Since it is possible that the consultants will carry the knowledge of the client organization with them, the client can become permanently dependent on the services of the

consultant (Werr & Linnarsson, 2002). But the consultant as an outsider can create a boundary between him/her and the client organization, “which has the potential of creating new dynamics and shifting the status quo” (Smith, 2009, p. 153). Or, to borrow another phrase from Smith (2009): “Collaboration with consultants is most valuable when consultants are able to behave, relate and known as insiders, but without losing the perceived “magic” of an outsider’s fresh perspective and challenging edge” (p .175). One of the statements in the questionnaire to measure one of these aspects is formulated as: *“Through the consultant I gained a fresh perspective on the approach of the consultancy project”*.

3 Methodological framework

This section first gives insight in the research design, the questionnaire construction, the data collection, the data analysis and the research quality indicators. Since this research is twofold, this methodological framework only addresses the issues that are involved in elaborating the concept client-consultant collaboration and how the elements will be constructed.

3.1 Research design

The first part of this research, constructing the elements of client-consultant collaboration can be described as inductive, quantitative and cross-sectional. It is inductive since the observed data gathered from clients (by the use of questionnaires) is used to detect patterns in answering the questionnaire. To get a clear picture of the elements that might be present in client-consultant collaboration, these patterns in answering are used to determine the elements in each facet. The research is quantitative, since the data is gathered from the clients by the use of questionnaires in which it only is possible to fill in numerical data. This numerical data makes it possible to analyze the output with quantitative statistical analysis. Also it is cross-sectional because the research is conducted at one moment in time, the data is gathered from more than one case and the data will be used to detect patterns of associations. For this study the data is only gathered from the clients' side and will be used to draw conclusions on the consultancy project.

3.2 Questionnaire and element construction

To find out which elements are presented in the concept of client-consultant collaboration, first the facet method is used. The reason for using the facet method is that there is no elaborated theory of client-consultant collaboration that takes into account the underlying facets and/or elements of client-consultant collaboration. With the use of the facet method, it will be possible to elaborate client-consultant collaboration into different underlying elements, which are needed later on to give a detailed picture of the effects of the elements of client-consultant collaboration on the successful completion of the consultancy project. In executing the facet method, the first three steps of concept analysis defined by Oosterveld & Vorst (1998) are applied. These steps are: (1) formulating the definition of the concept, (2) identifying the facets, and (3) determining the elements of each facet (Oosterveld & Vorst, 1998). Step one and two are already performed in chapter two of this research. Step three is done in combination with the internal method. Therefore, first the client-consultant literature of each facet is analyzed until the information according to this facet is saturated. After that, the questionnaire is constructed with the use of theory in the client-consultant literature, and

subsequently conducted among the clients. The results of the questionnaire are analyzed and the elements of the facets are created with the use of principal component analysis (explanation in chapter 3.4). This last activity is done with the internal method since elements cannot be specified in advance and must be deduced from the relationship between the responses to the items (Oosterveld & Vorst, 1998). Step four of the facet method, capturing the relationships of the facets, will not be executed since the aim of this research is to determine if the elements present in client-consultant collaboration have an effect on the successful completion of the consultancy project, and not to create a (new) concept. The elements constructed with the use of the principal component analysis in chapter four will be used to form the hypotheses in the second theoretical framework of this study (chapter five).

Table 3.1 below gives an impression of the relation between the concept, facets, elements and aspects. Note that with the combination of the facet method and the internal method, first the concept is defined, after that the facets are determined, then the aspects of each facet are searched in the client-consultancy literature, and finally these aspects are allocated among the elements with the use of the principal component analysis. The content of the elements should differ from other elements so that they together can be seen as complementary elements present in the concept of client-consultant collaboration (Oosterveld & Vorst, 1998).

Concept	Facets	Elements	Aspects
Client-Consultant collaboration	Information exchange	ElementIE ₁	AspectX _{1, ..., X}
		ElementIE _X	AspectX _{1, ..., X}
	Awareness of resources	ElementRS ₁	AspectX _{1, ..., X}
		ElementRS _X	AspectX _{1, ..., X}
	Commitment	ElementRS ₁	AspectX _{1, ..., X}
		ElementRS _X	AspectX _{1, ..., X}
	Learning	ElementLN ₁	AspectX _{1, ..., X}
		ElementLN _X	AspectX _{1, ..., X}
	Independency	ElementID ₁	AspectX _{1, ..., X}
		ElementID _X	AspectX _{1, ..., X}

Table 3.1: impression of the different layers of the concept client-consultant collaboration

3.3 Data collection

The research will make use of a questionnaire because it is a good mechanism to reach a large response rate, which is needed for executing principal component analysis to construct the scales of the elements in each facet of client-consultant collaboration. The questionnaire is presented in appendix 2. To minimize the misinterpretations by the respondents and to be sure the questionnaire is clear, two clients and the supervisor of this master circle checked the questionnaire. After that, the questionnaires were adjusted and handed out to the clients. To meet the needs of the clients, the questionnaire was distributed either by sending a hard copy or by sending a digital version of the questionnaire, as preferred by the clients.

The clients were selected to participate in the study if they have been a key person, from the client side, in a consultancy project occurred and completed in the last five years. In this „definition’, the key person can be described as „the contact client’, „the intermediate client’, or „the primary client’ described by Schein (1997). These clients are typically directly involved and work directly with the consultant. To ensure that there was no tendency to respond to either good or bad projects, the clients were asked to fill in the questionnaire about their latest completed project. For each project only one client was asked to fill in the questionnaire. The projects are comparable in the way that all projects are management consultancy projects and an external management consultant is hired to fulfill the assignment. Furthermore a distinction is made between two types of projects defined by Kubr (2002): the resource consultancy project and the process consultancy project, as further defined in chapter 5.3: control variables. Finally a 1-5 Likert scale is used because it is a good scale to measure attitudes (Ary, et al., 2009). The following answer possibilities are used for the Likert scale: strongly agree, agree, neither agree/nor disagree, disagree, strongly disagree.

3.4 Data analysis

As mentioned before, the internal method is used in combination with the facet method for the analysis of the outcomes. This includes the use of principal component analysis for the scale construction and the reliability analysis to determine the reliability of the scales. SPSS 17.0 is used to analyze the data gathered from the questionnaires. First the data is checked for errors, missing values and outliers. After that, the items of each separate facet of client-consultant collaboration are used in the principal component analysis to construct the elements in each facet. To determine if the principal component analysis can be executed, most the communalities of the items present in the principal component analysis should be higher than .6, which is the threshold with a response rate smaller than 100 (MacCallum et al., 1999).

Next to that, there must be correlations present among the items that are greater than .3, the Barlett's test of Sphericity should be significant ($p < .05$), and the KMO $\geq 0,6$ (Pallant, 2007). To determine if the scales of the components are reliable enough, the Cronbach's alpha should be higher than .7 (DeVellis, 2003). Next to that, it is important that the items in a component actually measure the same construct (Oosterveld & Vorst, 1998).

3.5 Sample strategy

There were two strategies used to obtain the data required for this research. The first strategy was the use of my own (indirect) personal network. This has led to nine managers of different organization in as well profit as non-profit organizations that have given me access to their network. Also persons from which I knew that they had been working with a consultant where approached. Finally the supervisor of this master circle has approached people from her network. As result of this diversity in the approached organizations, the selection bias is reduced. Next to that, the clients has to fill in the questionnaire about their experience of the last completed consultancy project they have participated in, which further reduces the selection bias. Moreover, the respondents had the possibility to fill in the questionnaire anonymous, which reduces the tendency to give „appropriate' answers.

The second strategy used for this study was to contact organizations and ask if they have hired a consultancy company in the last five years and if they would like to cooperate in this research. Thirty organizations were approached by letter, e-mail and/or telephone. These organizations were randomly selected, reducing the likelihood of selection bias. The consultancy projects are comparable in the way that they all are management consultancy projects, all client organizations hired an external management consultant, and the projects can be categorized into a resource consultancy project or a process consultancy project, as defined by Kubr (2002). Just as in the first strategy, the clients had to fill in the questionnaire about their experience of the last completed consultancy project they had participated in. The response rate of both strategies was 91, from which 77 respondents filled in the questionnaire completely. After looking at the errors and outliers, two more respondents were deleted, which results in a sample of 75 respondents that are used for the analysis in this study.

3.6 Research quality indicators

This section elaborates on the quality indicators used for this part of the research, namely: construct validity and reliability.

3.6.1 Construct validity

Surprisingly little quantitative literature is done on client-consultant collaboration in general since most of the studies are qualitative (case) studies (Appelbaum & Steed, 2005). Furthermore, no elaborated definition of collaboration in the client-consultant literature could be found. However, there are different researchers who have complementary and confirmatory views on the facets of client-consultant collaboration that are used in this research. Therefore it is likely that the selection of these facets give a true reflection of the concept of client-consultant collaboration. Although the constructed elements within each facet of client-consultant collaboration are not yet proven to be valid, the right use of the facet and internal method makes it more likely that eventually there will be proper scales for the elements that might be present in client-consultant collaboration.

Although the amount of respondents in general is seen as low to perform principal component analysis, it seems high enough for this study since most of the communalities of the items present in the principal component analysis are higher than .6. This according to MacCallum et al. (1999) is a threshold with a response rate smaller than 100. Therefore it can be stated that the construct validity for this study is at least sufficient.

3.6.2 Reliability

The reliability of the scales of the elements that are constructed for this part of the research can be described as good. The reason for this assumption is that two aspects of reliability are met in constructing the elements of client-consultant collaboration. The first one is that the items/aspects that form an element measure the same construct. The second aspect is the Cronbach's alpha, which is a measure for the internal consistency of the items of the underlying attribute. In all elements of client-consultant collaboration that are constructed, the Cronbach's alpha is higher than the critical value of .7, which according to DeVellis (2003) is ideally the measure for a good reliability.

4 Results

This chapter concerns the primary analysis and the secondary analysis. In the primary analysis the data gathered from the respondents will be prepared for executing the analysis. In the secondary analysis the principal component analysis is executed in order to construct the elements in each facet of client-consultant collaboration.

4.1 Primary analysis

Before starting with the principal component analysis the data file must be prepared to execute the analysis. Therefore the dataset was controlled for missing values and outliers. Furthermore negatively formulated questions were recoded.

4.1.1 Missing values & Outliers

Not all questionnaires were filled in correctly. This was especially the case with the digital questionnaire from the internet, in which 14 respondents did not complete the whole questionnaire. In most cases, only the first page was filled in correctly after which the respondents had stopped. The incomplete surveys were deleted from the dataset. Furthermore there were two outliers in the data set. One respondent had the age of four and one respondent had participated in 500 consultancy projects. Since these figures are doubtful, these respondents were also deleted from the data set. This means that 75 respondents are left for the analysis.

4.1.2 Mirror questions

Some of the items in the questionnaire were formulated negatively to minimize the response bias. These items were recoded into the same variable, which means that the numerical data is turned into exactly the opposite which makes it possible to compare the items. The following items were recoded:

Information exchange: 2,3,7,13,14

Resources: 3

Commitment: 4,14

Learning: -

Interdependency: 2,3

4.2 Secondary analysis

In the next paragraph the elements of each facet of client-consultant collaboration will be constructed with the use of principal component analysis.

Important notices before reading the chapter

In the following five sub-paragraphs the principal component analysis will be executed in order to construct the elements that are present in each facet of client-consultant collaboration. Since the principal component analysis is used, elements in this chapter will be called components. To construct the components, two aspects are taken into account when analyzing the output of the pattern matrix. The first aspect is that all items in each component should measure the same construct. This implies that the subject of each item in the component should more or less match each other. The second aspect is that the reliability can be improved when the items are deleted out of the component. The justification for the construction of the component will not be addressed in each paragraph, and therefore is presented in appendix 4.

4.2.1 Information exchange

To determine whether there are elements present in the facet information exchange, and if they are present, to construct the elements, the questionnaire for this facets consist of 16 items. All items are used in the principal component analysis and the SPSS output is presented in appendix 5. The three criteria for the use of principal component analysis discussed in chapter 3 are met: 47 of the 120 correlations are $\geq .3$, the KMO is .779 and the significance of the Barlett's test of Sphericity is .000. Furthermore, the Direct Oblimin rotation is used for the analysis since several correlations between components (component transformation matrix) in the Varimax rotation are higher than .3. The execution of the Direct Oblimin rotation for the principal component analysis results in the analysis of 4 components: the eigenvalue of 4 components is higher than 1.0 and 4 components are above the line in the Scree plot.

The distribution of the items among the components and the corresponding reliability is presented in table 4.4 below. Looking at the results in this table, component 1 and 2 have a sufficient reliability (DeVellis, 2003). Component 3 only has one item left, which is too less to form a component (Pallant, 2007) and therefore will not be used in the rest of this study. The reliability of component 4 is not sufficient, and therefore also will be used as an element of the facet information exchange. Since the content of the items in component 1 concern the

process of information exchange, this component is labeled IE_Process. The items in component 2, concern the comprehensiveness of the information and therefore this component is labeled IE_Comprehensive.

Component	Item (InformationXX)	Reliability
Component 1 (IE_Process)	5,10,11,14,15,16	.798
Component 2 (IE_Comprehensive)	1,2,3,8,9	.735
Component 3	12	-
Component 4	4,6,7	.655

Table 4.4: Reliability and the distribution of items among components.

4.2.2 Awareness of resources

To determine whether there are elements present in the facet awareness of resources, and if they are present, to construct the elements, the questionnaire for this facets consist of 14 items. All items are used in the principal component analysis and the SPSS output is presented in appendix 6. The three criteria for principal component analysis discussed in the previous section are met: 50 of the 91 correlations are $\geq .3$, KMO = .797 and the Barlett's test of Sphericity is significant ($p = .000$). Furthermore Direct Oblimin rotation is used for the analysis since several correlations in the Varimax rotation between components is higher than .3 (component correlation matrix). The execution of the Direct Oblimin rotation for principal component analysis results in the analysis of four components. Although according to the eigenvalue the amount of components should be 4 and according to the Scree plot the amount of components should be 6, this analysis will only analyze 4 components. The reason to use 4 components is that that the breaking point in the Scree plot is not that extreme, and therefore it can overestimate the amount of components.

The distribution of the items among the components and the corresponding reliability is presented in table 4.6 below. The results in this table indicate that component 1-3 have a reliability that is sufficient (DeVellis, 2003). Component 4 only has two items left, which is too less to form a component (Pallant, 2007) and therefore is not used for further research. As mentioned earlier, the items within each separate component match each other. The content of the items in component 3 however, does not show substantial equalities, and therefore this component will not be used in further analysis. The items in component 1 concern the already examination of the present resources in the organization and therefore this component is

labeled RS_Examination. The items in component 2 concern the application of the resources and therefore this component is labeled RS_Application.

Component	Item (ResourcesXX)	Reliability
Component 1 (RS_Examination)	6,7,8,9	.903
Component 2 (RS_Application)	1,2,14	.751
Component 3	10,11,12,13	-
Component 4	3,4	-

Table 4.6: Reliability and the distribution of items among components.

4.2.3 Commitment

To determine whether there are elements present in the facet commitment, and if they are present, to construct the elements, the questionnaire for this facets consist of 15 items. All items are used in the principal component analysis and the SPSS output of all analyses is presented in appendix 7. The three criteria for the use of principal component analysis discussed in chapter 3 are met: 47 of the 105 correlations are $\geq .3$, KMO = .754, and the Barlett's test of Sphericity is significant ($p = .000$). Direct Oblimin rotation is used in the analysis, since several correlations between components in the Varimax rotation are higher than .3 (component correlation matrix). Just as in in the analysis of the facet resources, the Scree plot (6 components) gives a higher value than the eigenvalue (5 components). Also in this analysis, the output of the total variance explained table will be used since the breaking point in the Scree plot is not that clear, which can result in an overestimation of the amount of components which should be used.

The distribution of the items among the components and the corresponding reliability is presented in table 4.7 below. Looking at the results in this table, components 1 and 3 have a reliability that is sufficient (DeVellis, 2003). Component 2, 4 and 5 have to less items to form a component (Pallant, 2007) and therefore are not used in further research. To form the components, it is also checked if all items in the separate components measure the same construct. This has led to label component 1 and 3. The items in component 1 concern the dedication of persons towards the consultancy project and therefore this component is labeled RS_Dedication. The items in component 3 concern the involvement of persons in the consultancy project and therefore this component is labeled RS_Involvement.

Component	Item (CommitmentXX)	Reliability
Component 1 (CM_Dedication)	1,2,3,12,13,14	0.817
Component 2	9,10	-
Component 3 (CM_Involvement)	5,6,7,8	0.715
Component 4	3	-
Component 5	4	-

Table 4.7: Reliability and the distribution of items among components.

4.2.4 Learning

To determine whether there are elements present in the facet learning, and if they are present, to construct the elements, the questionnaire for this facets consist of 15 items. All items are used in the principal component analysis and the SPSS output is presented in appendix 8. The three criteria for the use of principal component analysis discussed chapter 3 are met: 37 of 115 correlations are $\geq .3$, the KMO is .732 and the significance of the Barlett's test of Sphericity is .000. Furthermore, the Direct Oblimin rotation is used for the analysis since several correlations between components are higher than .3 (component correlation matrix). The execution of the Direct Oblimin rotation for the principal component analysis results in the analysis of 4 components: the eigenvalue of 4 components is higher than 1.0 and 4 components are above the line in the Scree plot.

The distribution of the items among the components and the corresponding reliability is presented in table 4.9 below. The results in this table show that the reliability of component 1 is sufficient (DeVellis, 2003). Component 2 is does not have a sufficient reliability and therefore only component 1 will be used in the hierarchical multiple regression. Component 3 and 4 only have two items left, which is to less to form a component (Pallant, 2007). Therefore this components are not used in further research. Since the items in component 1 all concern active learning in collaboration with the consultant, component 1 is labeled LN_Active.

Component	Item (LearnXX)	Reliability
Component 1 (LN_Active)	1,2,3,4,5,7,12	.839
Component 2	8,9,10,11	.663
Component 3	13,14	-
Component 4	6,15	-

Table 4.9: Reliability and the distribution of items among components.

4.2.5 Independency

To determine whether there are elements present in the facet independency, and if they are present, to construct the elements, the questionnaire for this facets consist of 13 items. All items are used in the principal component analysis and the SPSS output is presented in appendix 9. The three criteria for executing the principal component analysis discussed in the previous section are met: 26 of the 78 correlations are $\geq .3$, the KMO = .711 and the Barlett's test of Sphericity is significant ($p = .000$). Furthermore the Direct Oblimin rotation is used for this analysis since the correlation between the components in the Varimax rotation is higher than .3. Just as in in the analysis of the facets resources and commitment, the Scree plot (6 components) gives a higher value than the eigenvalue (4 components). Also in this analysis, the output of the total variance explained table will be used since the breaking point in the Scree plot is not that extreme, and therefore it can overestimate the amount of components.

The distribution of the items among the components and the corresponding reliability is presented in table 4.4 below. Examining those results, components 1 and 3 have a reliability that is sufficient (DeVellis, 2003). Component 2 has a reliability that is too low to form a component (DeVellis, 2003) and component 4 has to less items to form a component (Pallant, 2007). Therefore these components will not be used in the rest of this research. As mentioned before, it is taken into account that the items fit the construct of each component. This has resulted in labeling the components. The items in component 1 concern the client that is challenged by the consultant to look at the organization with the perspective of an independent outsider. Therefore component 1 is labeled ID_Perspective. The items in component 3 concern objectivity in the independent collaboration, and therefore this component is labeled ID_Objectivity.

Component	Item (IndependencyXX)	Reliability
Component 1 (ID_Perspective)	5,9,10,12	.780
Component 2	6,7,13	.652
Component 3 (ID_Objectivity)	1,2,8,11	.709
Component 4	3,4	-

Table 4.11: Reliability and the distribution of items among components.

5 Theoretical Framework

This section will give an overview of the current state of the literature considering the relation between the elements of client-consultant collaboration and the successful completion in the consultancy project. First the successful completion of the consultancy project will be explained. Secondly, the elements of client-consultant collaboration and their relation with the successful completion of the consultancy project will be elaborated. Additionally, in this section the hypotheses are formed, control variables are given and finally the conceptual model is presented.

5.1 Dependent variable: Successful completion of the consultancy project

Success is a broad concept and therefore differently used by many scholars. According to Lucas (1981), there is not one single measure that is applicable in all different situations. Ein-Dor & Segev (1982) confirmed this by saying that success can differ between organizations because success depends on the extent that particular values will fit the organizations environments. However, by making the measurements for success more specific to the context, the possibility to generalize the outcomes is lost (Malone, 1990). According to Armenakis & Burdige (1988), economical measures as profitability and productivity are not applicable for consultation programs. They state that the use of „soft’ criteria like satisfaction, leadership and group process are better to use.

Although soft criteria of success are included in the studies of many researchers (van Aken, 1996; De Caluwé & Stoppelenburg, 2004; Gable, 1996; Kumar & Simon 2001; McLachlin, 2000; Philips, 2000), there is no consensus on what criteria actually are required to measure success. For example, Gable’s (1996) model of engagement success uses three areas of assessment: consultant performance, client understanding and consultant recommendations, while according to McLachlin (2000) “changing the organizational culture” also is an important area to measure engagement success. Next to that, Kumar & Simon (2001) and Philips (2000) are using more of a mix of the soft and hard criteria by adding the financial side to the whole picture. A reason for the disagreement on the criteria used for success could be that: “it is not always easy to see what consultants do: (a) consultancy projects are intangible, (b) there are too many changes happening at once to isolate the effects of one change, or (c) the change involves a long time frame and the effects are not immediately apparent” (Wright & Kitay, 2002, p. 275).

Next to the differences in the criteria to measure success, there are also differences on how to measure success. Appelbaum & Steed (2004) conducted their study on critical success factors in a client-consulting relationship only from the clients' point of view. However, their questionnaire was composed based on literature of both the client and the consultant side. According to Gable (1996), the successful engagement of the consultancy project has to be measured by both the client and the consultant. McLachlin (2000) argues the same but adds that the expectations of both client and consultant should be met in order to claim that the consultancy project is a success. Van Aken (1996) developed a measure for project success, in which he states that project success should be measured to the extent that all involved actors are satisfied about the success factors of project success. In doing this, he uses a wider range of involved actors like for example the client, the consultant, the consumers and social groups (van Aken, 1996).

When reading the paragraphs above, it is obvious that there is not one clear definition of success in the consultancy literature. However, satisfaction is one of the most commonly used measures for success and furthermore the vast majority of literature uses only one criterion to measure success (Delone & McLean, 1992). This is also the case in the work of van Aken (1996) and McLachlin. In the dissertation of Van Aken (1996), he formulated the following definition of project success: "project success is the extent to which the involved actors are satisfied with the output of the project" (p. 90). McLachlin (2000) formulates a consulting engagement as successful if: "the client is satisfied that the consultant has met expectations (by improving one or more of client performance, client capabilities, or organizational culture, without making any category worse) - whether or not a core need has been addressed - and the consultant is satisfied that his/her reputation has been enhanced, with expectations of future revenue streams - whether or not any immediate income has been received" (p. 149). Although the study of van Aken (1996) focuses on project success, and not on consultancy project success, both projects are quite consistent. A project according to van Aken (1996) is: "a set of related activities, performed to achieve a predetermined result, with a beginning and an end, using limited resources and manpower and is most of the time a one time performance" (p. 12). Looking at the definitions of consulting in the introduction, a consultancy project also is performed to achieve a predetermined result and executed with a set of related activities. Next to that there is a beginning and an end of the consultancy project and there is a limited amount of resources and manpower. Moreover a consultancy project is

generally a one-time performance since project results are unique and hard to compare with other projects (Armbrüster, 2006).

In the dissertation of van Aken (1996), he did choose for satisfaction to measure the success factors of project success since satisfaction is not an absolute concept. This makes it possible to say more about the success of the project than only “yes” the project is a success, or “no” the project is not a success. A limitation to this method is that it makes it impossible to assess projects without result, which are projects that did not reach the implementation phase (van Aken, 1996). However, since this research is focused on consultancy projects that are completed, and this perfectly fits the method of van Aken (1996), this is not a problem. For projects that are completed, but not used, it will be possible to evaluate since satisfaction of the factors of project success also explains why projects were not used (van Aken, 1996). For example: an unsatisfied client, who did not use the project since it did not meet the needs of the client, can still evaluate the project. Therefore his method gives no answer to the question “why has this project failed” but it gives answer to the question “why is this project more/less successful than the other project” (van Aken, 1996).

In using satisfaction of the involved actors to measure the success factors of project success, it is not the concept of satisfaction itself that is measured. Van Aken (1996) only uses satisfaction to measure the success factors of project success. He argued that measures like time, money, and profit, as agreed before the project, are not applicable since the ideas at the start of the project typically do not all hold at the end of it. Although the successful completion of the consultancy project is operationalized by the use of satisfaction to measure the success factors, this is a commonly used method in the client-consultant literature (McLachlin, 2000). Choosing for the method of van Aken (1996) also fits the results of the research by Wright & Kitay (2002), which states that the client managers and employees generally highlight the subjective and informal aspects of the consultancy project. Next to that, the definition of project success by van Aken (1996) reflects the successful completion of a consultancy project in this thesis better than the previous mentioned definition of engagement success. Furthermore the measure of van Aken (1996) is applicable for both resource consulting (also called the expert consulting) as process consulting defined by Kubr (2002). According to Kubr (2002), the degree of collaboration in process consulting projects is greater than in resource consulting projects since the client is generally more involved in process consulting projects. However, both types of consulting projects involve collaboration

with the client. The difference between both consulting projects is discussed in section 5.3: Control variables.

The difference between the definition of van Aken (1996) and the used definition in this thesis is that this research only focuses on the client side, which makes it necessary to adjust van Aken's definition. Therefore it will no longer be the satisfaction of the involved actors, but the satisfaction of the involved client(s) that will be measured. The downside of changing this definition is that it only allows to draw conclusions regarding the successful completion of the consultancy project from the client point of view, which are therefore somewhat limited in their interpretation. The following definition for the successful completion of the consultancy project, derived from the definition of van Aken (1996), will be used:

“Successful completion of a consultancy project is the extent to which the involved client(s) are satisfied with the output of the consultancy project.”

5.2. Client-consultant collaboration

In the client-consultancy literature, there are multiple researchers who state that there is a relation between client-consultant collaboration and the successful completion of the consultancy project. According to Kubr (2002), “there is no effective consulting without client-consultant collaboration” (p. 66). And according to Czerniawska & May (2006) “a world where project-based work is increasingly the norm, collaboration is key to success” (p. 1). Furthermore, Nikolova et al. (2009) state that the implementation of the solution only is a success when the client and consultant are working closely together. Moreover, according to Jang & Lee (1998), “the probability of a successful implementation is very much influenced by the collaboration that develops between the consultant and the client” (p.70). In chapter two of this research it is also shown that several researchers state that the facets of client-consultant collaboration, used in this study, have a positive effect on the successful completion of the consultancy project. This research however focuses on the effects of the elements of client-consultant collaboration on the successful completion of the consultancy project.

To give an indication of the effects of the elements of client-consultant collaboration on the successful completion of client-consultant collaboration, literature about this relationship is required. A problem however is that there is not that much research done on the concept of client-consultant collaboration, and the research that exists seems to lack detail. This lack of detailed information on client-consultant collaboration is also noted by Schaffer (2002).

Therefore (in some cases) it often is hard to give a comprehensive explanation of the possible effects of each element on the successful completion of the consultancy project. In order to overcome this problem, next to an elaboration of the effect of the elements on the successful completion of the consultancy project (if possible), an indication of the separate effects of the aspects that together form the element on the successful completion of the consultancy project will be given. This will not totally cover the effect of the elements on the successful completion of the consultancy project, but it will give an indication of the effects that are present. With this information also the hypothesis of the effects of the elements of client-consultant collaboration on the successful completion of the consultancy project will be formulated in each sub-paragraph.

5.2.1 Process of information exchange

The process of information exchange is about the aspect in the client-consultant collaboration that ensures that the information is exchanged well. Therefore, according to the aspect that are part of this element, there should be a mutual understanding of the content of the consultancy project, there must be the willingness to give the information, there must be a mutual responsibility of both client and consultant to exchange the information, and feedback sessions should be held in order to improve the process of information exchange. In consulting the client-consultancy literature, it seems that there is an positive relation described between those aspect and the successful completion of the consultancy project. Appelbaum and Steed (2004) proved in their research that clients experience a project to be more successful when the consultant provides the client with feedback. And when the client is open to give the information the consultant is asking for this helps the consultant to collect sufficient information required for a successful completion of the consultancy project (Kubr, 2002). Furthermore, Smith (2002) states that it is important to exchange information in both ways to gain a successful completion of the consultancy project, since a mutual understanding of the real problem should be created.

Looking at the theory about the element process of information exchange as a whole, there also are indications that it has an positive effect on the successful completion of the consultancy project. Broom & Smith (1979) for example state that if the process of information exchange is facilitated well, this will lead to better decision making of mutual interest since full participation of both parties promotes the process of information exchange. Moreover, according to Bennett & Robson (1999), in a good information exchange process, the interaction is promoted which improves the relationship between both parties and leads to

a better performance. Since this information suggest that the aspects in the element process of the information exchange as well as the element as a whole have a positive effect on the successful completion of the consultancy project, the following hypothesis is formulated.

Hypothesis 1: The process of information exchange has a positive effect on the successful completion of the consultancy project.

5.2.2 Comprehensiveness of the information

The comprehensiveness of the information that is exchanged takes into account that the information that is exchanged is valuable. Therefore, according to the aspect that are part of this element, the information that is exchanged should be of good quality, the information should be accurate, the client should be honest about the information and the client should not withhold information. Since according to Jang & Lee (1998) and Kubr (2002), there should be enough management support to guarantee the above mentioned, management support also is included in the content of this element. Looking at the client-consultancy literature, these separate aspects seems to have a positive effect on the successful completion of the consultancy project. According to Sweem (2009), the information must be honest and accurate to realize successful solutions, and according to Kubr (2002) a client that withhold information for the consultant will hinder the consultant to do his work properly, which could lead to a less successful completion. Furthermore top management support is important to gain enough information and authority to fulfill the project (Jang & Lee, 1998).

But it are not only the aspects of the element that have a positive effect on the successful completion of the consultancy project. It also makes sense to assume that the comprehensiveness of the exchanged information (the element as a whole) would have a possible effect on the successful completion of the consultancy project. The fact is that according to Kubr (2002) and Smith (2002) the client and consultant should exchange valuable information in order to gain a successful completion of the consultancy project, and therefore it plausible that the information that is exchanged is enough, honest, and accurate. When exchanging too little or exchanging dishonest and old information, this obviously does not foster the successful completion of the consultancy project. Therefore the following hypothesis is formulated:

Hypothesis 2: The exchange of comprehensive information has a positive effect on the successful completion of the consultancy project.

5.2.3 Examination of present resources

The examination of present resources is about the client which, with the help of the consultant, examines the organizational resources that can be used in the consultancy project. This means that the client is stimulated by the consultant to think more in line of the quality of the present resources in the organization, the client is confronted with the present resources of the organization, the client is challenged to talk about the present resources and is challenged to use these resources in the consultancy project. When examining the resources that are present in the client organization, it is avoided that the consultant uses similar resources from the consultancy organization (Huxham, 1993). This could increase the successful completion of the consultancy since according to Appelbaum (2004), the use of internal resources in collaboration with the consultant should leverage more in-house knowledge and expertise. Furthermore the examination of the present resources by the client helps the client to overthink its own resources and make the process better (Smith, 2009). According to Kubr (2002), good client-consultant collaboration helps the examining of the resources in the client organization, which then can be mobilized, and possibly resulting in improving the project. Therefore it is expected that the examination of present resources will have a positive effect on the successful completion of the consultancy project and the following hypothesis is formulated:

Hypothesis 3: The examination of present resources in the client organization has a positive effect on the successful completion of the consultancy project.

5.2.4 Application of present resources

This element concerns the application of the resources in the client organization. Therefore, according to the aspect that are part of this element, the client is given information by the consultant about the present resources of which he did not know they were available, the client is shown how the resources of the client organization could be used, and the consultant did know how to fill in the blanks with the present resources of the organization. According to Luefschuetz (2010), the successful completion of the consultancy project is tightly aligned with the application of the resources that are present in the client organization, since having sufficient organizational resources makes it easier to implement the outcome of the project. The client however should make these resources available to the consultant so that the consultant can do his work properly (Luefschuetz, 2010). Also from a HR point of view, the use of internal resources may make a difference for the employees in the organization (Czerniawska & May, 2006). Since they are used to the organizational resources, a

collaborative approach with the consultant to use these resources can lead to a rapid improvement of the results (Czerniawska & May, 2006). Moreover, according to Freedman & Zackrisson (2001), many consultancy projects actually exist because clients fail to fully utilize their internal resources. Therefore the consultants should help the client to make use of its resources properly, which helps to make the consultancy project a success. With this information it is clear that the application of present resources in the client organization has a positive effect on the successful completion of the consultancy project and therefore the following hypothesis is formulated:

Hypothesis 4: The application of present resources in the client organization has a positive effect on the successful completion of the consultancy project.

5.2.5 Dedication

This element describes the dedication of the client to the consultancy project. Therefore, according to the aspect that are part of this element, the client and the management should be fully dedicated to hire the consultant and to let the project succeed, the dedication of the client should be present before as well as during the project, and the relationship with the consultant should be good. Also the client should have the feeling that the consultant is dedicated to the project. Looking at the client-consultancy literature, the effects of the separate aspects that form this element seems to have a positive effect on the successful completion of the consultancy project. If top managers are dedicated to let the project succeed, they will mobilize the resources from the client organization, which will increase the likeliness of positive client attitude and a better participation during the consultancy project. Moreover, a good relation with the consultant is important to develop commitment and dedication of the client to let the consultancy project succeed (Turner, 1982). Often the absence of strong commitment leads to a less successful completion of the consultancy project (Margerison, 2001).

Next to its aspects, it can also be assumed that dedication as a whole has a positive effect on the successful completion of the consultancy project. According to Luefschuetz (2010), the success of the consultancy project depends on the client's dedication, since a dedicated client is more likely to mobilize the resources in its organization. And according to Englund & Bucero (2006), success breeds success, and is realized through the dedication of the clients involved in the project. Therefore it seems obvious that the client that is more dedicated to the project will put more effort in the project to let the project succeed, compared to a client that

is not or less dedicated to the project. With this information the following hypothesis is formulated:

Hypothesis 5: Dedication of the client has a positive effect on the successful completion of the consultancy project.

5.2.6 Involvement

The involvement of the client in the consultancy project is about the client participation during the course of the project. Therefore, according to the aspect that are part of this element, the client should be involved in the beginning and end phase of the consultancy project, the client should be aware of what the consultant is doing and the client should partly implementing the solution itself. The aspect that are part of the element involvement seem to have a positive effect on the successful completion of the consultancy project. According to Foote (2003), the clients that can place themselves in the position of the consultant will be more committed, which increases the successful completion of the consultancy project. Next to that Kubr (2002) states that if the client and consultant are collaborating more closely together, commitment will be created and the client will “own” the problem and solutions that are needed for the successful implementation of the consultancy project.

Also the involvement of the client as a whole seems to have a positive effect on the successful completion of the consultancy project. According to Turner (1982) the client that is involved will be more enthusiastic about the project and therefore will be more motivated to let the project succeed. Furthermore, involvement of the client throughout the whole consultancy project could lead to insights in the problems of the organization and the organizations functioning, which can help to make the project a greater success (Turner, 1982). And according to Wysocki (2011), meaningful client involvement is essential to let complex projects succeed since the client can generate valuable information. Since there seems to be a positive relation between the involvement of the client in the project and the successful completion of the consultancy project, the following hypothesis is formulated:

Hypothesis 6: Client involvement in the consultancy project has a positive effect on the successful completion of the consultancy project.

5.2.7 Active learning

The element active learning is about the client that actively participates in the consultancy project to learn from it. Therefore, according to the aspect that are part of this element, the client should see learning as a predetermined goal of the client-consultant collaboration, the consultant should facilitate the learning for the client, the client should learn by analyzing and solving problems that are involved in the consultancy project and the client should ensure himself that he will learn from the consultancy project. Looking at the client-consultancy literature, there is a positive effect of the aspects in the element on the successful completion of the consultancy project. Turner (1982) said that the consultant should facilitate client learning so that the client can resolve similar problems that may occur in the future. And according to Werr & Linnarsson (2002), to successfully complete the consultancy projects, clients should strive to manage their own learning process by actively involving themselves in the project.

But this positive effect also counts for the element active learning as a whole. According to Dierkes et al. (2001), clients that are eager to learn from the consultancy project are the recipe for solving the problems that are present in the organization. On the other hand, clients that think the consultant can take over the problem and they do not have to do something by themselves, often have to be showed that learning of the consultancy project is needed to gain a successful completion of the consultancy project (Dierkes et al., 2001). This according to Dierkes et al. (2001) is essential because at the time the project is finished, the client must deal with the outcomes/changes itself. This is also stated by Werr & Linnarsson (2002), who state that in order to learn from the consultancy project, and to make the project a success, clients should own the consultancy project and not only associate the project with consultants (Werr & Linnarsson, 2002). Since both the aspects of active learning and the element as a whole indicate that there is a positive effect of active learning on the successful completion of the consultancy project, the following hypothesis is formulated:

Hypothesis 7: Active learning of the client has a positive effect on the successful completion of the consultancy project.

5.2.8 Outsider's perspective

The outsider's perspective is about the client that is challenged by the consultant to look at the organization as an independent outsider. This is realized when the client is challenged by the consultant to think outside the daily routines, the client has gained a fresh perspective of an

outsider on the approach of the consultancy project and the consultant did have a fresh perspective of an outsider. This will help to gain a more successful completion of the consultancy project since according to Smith (2009) consultants are most valuable when they behave and think as insiders, but have the fresh perspectives of an outsider. They can ask the client “stupid questions” to let the clients think about their routines and reasons for doing those things (Smith, 2009). This ensures that the client is encouraged to evaluate its own working methods and in collaboration with the consultant is able to improve the completion of the consultancy project. According to Kubr (2002) a consultant should encourage the client to generate new ideas and support the client to perform these ideas in order to make the project a success. An important task for the consultant is to minimize the errors the client can make in performing its ideas (Kubr, 2002). This information indicates that there is a positive relation between the outsiders’ perspective and the successful completion of the consultancy project. Therefore the following hypothesis is formulated:

Hypothesis 8: The outsiders’ perspective of the client on the organization has a positive effect on the successful completion of the consultancy project.

5.2.9 Objectivity

The objectivity in this research considers the objectivity of the consultant, perceived by the client, as an important characteristic of independent client-consultant collaboration. To ensure that there is objectivity during the consultancy project, according to the aspect that are part of this element, the client should believe that the consultant is operating independently, the client thinks the consultant is objective in executing the project, and the results of the project are perceived as better than the client could do without the help of the consultant. According to English & Steffy (1994), clients often hire a consultant to gain a “fresh” and objective insight from someone that is independent (Buono, 2009; English & Steffy, 1984). And according to Smith (2009), collaboration between client and consultant can lead to new dynamics and a shift of the status quo if there is a boundary between the client and consultant. This boundary should guarantee the objectiveness of the consultant. Therefore, the interests of the client should be taken into account, but the consultant should be able to give an objective advice without being sensitive for politics within the client organization in order to let the project result is success. (Sobel, 2003).

According to Lalonde (2011), the successful completion of the consultancy project can be harmed when the consultant loses its objectivity. This often is the case when the consultant is

involved in intense political games that evolve during the project, and therefore is forced to execute the ideas of a particular party (Lalonde, 2011). The consultant's objectivity is important to question everything and to search for the real problems of the organization, which in its place is necessary to make the project a success (Bermont, 1978). But when the consultant develops a personal relationship with the client, the objectivity of the consultant can come in danger, which can negatively influence the success of a consultancy project (Anderson, 2000). Therefore it is expected that perceived objectivity of consultant by the client has a positive effect on the successful completion of the consultancy project, and the following hypothesis is formulated:

Hypothesis 9: The perceived objectivity of the consultant by the client has a positive effect on the successful completion of the consultancy project.

5.3 Control variables

This study has a certain number of control variables. These variables are used in order to detect and exclude any spurious relationships that might apply to this specific model. The control variables that are used are: personal characteristics, process duration, experience, and the type of consultancy project. In chapter 7 it will be checked if these control variables truly have an effect on both the dependent as well as the independent variables.

Personal characteristics.

Age and gender are the two personal characteristics that will be taken into account. There is no real evidence in the client-consultancy literature that age and gender of the client have an influence on the client-consultant collaboration and the successful completion of the consultancy project, but since it is interesting to see if there is any difference, this criteria will be taken into account. The criteria age will be measured in years. The criteria gender is divided in man or woman.

Process duration

The amount of time the client and consultant work together could have an influence on client-consultant collaboration and the successful completion of the consultancy project. According to Kubr (2002), the possibility that a client get used to the consultant could be bigger when they spend more time together (Kubr, 2002). And according to Turner (1982) a good relationship between client and consultant influences the successful completion of the consultancy project since more commitment is created. Furthermore if the client and consultant

have been working together for a longer period, the relationship might have improved which could have led to better collaboration. To take this into account, it will be measured in two ways: first the amount of time the process took place, measured in weeks. Second, the average number of hours a week the client has contact with the consultant about the consultancy project.

Experience

The experience of the client will be measured since the number of projects the client has participated in could have an influence on the client-consultant collaboration and the successful completion of the project. According to Argyris (1991), people need to experience failure to learn from their mistakes and to do it better the next time. This is obvious more often the case when clients have participated in more consultancy projects. Furthermore, Block (2000) argues that clients learn from consultancy projects and can use this experience in other (similar) consultancy projects. Therefore, it is expected that if the client has participated in multiple consultancy projects, this has a positive effect on the successful completion of the consultancy project as well as on the client-consultant collaboration. Next to that, the second most important reason for a client to select a consultant is the experience with the consultant (Dawes, Dowing & Patterson, 1992). This will lead to repeated collaboration and the probability that the client gets used to the consultant could be higher (Kubr, 2002). This can lead to dependency which has a negative effect on the successful completion of the consultancy project (Kubr, 2002). But since the client and consultant get used to each other, it is expected that the repeated collaboration with the same consultant as in previous projects will have positive influence on the client-consultant collaboration. According to the information described above, this control variable will be measured in two ways: the number of times the client has worked with a consultant, and the number of times a client has worked with the same consultant as in his latest project.

Type of consultancy project

Consultancy projects can be divided into different types of projects. Kubr (2002) makes a distinction between two main consultancy projects: the resource consultancy projects and the process consultancy projects. In the resource consultancy projects, the consultant only suggests to the client „what’ to change. Typically, these types of consultancy projects can be defined as advisory projects. In the process consultancy projects, the consultant is mainly about „how’ to change and therefore this type of consultancy projects can be defined as

implementation projects, where the consultant helps the client throughout the change (Kubr, 2002). The process consulting projects therefore can be seen as more collaborative since next to exchange of information and discussing the process, the consultant also has to do with human issues (Kubr, 2002). Therefore it is expected that the collaboration between client and consultant is better in the implementation projects than in the advisory projects. Next to that, Jang & Lee (1998) state that the success of a consultancy project is higher when there is more collaboration between the client and the consultant. Since according to Kubr (2002) the collaboration in process consultancy projects is higher, it is expected process consultancy projects are assessed more successful according to the client. To measure this, the clients will be asked if the project was an advisory project (resource consultancy project) or an implementation project (process consultancy project).

5.4 Conceptual model

In figure 5.1 the conceptual model of this research is presented. In the previous chapters, nine elements were constructed as part of the concept of client-consultant collaboration. In the previous paragraphs the effects of these elements on the successful completion of the consultancy project are described and the control variables were given. These effects all are represented in the conceptual model. With the use of hierarchical multiple regression analysis it will be tested if these relationships truly exist and what effects these elements have on the successful completion of the consultancy project. The outcomes will be further analyzed in the upcoming chapters.

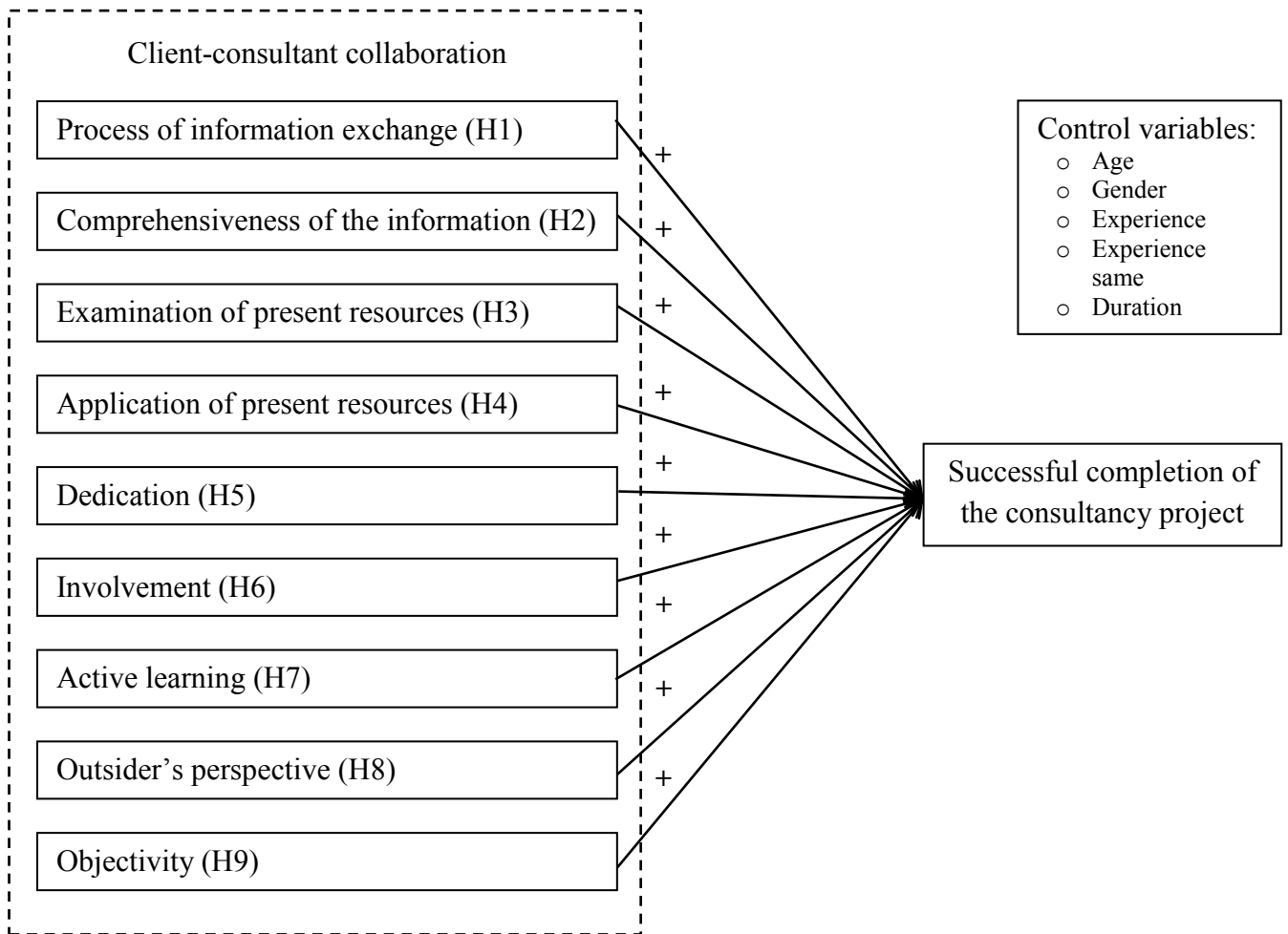


Figure 5.1: Conceptual model

6 Methodology

This section gives insight into the methodology for the second part of the research: the effects of the elements of client-consultant collaboration on the successful completion of the consultancy project. Therefore the research design, the data collection, the data analysis and the research quality indicators will be addressed. Several aspects already are addressed in the first methodological framework (chapter 3), and therefore will not be repeated in this chapter.

6.1 Research design

This part of the thesis can be described best as a deductive, quantitative and cross-sectional research. It is inductive since the research is starting with the analysis of theory on collaboration and success in the client-consultant literature. This theory is used to form hypotheses which examine whether the aspects of client-consultant collaboration have an effect on the successful completion of the consultancy project. Later these hypotheses will be tested so that the hypotheses can be accepted or rejected. This part of the research can be described as quantitative and cross-sectional due to the same reasons as explained in the first methodological framework in chapter 3.1.

6.2 Data collection

The research will make use of a questionnaire because it is a good mechanism to reach a large response rate and to test the hypotheses. The questionnaire used in this research consists of self-developed and existing scales. For the variable successful completion of the consultancy project, the scale of van Aken (1996) will be used. For the elements within each facet of client-consultant collaboration, scales are developed by using the facet method and internal of questionnaire design and scale construction, as already is done in chapter four. Since the questionnaire is the same as used for the elaboration of the concept client-consultant collaboration, other conditions regarding the data collection are the same as discussed chapter 3.3: Data collection.

6.3 Data analysis

Hierarchical multiple regression analysis is used to test the hypothesis. The number of respondents to execute a hierarchical multiple regression is insufficient since the minimal number of respondents to run a hierarchical multiple regression is about $50 + 8m$, in which m stands for the amount of independent variables (Tabachnick & Fidell, 2007). Since in the hierarchical multiple regression 10 independent variables will be used, theoretically a response rate of 130 must be reached ($50 + 8 * 10$). These independent variables consist of the

nine elements and one control variable (further explanation for the use of only one control variable will be given in chapter 7.2). Although the sample size for this study is only 75, the hierarchical multiple regression will nonetheless be performed. The downside of this decision is that as a result, the generalizability of the outcomes of this study are relatively low.

Hierarchical multiple regression is performed so that the variance explained by the elements of client-consultant collaboration in the successful completion of the consultancy project, can be controlled for the influence of the control variable. The control variable is therefore first entered in model one, so that the independent variables in model two can be controlled for this control variable. The difference between the variance explained in model one and model two represent the additional explained variance in the successful completion of the consultancy project. To make sure that there is no multicollinearity among the independent variables in the model, the VIF value should be lower than 10, and the tolerance higher than 0.10 (Pallant, 2007). The results of the hierarchical multiple regression is presented in chapter four: results. As for significance, a level of at least $p < .05$ will be used. Furthermore, the reliability of van Aken's scale in this research is .860, which in the research of van Aken was .8546.

6.4 Sample strategy

Since the questionnaire used for this study is the same as used to construct the elements of client-consultant collaboration, the sample strategy is the same as mentioned in chapter 3.5.

6.5 Research quality indicators

This section elaborates on the quality indicators used for this research, namely: construct validity, internal validity, and external validity.

6.5.1 Construct validity

Although researchers often seem to assume that there is a relation between client-consultant collaboration and the successful completion of the consultancy project (Appelbaum & Steed, 2004; Kubr, 2002; Smith; 2009), there is almost no empirical data supporting this assumption. Next to that, surprisingly little quantitative literature is done on client-consultant collaboration in general since most of the studies are qualitative (case) studies (Appelbaum & Steed, 2005). Therefore it is hard to say if the constructs for this study actually measure the things that they have to measure. The variable successful completion of the consultancy project in this study is limited to the definition of van Aken (1996). Although there are different views on measuring success, the scale of van Aken (1996) has proven to be valid and fits this study perfectly. Next to that, using satisfaction to measure the success factors is a commonly used and accepted

measure for the variable successful completion (Delone & McLean, 1992). The scales for the elements of client-consultant collaboration are newly developed for this study, as not much research is done in this area. It is therefore hard to compare these scales with other scales in the client-consultancy literature. However, the regression analysis that is used to investigate the effects of the elements of client-consultant collaboration on the successful completion of the consultancy project proves that the validity of some of the elements is sufficient. Concluding: the construct validity is at least sufficient to obtain some strong and interesting results.

6.5.2 Internal validity

Because this study is cross sectional, the internal validity is low (Bryman, 2008). To overcome this problem, control variables were used to exclude any spurious relationships. Next to that, this research did make use of an existing questionnaire by van Aken (1996) for the variable successful completion of the consultancy project, which has proven to have a good reliability. Although the relationship between the elements of client-consultant collaboration and the successful completion of the consultancy project are not yet proven in the client-consultant literature, Nikolova et al. (2009) have proven that collaboration is present in the client-consultant relationship.

6.5.3 External validity

Due to the small amount of respondents it is not possible to generalize the outcomes the population of clients who are operating in the Netherlands and hired a consultant in the last five years. According to Tabachnick & Fidel (2007), the amount of respondents should be more than $50 + 8$ times the amount of independent variables. And according to Stevens (1996) the minimum amount of respondents is even 15 times the amount of predictors. Since the model in this study consists of ten independent variables (including the control variable), the outcomes cannot be generalized to the population. Therefore the outcomes of this research only say something about the sample of this study, but nonetheless give an indication about the effects of the elements of client-consultant collaboration on the successful completion of the consultancy project.

7 Results

This chapter gives the results of the second part of this research: the effects of the elements present in client-consultant collaboration on the successful completion of the consultancy project. But before the results are given, the descriptive statistics are presented.

7.1 Descriptive statistics

The following numbers give a description of the sample of this research: 77.3% of the respondents are male. The youngest respondent is 22 and the oldest 63 years old. The average age of the respondents is 43.3 years. On average, clients participated in 14.4 consultancy projects, while the client has collaborated on average 2.4 times with the same consultant as hired in the latest project. Furthermore the average duration of a consultancy project is 8 months and the client has on average 5.6 hours per week contact with the consultant during the consultancy project. Next to that, 30.7% of the clients hired a consultant for an advisory project, 29.3% for an implementation project and 40% for an advice and implementation project. The latter means that 30.7% of the consultants performed a resource role, while 69.3% of the consultants performed a process role. In table 4.1 to 4.3 a summary of the data is presented. The SPSS output is presented in appendix 3. Note that the outliers and missing values are deleted in chapter 4.1.1.

	Minimum	Mean	Maximum
Age (year)	22	43.3	63
Experience (times)	0	14.4	150
Experience with same consultant (times)	0	2.4	20
Duration (months)	1	8.0	48
Contact hours (hours per week)	0.5	5.6	32

Table 7.1: Non-categorical data control variables.

	Advise	Implementation	Advise and Implementation
Project	30.7 %	29.3%	40.0%

Table 7.2: Type of project.

	Male	Female
Gender	77.3%	22.7%

Table 7.3: Gender.

It is remarkable that one respondent collaborated in a consultancy project for 150 times, but since this respondent is 60 years old, this might be possible. Furthermore one respondent had on average 32 hours of contact (per week) with a consultant. Also this might be a high value, but it is possible that a certain type of project or this persons' specific role demands that amount of time. These high values however did not significantly influence the outcome of the research and therefore these respondents are not deleted.

7.2 Secondary analysis

This section concerns the hierarchical multiple regression and correlations among variables.

7.2.1 Correlations

In table 7.4 the correlations of all variables used in this study are presented. These correlations give a clear overview of the effects and the strength of the relations of the variables used in this research. Since this study attempts to look whether the elements in client-consultant collaboration have an effect on the successful completion of the consultancy project, the effects on the variable successful completion of the consultancy project are of particular interest. To examine the strength of the correlations, the interpretation of the effects by Cohen (1988) will be used. He suggests that the strength of the correlations should be interpreted as follows: $r = .10$ to $.29$ for a small effect, $r = .30$ to $.49$ for a medium effect, and $r = .50$ to 1.0 for a strong effect between the two variables. Using this measure, there are four variables that have a strong and significant effect on the successful completion of the consultancy project when using a significance level of $.05$: the process of information exchange ($r = .738$), dedication ($r = .575$), involvement ($r = .506$), and objectivity ($r = .727$). Only one element, outsider ($r = .406$), has medium effect and the element active learning ($.273$), has a significant small effect on the successful completion of the consultancy project. Three elements have no significant effect on the successful completion of the consultancy project: comprehensiveness of the information, present resources, and the application of the resources. A possible explanation for the absence of these effects will be given in chapter 9.1. Furthermore there are also correlations among the variables other than the correlations with successful completion of the consultancy project. Therefore it should be taken into account that multicollinearity can appear in the hierarchical multiple regression.

Looking at the control variables (variable 11-17), only the amount of times the client collaborated with the consultant (experience) has an effect on the successful completion of the consultancy project. Since control variables should have an effect on both the dependent as

the independent variable, only this control variable will be used in the hierarchical multiple regression. That the other control variables do not have an effect on the successful completion of the consultancy project means that the age and gender of the client do not have an effect on the successful completion of the consultancy project. This also is the case for the amount of times the client has worked with the same consultant (ExperienceSame), the duration of the project, the amount of hours the client has contact with the consultant and whether the consultancy project is a resource or a process consultancy project.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Success	3,65	,88	1																
2. IE_Process	4,06	,64	,738**	1															
3. IE_Comprehensive	4,36	,54	,198	,468**	1														
4. RS_Examination	2,76	1,02	,193	,164	-,226	1													
5. RS_Application	2,71	,90	,182	,173	-,131	,439**	1												
6. CM_Dedication	4,14	,63	,575**	,755**	,446**	,130	,089	1											
7. CM_Involvement	3,80	,71	,506**	,596**	,301**	,196	,003	,536**	1										
8. LN_Active	2,99	,74	,273*	,188	-,122	,498**	,445**	,238*	,208	1									
9. ID_Perspective	3,28	,74	,406**	,359**	,011	,482**	,230*	,374**	,375**	,658**	1								
10. ID_Objectivity	3,82	,82	,727**	,804**	,330**	,233*	,269*	,646**	,502**	,326**	,489**	1							
11. Gender	1,22	,42	-,037	-,175	-,171	-,069	-,015	-,116	-,052	,017	,010	-,204	1						
12. Age	43,26	10,97	,092	,170	-,070	,299**	,053	,032	,004	,093	,058	,183	-,323**	1					
13. Experience	14,36	24,20	,292*	,331**	,192	,218	,057	,156	,218	-,049	,120	,317**	-,207	,281*	1				
14. ExperienceSame	2,40	3,50	-,107	-,012	-,038	,128	-,004	-,036	-,131	-,028	-,009	,017	-,200	,229*	,405**	1			
15. Duration	8,04	8,52	,040	-,144	,113	,010	-,068	,034	-,023	-,033	-,101	-,147	-,056	-,041	,042	-,097	1		
16. ContactHours	5,58	7,01	,028	-,074	,000	-,061	-,069	,042	,011	,295*	,304**	,008	,133	-,237*	-,204	-,131	-,053	1	
17. Project	2,09	,841	,050	-,012	,055	,006	,148	,033	,053	,054	,103	-,122	,016	-,173	,093	-,072	,160	,114	1

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

Table 7.4: Pearson correlation matrix

* . Correlation is significant at the 0.05 level (2-tailed).

7.2.2 Hierarchical multiple regression

The hierarchical multiple regression is performed to give an answer to the research question. Therefore the elements present in client-consultant collaboration are used in order to predict their effect on the successful completion of the consultancy project. To examine if these elements have an effect on the successful completion of the consultancy project, the elements will be entered in model two of the hierarchical multiple regression analysis, after controlling for the control variable experience in model one. Looking at the output of the analysis, there is no multicollinearity since the VIF value in the coefficients table is lower than 10 and the tolerance in the same table is higher than .10 (Pallant 2007). The R² in model one is .085 and significant (p = .011). This means that experience explains 8.5% of the variance in the successful completion of the consultancy project. The R² in model two is .631 and significant (p = .000) which means that the model as a whole explains 63.1% of the variance in the successful completion of the consultancy project. The elements present in client-consultant

collaboration therefore explain an additional 54.6% of the variance in the successful completion of the consultancy project, after controlling for the control variable experience in model one (R^2 Change = 0.546).

To determine which variable has the strongest effect on the successful completion of the consultancy project, the standardized coefficients are used. The second model, in which the elements present in client-consultant collaboration are added, shows that the control variable experience is not significant. This means that the amount of times the client did participate in a consultancy project has no significant effect on the successful completion of the consultancy project. Looking at the effects of the elements shows that the process of information exchange has the strongest and a positive effect on the successful completion of the consultancy project (IE_Process: $\beta = .474$, $p = .005$), objectivity has the second strongest and also a positive effect (ID_Objectivity: $\beta = .314$, $p = .029$), and the comprehensiveness of the information has the weakest and a negative effect (ID_Perspective: $\beta = -.190$, $p = .049$). The other elements do not have a significant effect, which means that they do not make a unique contribution in explaining the successful completion of the consultancy project. The results of the analysis are presented in table 7.5 below. The SPSS output is presented in appendix 10-11.

Model		Beta	Significance	Tolerance	VIF
1	Experience	,292	,011	1,000	1,000
2	Experience	,066	,449	,773	1,294
	IE_Process	,474	,005	,216	4,630
	IE_Comprehensive	-,190	,049	,641	1,559
	RS_Examination	-,073	,475	,554	1,805
	RS_Application	-,019	,843	,649	1,541
	CM_Dedication	,029	,818	,379	2,639
	CM_Involvement	,083	,411	,578	1,729
	LN_Active	,061	,601	,435	2,301
	ID_Perspective	,035	,766	,425	2,355
	ID_Objectivity	,314	,029	,291	3,431

Table 7.5: Hierarchical multiple regression.

7.2.3 Hypotheses

The outcomes of the hierarchical multiple regression is used to confirm or reject the hypothesis formulated in this research. Since only two elements have a positive effect on the successful completion of the consultancy project, two hypotheses can be confirmed. The element with the strongest significant effect on the successful completion of the consultancy

project was the process of information exchange ($\beta = .474$, $p = .005$). Therefore hypothesis 1 - *The process of information exchange has a positive effect on the successful completion of the consultancy project* - is confirmed.

The second strongest element that had an effect on the successful completion of the consultancy project is the perceived objectivity of the consultant by the client ($\beta = .314$, $p = .029$). Therefore hypothesis 9 - *The objectivity of the consultant, as perceived by the client, has a positive effect on the successful completion of the consultancy project* - is confirmed.

The third significant effect on the successful completion of the consultancy project is the exchange of comprehensive information ($\beta = -.190$, $p = .049$). This however is a negative effect, and therefore hypothesis 2 - *The exchange of comprehensive information has a positive effect on the successful completion of the consultancy project* - is rejected. The other elements used in this study did not have a significant effect. Therefore hypotheses 3-8 also are rejected. An overview of the accepted and rejected hypotheses along with the significant effects is presented in table 7.6 below.

Hypothesis	Accepted/ rejected	Effect
H1: The process of information exchange has a positive effect on the successful completion of the consultancy project.	Accepted	.474
H2: The exchange of comprehensive information has a positive effect on the successful completion of the consultancy project.	Rejected	-.190
H 3: The examination of present resources in the client organization has a positive effect on the successful completion of the consultancy project.	Rejected	-
H4: The application of present resources in the client organization has a positive effect on the successful completion of the consultancy project.	Rejected	-
H5: Dedication of the client has a positive effect on the successful completion of the consultancy project.	Rejected	-
H6: Client involvement in the consultancy project has a positive effect on the successful completion of the consultancy project.	Rejected	-
H7: Active learning of the client has a positive effect on the successful completion of the consultancy project.	Rejected	-
H8: The outsider's perspective of the client on the organization has a positive effect on the successful completion of the consultancy project.	Rejected	-
H9: The objectivity of the consultant, as perceived by the client, has a positive effect on the successful completion of the consultancy project.	Accepted	.314

Table 7.6: Summary of the accepted/rejected hypothesis.

8 Conclusion

The aim of this research is to explore if the elements present in client-consultancy collaboration have an effect on the successful completion of the consultancy project. Since little research is available on the concept of client-consultant collaboration, and in particular on the effects of the elements present in client-consultant collaboration on the successful completion of the consultancy project, this research is twofold. First, the concept of client-consultant collaboration was elaborated in order to construct the elements that are present in client-consultant collaboration, and second it was examined what effects these elements have on the successful completion of the consultancy project. Because the main purpose of this research is to look after the effects of the elements present in client-consultant collaboration on the successful completion of the consultancy project, the following research question was formulated:

“What are the effects of the elements present in client-consultant collaboration on the successful completion of the consultancy project, seen from a client point of view?”

In order to answer this research question, first the elements present in client-consultant collaboration were determined. This was done according to a combination of the facet method and the internal method of questionnaire design. Eventually nine elements were considered as elements in client-consultant collaboration and were constructed: the process of information exchange, comprehensiveness of the information, examination of present resources, application of present resources, dedication, involvement, active learning, outsider’s perspective and objectivity. After that, the hierarchical multiple regression was executed in order to examine the effects of these elements on the successful completion of the consultancy project. The variable successful completion of the consultancy project was derived from the research of van Aken (1996) on project success.

The data for this research was gathered from clients that hired a management consultant and were a key person, from the client side, in a consultancy project that occurred and was completed in the last five years. In this ‘definition’ the key person can be described as ‘the contact client’, ‘the intermediate client’, or ‘the primary client’ as described by Schein (1997). The sample used for this study is 75.

The output of the hierarchical multiple regression showed that the elements and the control variable experience explain 63.1% of the variance in the successful completion of the consultancy project. After controlling for the control variable experience, the elements

explained a unique variance of 54.6% in the successful completion of the consultancy project. Therefore it can be concluded that the elements present in client-consultant collaboration explain a significant part of the successful completion of the consultancy project, but also that 45.4% remains unexplored by these elements. The later will be further discussed in the next chapter.

Now it is clear that all elements together explain a significant part of the successful completion of the consultancy project, it is interesting to look at which of the elements have contributed to the successful completion of the consultancy project, and how strong their effects on the successful completion of the consultancy project are. Looking at the process of information exchange, it has a positive and significant effect ($\beta = .474$, $p = .005$), and therefore hypothesis 1 - *The process of information exchange has a positive effect on the successful completion of the consultancy project* - is accepted. The effect of the comprehensiveness of exchanged information also has a significant effect, but is negative ($\beta = -.190$, $p = .049$). This means that hypothesis 2 - *The exchange of comprehensive information has a positive effect on the successful completion of the consultancy project* - is rejected. The effect of the examination of the present resources in the client organization does not have a significant effect ($p = .475$) and therefore hypothesis 3 - *The examination of present resources in the client organization has a positive effect on the successful completion of the consultancy project* - is rejected. Also the application of present resources does not have a significant effect ($p = .843$), which results in the rejection of hypothesis 4: *the application of present resources in the client organization has a positive effect on the successful completion of the consultancy project*. Also hypothesis 5 - *Dedication of the client has a positive effect on the successful completion of the consultancy project* - is rejected since the dedication of the client does not have a significant effect on the successful completion of the consultancy project ($p = .818$). Likewise, the involvement of the client in the consultancy project does not have a significant effect ($p = .411$) and therefore hypothesis 6 - *Client involvement in the consultancy project has a positive effect on the successful completion of the consultancy project* - is rejected. Hypothesis 7 - *Active learning of the client has a positive effect on the successful completion of the consultancy project* - also is rejected since the effect is not significant ($p = .601$). The last hypothesis that is rejected since it has no significant effect ($p = .766$) on the successful completion of the consultancy project is hypothesis 8: *The outsider's perspective of the client on the organization has a positive effect on the successful completion of the consultancy project*. The objectivity of the consultant, perceived by the client, does have a

positive and a significant effect ($\beta = .314$, $p = .029$) and therefore hypothesis 9 - *The objectivity of the consultant, as perceived by the client, has a positive effect on the successful completion of the consultancy project* - is accepted. The control variable experience however did not have a significant effect ($p = .449$) on the successful completion of the consultancy project.

Referring back to the research question in the first part of the conclusion, it can be stated the process of information exchange, the objectivity of the consultant perceived by the client and the comprehensiveness of the information, have an effect on the successful completion of the consultancy project, seen from a client point of view. The process of the information exchange has the strongest and a positive effect on the successful completion of the consultancy project ($\beta = .474$, $p = .005$), objectivity has the second strongest and positive effect ($\beta = .314$, $p = .029$), and the comprehensiveness of the information has the weakest and a negative effect ($\beta = -.190$, $p = .049$). The other elements do not have significant effects, which means that they do not make a unique contribution in explain the successful completion of the consultancy project. All elements of client-consultant collaboration together significantly explain 54.6 percent of the variance in the successful completion of the consultancy project, after controlling for the control variable experience.

9 Discussion, limitations and recommendations for further research

This chapter discusses the findings of this research, elaborates on the limitations of the research and gives recommendations for further research.

9.1 Discussion

This research shows that the concept of client-consultant collaboration is very extensive and that not all elements used in this study have an effect on the successful completion of the consultancy project. Even though the concept of client-consultant collaboration is widely used in the literature, many scholars use it differently. It would therefore be naive to state that this study fully explains the concept of client-consultant collaboration and that the constructed elements are a complete representation of the concept. This may even be impossible to do so, since according to Huxham (1993) client-consultant collaboration is a concept that is forever evolving, and therefore he believes it might be impossible to define all issues that are involved in the concept. The first part of the research therefore must not be seen as an attempt to construct an all-embracing concept of client-consultant collaboration, but rather as a first step in the exploration of the concept, of which the outcomes could be used for further research.

Regarding the effects of the elements present in the concept of client-consultant collaboration on the successful completion of the consultancy project, it is interesting to see that only three elements significantly contribute in explaining the successful completion of the consultancy project. The process of information exchange has the strongest effect. It is hard to say why this element has the strongest effect, but it is by all means too easy to explain it by the saying: “information is key to success”. In the context of client-consultant collaboration however, it certainly is an important part of the collaboration since it is impossible for the consultant to do its job properly without information of the client organization. Next to that, the exchange of information often is the first activity that occurs when the client hires a consultant (Armbrüster & Kipping, 2002). Therefore it is important that the process of information exchange is well organized, so that client and consultant can exchange the information and a basis for further collaboration will be set. The latter is in line with the research of Broom & Smith (1979), since they state that if the process of information exchange is facilitated well, this will form a strong basis in future decision making. And according to Bennett & Robson (1999), not only the consultancy project will be more successful due to a good process of information exchange, but it also promotes the interaction and relationship between client and consultant. Therefore it can be assumed that the process of information exchange more or less

forms the basis of good client-consultant collaboration and a successful completion of the consultancy project.

The second effect in order of strength is the objectivity of the consultant, as perceived by the client. This result is not that striking since clients often hire a consultant to gain a “fresh” and objective insight from someone that is independent (English & Steffy, 1984). Moreover, almost all definitions of management consultancy emphasize the importance of the objectivity of the consultant. This result therefore confirms that the objectivity of the consultant is important in collaborating with the client to gain a successful completion of the consultancy project. The objectivity of the consultant serves to create new dynamics and a shift in the status quo (Smith, 2009), which can generate new insight for the client and can result in a more successful completion of the consultancy project. Herein it remains important that the interests of the client should be taken into account, but the consultant should be able to give an objective advice without being sensitive for politics within the client organization (Sobel, 2003).

The comprehensiveness of the information in the information exchange between the client and consultant has the weakest significant effect, but yet a negative effect on the successful completion of the consultancy project. This is striking since it suggest that if a client provides accurate information, is honest about the information, does not withhold information and gains enough top management support from the client organization, this leads to a less successful completion of the consultancy project. Another remarkable fact is that the comprehensiveness of information alone does not have a significant correlation with the successful completion of the consultancy project, which indicates that this element is influenced by other elements present in the model. It however is hard to trace where this influences comes from, especially since it seems that this element is influenced by multiple other elements. One possible explanation could be that the objectivity of the consultant, as perceived by the client, influences this outcome. The results in the research of Ashford strengthen this assumption since according to his research 68 percent of the clients qualified the consultancy project as a success, but 74 percent of this group had the feeling that the consultant was fleshing out the client’s ideas, without coming up with new ideas. Therefore a less independent consultant that only uses the information and ideas of the client, and does not come with „new’ solutions, can influence the added value of the comprehensiveness of the information. This may happen since the comprehensive information then only is used to flesh

out the client's ideas. It however remains an unexpected outcome, of which it is beyond the scope of this study to further investigate the real cause.

It is hard to tell why the other variables do not influence the successful completion of the consultancy project in this study. One reason could be that there are too many variables involved in the model in relation to the small number of respondents. This however will be further discussed in the paragraph 9.2. Another reason could be that the questionnaire is incomplete since it only has used the aspects out of the client-consultant literature, which may be incomplete due to the limited elaboration of the concept of client-consultant collaboration. A third explanation could be that the outcomes of the analysis are a true reflection of the reality, which means that in the real world not all elements contribute to the successful completion of the consultancy project.

This last reason can be explained by the possibility that the successful completion of the consultancy project is not influenced that much by the involvement of the client, but rather depends on the qualities and the work of the consultant. This can be explained by theory of Ciampi (2008), who states that client-consultant collaboration is only a process of information and knowledge exchange between client and consultant, in which it is the responsibility for the consultant to deliver a project of a high quality and corresponding objective opinions. The responsibility of the client only involves accepting or rejection the project. Schaffer (2002) shares this thoughts and states that client and consultant operate under a model that does not allow them to fully collaborate. Therefore the consultant is responsible for delivering the best possible solution(s) and the client is responsible for the use of these solution(s). But in order to realize this, extensive communication between both parties is needed (Schaffer, 2002). The reasoning of Ciampi (2008) and Schaffer (2002) therefore could reinforce the findings of this study that the process of information exchange and the objectivity of the consultant are the most important aspects in client-consultant collaboration in order to gain a successful completion of the consultancy project.

On the contrary, this reasoning might be too „easy’ since it ignores findings earlier in this research. These findings however mostly origin from assumptions based on case studies and qualitative research, and lack in empirical proof. Therefore it is essential that there will be more empirical studies that can provide more clarity on what elements truly are involved in client-consultant collaboration when looking at its relation to the successful completion of the

consultancy project. Since there could be other reasons for the insignificant effects in this study than described above, below some other explanations are discussed.

One of the insignificant effects that can be explained by current theory is the effect of active learning on the successful completion of the consultancy project. Turner (1982) and Werr & Linnarsson (2002) are probably right in stating that learning is rarely considered as an objective of the client and consultant assignment. Therefore it is the question if the client learns that much of client-consultant collaboration and that this truly influences the successful completion of the consultancy project. Another reason could be that if a client learns from the consultancy project, this learning does not directly influence the successful completion of the current project, but rather has its effect on the successful completion of subsequent project(s). This is more in line with Block (2000) and Gable (1996) who state that through a better understanding, the client could deal with a similar future project itself with reduced external assistance. The latter is the most suitable for this research, since this research is only based on the examination of one project, and learning experiences of other projects is not involved.

A reason for the insignificant effect of the involvement and dedication of the client can be found in the sample of the research. Almost half (48 percent) of the clients had an average of two hours per week or less contact with the consultant. This figure shows that a large part of the clients in the sample does not have that much of contact with the consultant, indicating that the client is not that involved with the consultant. Furthermore, 68 percent of the projects had a duration of 6 months or less. This might indicate that the duration of the project is too short to create dedication by the client. Although there are no significant effects between the involvement of the client and the contact hours with the consultant, and also not between the dedication of the client and the project duration, these figures shows that there is a limited distribution of the respondents' answers in this research. The latter will be further discussed in the limitation of the research.

In the examination and application of present resources in the client organization the emphasis of this research might be too much on the preservation of those resources to use them in the consultancy project, rather than in improving these resources and then using them in the consultancy project. According to Smith (2009), the consultant should challenge the insiders to improve their resources and collaboratively make the process better. In improving those resources, the resources might fit better to the consultancy project, and therefore the probability of the successful completion of the consultancy project might be higher. Another

reason could be found in the reasoning of Sweem (2000) that often clients hire a consultant because they do not have the required resources present in their own organization. Therefore the client is forced to use external resources. Moreover, it is possible that the client is aware of the resources in its organization and only hires a consultant to increase the legitimacy of the decision that already is made, or the client uses the consultant as a scapegoat to practice unpopular actions (Jackall, 1988).

The control variables included in this study did not substantially influence the outcomes of this study. It is possible to say that this is a good thing, but also it is possible to question if it makes sense. Following the reasoning of Schaffer (2002) that consultants operate under a model that does not allow for client-consultant collaboration, and that the consultant is responsible for delivering the project, it can be stated that the client's characteristics do not influence the outcome of the consultancy project. If this is the case, it would make more sense to measure the characteristics of the consultant. Another possibility could be that for measuring the success factors of project success, satisfaction is used. Since satisfaction is highly influenced by the feelings of the clients, it remains an emotional issue, without taking into account the „hard' measures of the successful completion of the consultancy project. Another possibility could be that some of the supplied figures provided by the respondents in the questionnaire are mere estimations since respondents could supply information about projects that occurred up to five years ago. Finally it could be that the sample size of this research is too small and the distribution of the respondents' answers in this research is too limited.

The last question that remains is why, although the model explained 54.6 percent of the variance in the successful completion of the consultancy project, still 45.4 percent remains unexplained, after controlling for the control variable experience. There are several possibilities to answer this question, but the most obvious reason could be found in the theory of Kubr (2002). According to Kubr (2002), client-consultant collaboration is a dimension of the client-consultant relationship. Therefore it is possible that other factors of the relation between client and consultant, such as trust, also are part of explaining the successful completion of the consultancy project. Trust therefore can possibly improve the client-consultant collaboration, but could also have an effect on other factors that influence the successful completion of the consultancy project. But since it is impossible to include all variables in this study, it can be concluded that a reasonable amount of the variance in the

successful completion of the consultancy project has been explained with the elements used in this study.

9.2 Limitations

Although this research has presented new insights, there are also limitations to this study. The first limitation is that the research only is derived from the client side. The consultants' perspective is not included in this research although according to McLachlin (2000), the expectations of both the client and consultant should be met to consider a consultancy project successful. Van Aken (1996) even states that all involved actors in the project should be satisfied. However, the scope of this research did not allow to do research on both the client and consultant side. To obtain the most interesting results, it was decided to focus on the client side. Moreover, in approaching this research from the client side, the people that eventually have to work with the outcome of the project are included in this research.

The second limitation is that possibly not all elements present in client-consultant collaboration are included in this research. In this study, the facets are derived from the theory of Kubr (2002), Buono (2009) and other scholars that suggested the existence of these facets in the concept of client-consultant collaboration. But the elaboration of these facets into elements is limited due to the scope of this research. It is reasonable to assume that if more questions in the questionnaire were used, of which of course the content must fit the content of the facet, more elements in each facet could be detected. Also it could be that due to a larger amount of questions stronger scales could have been created. Furthermore only the client-consultancy literature is used in this thesis. However, considering the tight time frame of this research, it was decided to focus on this area of literature in order to get the most meaningful results.

The third limitation is the relatively low sample size, which makes it difficult to generalize the outcomes to the population of the clients in the Netherlands. The number of clients in the Netherlands that hire a consultant is obviously much larger than the sample used for this study. Moreover, the sample size did not meet the criteria of Stevens (1996) and Tabachnick & Fidel (2007) to generalize the outcomes of this study to a larger population. Another limitation regarding the low sample size is that there seems to be a limited distribution of the respondents' answers when looking at some of the control variables. This may give a somewhat incorrect view on the outcomes. However, the outcomes of this study are at least representative for the sample, give a clear indication that the facets consist out of different

elements, and show that some of these elements contribute to gain a more successful completion of the consultancy project.

The fourth limitation is that the content of the concepts used in this study might differ from research to research. In this study lots of different studies are used to look after the effects of the element on the successful completion of the consultancy project. Most of the studies however use the variable successful completion of the consultancy project differently, and therefore not all studies are comparable to each other. However, all studies used in this research have their origins in the client-consultant literature, and generally use soft criteria to measure the successful completion of the consultancy project. Furthermore this is hard to overcome since there is possibly not one right measure for the successful completion of the consultancy project that is accepted by all researchers. To reduce this problem, the studies that were selected to include in this research were the ones most comparable to each other. This obviously also counts for the content of the elements.

The last limitation is that in this study, it was assumed that the literature on the facets of client-consultant collaboration was sufficiently defined to assume that the five facets together truly are a representation of the concept. This is a frequently used method when it comes to the elaboration of a concept. Another method is to execute principal component analysis on all items involved in the study in order to conclude if the facets truly are part of the underlying concept. In appendix 12 this analysis is executed. The outcomes of this analysis indicate that only three facets can be seen as part of client-consultant collaboration: information exchange, awareness of resources and independency. When executing a multiple regression analysis, it shows that only the exchange of information and independency have an effect on the successful completion of the consultancy project. This gives additional proof that the outcomes of the research are in the good direction, even though they are on facet level instead of element level. Given the small sample size of this research, it was regarded legitimate to use the current analysis and assume that the facets are a true representation of the concept of client-consultant collaboration as defined in the literature.

9.3 Recommendations

This study proved that there are some elements of client-consultant collaboration that contribute on the successful completion of the consultancy project. Due to the tight timeframe, it was impossible to include both client as consultant in this research. However the client who is the end user of the product, and therefore the most obvious to do research on, it

is wise to also do research from the consultants' side. This is in line with Gable (1996) and McLachlin (2000) who state that both client and consultant should be included in the research to give a comprehensive view on the successful completion of the consultancy project. When similar future research will be done from the consultant's side, an indication of the effect of client-consultant collaboration on the successful completion of the consultancy project from both sides can be given, which can help to see what clients and consultants should do to gain a more successful completion of the consultancy project. This may also confirm or reject the theory of Ciampi (2008) and Schaffer (2002) that it is the responsibility of the consultant to leverage a successful project, and the involvement of the clients is minimal regarding the client-consultant collaboration.

Another recommendation for further research is to examine if the elements of client-consultant collaboration have an effect on other factors than the successful completion of the consultancy project. Since client and consultant work together to achieve the goals the client and consultant agreed on, the elements of client-consultant collaboration could possibly also have an effect on other factors (trust, relationship, etc.) of the client-consultant engagement. Therefore it is interesting to investigate if the elements of client-consultant collaboration have an effect on other factors of a client-consultant engagement, which can lead to a clearer picture of the comprehensiveness of the elements of client-consultant collaboration.

It would be naive to state that the concept of client-consultant collaboration is fully elaborated in this study. It gives a clear picture of the elements involved in client-consultant collaboration, just as it proves that some elements of client-consultant collaboration have a positive effect on the successful completion of the consultancy project. But as Czerniawska & May (2006) state that "it is easy for collaboration to become another of those terms that become devaluated by overuse and under practice" (p. 21), it is not that easy to give a clear and elaborated theory of client-consultant collaboration. Therefore, this study should be seen as a start in elaborating the concept of client-consultant collaboration and its effect on the successful completion of the consultancy project, and could be a stimulus to further define the concept of client-consultant collaboration. Furthermore it is wise to use experts that are familiar with the content of client-consultant collaboration and scale construction.

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Appendix 1: Definition of the clients

To include only the actively involved clients in this study, a distinction is made between active involved clients and less involved clients. To do this, the six basic types of clients recommended by Schein (1997) (presented in the table below) will be used. He states that there is a difference in the sort of client, and that each clients has its own role in the consultancy project. The different type of clients are presented in table below. Since it can be expected that the „contact clients’, the „intermediate clients’ and the „primary clients’ will work together with the consultant, only this types of clients will be included in this study. The other types of clients possibly can say something on the successful completion of the consultancy project in their point of view, but they cannot say something about the collaboration between the client and consultant. Therefore this types are not included in the research.

Type of client	Definition
Contact clients	The individual(s) who first contact the consultant with a request, question or issue.
Intermediate clients	The individuals or groups who or which get involved in various interviews, meetings, and other activities as the project evolves.
Primary clients	The individual(s) who ultimately "own" the problem or issue being worked on; they are typically also the ones who pay the consulting bills or whose budget covers the consultation project.
Unwitting clients	Members of the organization or client system above, below and laterally related to the primary clients who will be affected by interventions but who are not aware that they will be impacted.
Indirect clients	Members of the organization who are aware that they will be affected by the interventions but who are unknown to the consultant and who may feel either positive or negative about these effects
Ultimate clients	The community, the total organization, an occupational group, or any other group that the consultant cares about and whose welfare must be considered in any intervention that the consultant makes

Six basic types of clients (Schein, 1997)

Appendix 2: Questionnaire

Beste deelnemer,

Mijn naam is Mark van de Sanden en ik ben masterstudent Organization Studies aan de Universiteit van Tilburg. In het kader van mijn afstudeerscriptie doe ik onderzoek naar de samenwerking tussen de klant en de consultant en in hoeverre deze samenwerking een relatie heeft tot het succesvol afronden van een consultancy project.

De vragenlijst bestaat uit twee delen. Het eerste deel bestaat uit algemene vragen die betrekking hebben op uw ervaring en eigenschappen van het consultancy project. Het tweede deel heeft betrekking op onderdelen die te maken hebben met de samenwerking tussen u en de consultant. Het invullen van de vragenlijst zal maximaal 10 minuten in beslag nemen. Mocht u geïnteresseerd zijn naar de resultaten van het onderzoek, dan kunt u mij mailen op m.m.c.v.d.sanden@uvt.nl

Wilt u kans maken op één van de twee VVV bonnen ter waarde van 50,00 euro? Vul dan aan het einde van de enquête uw e-mail adres in. (Dit is niet verplicht.)

De gegevens die verkregen worden door het invullen van de enquête worden enkel gebruikt voor wetenschappelijk onderzoek. De gegevens worden anoniem en vertrouwelijk behandeld en er worden geen gegevens verstrekt aan derden.

Voor het onderzoek is het van belang dat u antwoord geeft op basis van uw ervaringen uit het meest recentelijke, afgeronde consultancy project. Gedurende het invullen van de vragenlijst mogen er dus geen ervaringen uit verschillende consultancy projecten gecombineerd worden.

Mocht u nog vragen hebben dan kunt u telefonisch contact opnemen met 06-28430614 of per e-mail: m.m.c.v.d.sanden@uvt.nl.

Bij voorbaat dank voor het invullen van de enquête.

Met vriendelijke groeten,

Mark van de Sanden

Deel I

Persoonlijke informatie

1. Wat is uw geslacht
 - Man
 - Vrouw
2. Wat is uw leeftijd?
_____ jaar

Ervaring

3. In hoeveel eerdere consultancy projecten bent u de opdrachtgever of de gedelegeerde opdrachtgever geweest? (*Wanneer het exacte aantal niet bekend is, dan is een geschat aantal gewenst.*)
_____ keer

Eigenschappen van het consultancy project

Voor het beantwoorden van de onderstaande vragen is het belangrijk dat u uw ervaring uit het meest recente consultancy project voor ogen heeft en vanuit dit project en deze ervaringen alle vragen van deze enquête invult. Wanneer het exacte aantal niet bekend is, dan is een geschat aantal gewenst.

4. In hoeveel eerdere consultancy projecten heeft u met de consultant, die ingeschakeld is voor het laatste project, samengewerkt?
_____ keer
5. Hoeveel werknemers uit uw organisatie waren actief betrokken bij dit project?
_____ werknemers
6. Hoe lang heeft het totale consultancy project geduurd?
_____ maanden
7. Hoeveel uur had u gemiddeld per week contact met de consultant?
_____ uur
8. Het consultancy project was een:
 - Advies project
 - Uitvoering/implementatie project
 - Advies en uitvoering/implementatie project

Deel II

Kies bij de onderstaande vragen telkens het antwoord dat het meest van toepassing is.

Informatie uitwisseling

	Helemaal mee oneens	Mee oneens	Niet mee oneens, niet mee eens	Mee eens	Helemaal mee eens
1. Ik heb alle informatie gegeven waar de consultant om vroeg.					
2. Ik had <u>geen</u> toestemming van de directie om volledige openheid in informatie te verschaffen aan de consultant.					
3. Ik ben terughoudend geweest in het uitwisselen van informatie met de consultant.					
4. In de informatie uitwisseling tussen mij en de consultant was duidelijk sprake van tweerichtingsverkeer.					
5. Als ik de consultant om informatie vroeg heb ik die altijd gekregen.					
6. Ik had het vertrouwen dat de consultant vertrouwelijk om zou gaan met de door mij verstrekte informatie.					
7. De consultant was <u>niet</u> geïnteresseerd in de informatie die ik heb verstrekt.					
8. Ik ben eerlijk geweest met het verstrekken van informatie aan de consultant.					
9. De informatie die ik aan de consultant heb verstrekt was altijd accuraat.					
10. Ik zie het als een gezamenlijke verantwoordelijkheid van zowel mij, als de consultant, om alle informatie tussen beide partijen uit te wisselen					
11. Ik had het idee dat de consultant voldoende informatie over de organisatie had vergaard om een goed advies te geven.					
12. De consultant is eerst begonnen met het vergaren van informatie, waarna we gezamenlijk hebben gekeken wat het daadwerkelijke probleem was.					
13. Het daadwerkelijke probleem is gedurende het proces meerdere malen veranderd.					
14. Ik had het idee dat de consultant de situatie waarin de organisatie zich bevond <u>niet</u> goed begreep.					
15. Er zijn regelmatig feedback sessies geweest met de consultant.					
16. De consultant en ik begrepen elkaar volledig wanneer we het hadden over de inhoud van het consultancy project.					

Resources

Resources zijn mensen, middelen, geld en informatie die in een organisatie aanwezig zijn en van toegevoegde waarde (kunnen) zijn voor de organisatie.

	Helemaal mee oneens	Mee oneens	Niet mee oneens, niet mee eens	Mee eens	Helemaal mee eens
1. De consultant heeft mij op resources van het bedrijf gewezen, waarvan ik voorheen niet wist dat deze er waren.					
2. De consultant heeft mij laten zien hoe ik de resources van het bedrijf in kan zetten om het doel van het consultancy project te behalen.					
3. Ik heb <u>niet</u> geholpen met het mobiliseren van de werknemers om de consultant te ondersteunen.					
4. De consultant probeerde zoveel mogelijk resources vanuit mijn organisatie te gebruiken in het consultancy project.					
5. De consultant maakte gedurende het consultancy project veel gebruik van externe resources.					
6. De consultant wees mij voortdurend op de resources die aanwezig zijn in de organisatie.					
7. De consultant probeerde mij uit te dagen om over het gebruik van de organisatie resources te praten.					
8. De consultant probeerde mij uit te dagen om zo veel mogelijk resources vanuit de organisatie te gebruiken.					
9. De consultant stimuleerde mij om meer vanuit de kwaliteiten van de organisatie te denken.					
10. De consultant wist precies welke personen hij moest benaderen om dingen gedaan te krijgen.					
11. De consultant wist precies bij welke personen hij de meeste informatie kon vergaren.					
12. De consultant wist mensen die weerstand boden achter het consultancy project te scharen.					
13. De consultant motiveerde mij om oplossingen te vinden door middel van het gebruiken van mijn eigen resources.					
14. De consultant wist precies hoe hij de gaten in moest vullen met de resources vanuit de organisatie.					

Toewijding en betrokkenheid

	Helemaal mee oneens	Mee oneens	Niet mee oneens, niet mee eens	Mee eens	Helemaal mee eens
1. Voor aanvang van het consultancy project was ik erg toegewijd om het consultancy project goed af te ronden.					
2. Gedurende het consultancy project was ik erg toegewijd het consultancy project goed af te ronden.					
3. De consultant heeft mijn toewijding voor het project vergroot.					
4. Alle verantwoordelijkheid voor het consultancy project ligt bij de consultant.					
5. Ik wist precies waar de consultant mee bezig was.					
6. Ik heb het advies zelf geïmplementeerd.					
7. Ik was erg betrokken in de beginfase van het consultancy project.					
8. Ik was erg betrokken in de eindfase van het consultancy project.					
9. Ik heb de consultant vaak gevraagd mij op de hoogte te stellen over de voortgang van het project.					
10. Als ik iets niet wist, vroeg ik de consultant altijd om raad.					
11. Ik stond volledig achter het besluit om een consultant in te huren.					
12. Ik was vastberaden het consultancy project te laten slagen.					
13. Ik had het gevoel dat de consultant vastberaden was om het consultancy project te laten slagen.					
14. Ik had <u>geen</u> goede band met de consultant.					
15. Het management was erg toegewijd aan het consultancy project.					

Leren

	Helemaal mee oneens	Mee oneens	Niet mee oneens, niet mee eens	Mee eens	Helemaal mee eens
1. Ik heb veel geleerd van het consultancy project als het gaat om het analyseren van problemen.					
2. Ik heb veel geleerd van het consultancy project als het gaat om het oplossen van problemen.					
3. Leren van het consultancy project was een van de doelen die vooraf gesteld waren.					
4. De consultant heeft mij gestimuleerd te leren van het consultancy project.					
5. De consultant heeft het leren tijdens het traject gefaciliteerd.					
6. Als zich de volgende keer hetzelfde vraagstuk voordoet, dan zal ik wederom een consultant inhuren.					
7. De consultant heeft gevraagd wat ik wilde leren van het consultancy project.					
8. De consultant en ik hebben besproken waarom bepaalde dingen in de organisatie goed of fout gingen.					
9. Ik heb gedurende het hele consultancy project intensief samengewerkt met de consultant.					
10. Ik heb delen van het consultancy project intensief samengewerkt met de consultant.					
11. De samenwerking was informeel.					
12. Ik heb er zelf voor gezorgd dat ik iets heb geleerd van de samenwerking met de consultant.					
13. Er zijn meerdere werknemers uit de organisatie die intensief hebben samengewerkt met de consultant.					
14. Ik stond er helemaal voor open om van het consultancy project te leren.					
15. Gedurende het traject zijn verschillende processen meerdere malen doorlopen om het beste resultaat te verwezenlijken.					

Onafhankelijkheid

	Helemaal mee oneens	Mee oneens	Niet mee oneens, niet mee eens	Mee eens	Helemaal mee eens
1. Ik heb het idee dat de consultant een objectief advies heeft gegeven.					
2. Ik ben van mening dat de consultant <u>niet</u> onafhankelijk opereerde.					
3. Ik heb het idee dat de consultant <u>niet</u> gevoelig was voor politieke zaken vanuit de organisatie.					
4. De consultant was gevoelig voor ideeën die vanuit het management van mijn organisatie voorgesteld werden.					
5. De consultant vroeg vaak hoe ik over bepaalde onderwerpen dacht.					
6. De consultant heeft precies gedaan waar ik om vroeg.					
7. De consultant kwam met dezelfde oplossing als die ik voor aanvang van het project voor ogen had.					
8. Het eindresultaat was beter dan dat ik zelf had kunnen doen.					
9. De consultant spoorde mij aan buiten de dagelijkse routine te denken.					
10. De consultant gedroeg zich als een werknemer van de organisatie.					
11. De consultant had de frisse blik van een buitenstaander.					
12. Door de consultant heb ik een frisse blik gekregen over de aanpak van het consultancy project.					
13. Ik heb de consultant weten te overtuigen van mijn ideeën.					

Succes

	Helemaal mee oneens	Mee oneens	Niet mee oneens, niet mee eens	Mee eens	Helemaal mee eens	n.v.t.
1. Ik ben zeer tevreden met het resultaat.						
2. Ik ben zeer tevreden met het tijdstip waarop het project werd opgeleverd.						
3. Ik ben zeer tevreden met de wijze waarop binnen het project met de financiële middelen werd omgegaan.						
4. De kwaliteit van het projectresultaat is zeer hoog.						
5. Het door project X opgeleverde resultaat functioneert zeer goed.						
6. Het projectresultaat is de investering volledig waard geweest.						

Appendix 3: Primary analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Gender	75	1,00	2,00	1,2267	,42149
Age	75	22,00	63,00	43,2667	10,97212
Experience	75	,00	150,00	14,3600	24,20891
ExperienceSame	75	,00	20,00	2,4000	3,50289
Duration	75	1,00	48,00	8,0467	8,52190
ContactHours	75	,50	32,00	5,5867	7,01801
Project	75	1,00	3,00	2,0933	,84106
Valid N (listwise)	75				

Appendix 4: Construction of the components

In this appendix, the reasoning for the distribution of the items among the components is underpinned. To construct the components, two aspects are taken into account. The first aspect is that all items in each component should measure the same construct. This implies that the subject of each item in the component should more or less match each other. The second aspect is that the reliability can be improved when the items are deleted out of the component. Below the deletion of each item will be justified.

Information exchange

Component 1

- Information13 and Information15 are deleted out of this component since this increased the reliability.
- Information06 shows no substantive equalities with the other item of component one, and therefore is deleted.

Component 2

- Component two is kept intact.

Component 3

- Information05, Information11, Information15 and Information16 already are present in component 1, which construct fits better to the item.
- Information01, Information08 and Information09 is deleted from this component since it is already are present in component two, which construct fits better by the items.
- Since only one item is left, this is to less to form a component (Pallant, 2007).

Component 4

- Information05 and Information14 are deleted from this component since they are already present in component one, which construct fits better to the items.

Resources

Component 1

- Resources04 is deleted out of component 1 since this increased the reliability.

Component 2

- Resources05 is deleted out of component 2 since this increased the reliability.

Component 3

- The items in this component do not show substantive equalities, and therefore this component will not be used in this research.

Component 4

- Resources 10 is deleted from this component since it is already present in component one, which construct fits better to the item.
- Since only two items are left, this is to less to form a component (Pallant, 2007).

Commitment

Component 1

- Commitment06 is deleted out of component 2 since this increased the reliability.

Component 2

- Commitment05 is deleted from this component since it is already present in component two, which construct fits better to the item.
- Since only two items are left, this is to less to form a component (Pallant, 2007).

Component 3

- Commitment12 is deleted from this component since it is already present in component one, which construct fits better to the item.
- The content of rest of the items show no substantive equalities. Although there is a sufficient reliability, this component will not be used for further analysis.

Component 4

- Commitment11 and Commitment14 are deleted from this component since they already are present in component one, which construct fits better to the items.
- Commitment13 and Commitment06 are deleted form this component since they already are present in component three, which construct fits better to the items.
- Since only one item is left, this is to less to form a component (Pallant, 2007).

Component 5

- Commitment06 is deleted from this component since it is already present in component three, which construct fits better to the item.
- Since only one item is left, this is to less to form a component (Pallant, 2007).

Learning

Component 1

- This component is kept intact.

Component 2

- Learn12 is deleted from this component since it is already present in component one, which construct fits better to the item.

Component 3

- Learn10 is deleted from this component since it is already present in component one, which construct fits better to the item.
- Since only two items are left, this is to less to form a component (Pallant, 2007).

Component 4

- Since this component only consist of two items, this is to less to form a component (Pallant, 2007).

Independency

Component 1

- Independency08 and Independency11 are deleted from this component since they are already present in component three, which construct fits better to this items.

Component 2

- This component is kept intact.

Component 3

- Independency06 is deleted from this component since it is already present in component two, which construct fits better to the item.

Component 4

- Independency10 is deleted from this component since it is already present in component one, which construct fits better to the item.
- Since only two items are left, this is to les to form a component (Pallant, 2007).

Appendix 5: Information Exchange

Information Exchange = IE

Correlations

	IE01	IE02	IE03	IE04	IE05	IE06	IE07	IE08	IE09	IE10	IE11	IE12	IE13	IE14	IE15	IE16
IE01 Pearson Correlation	1	,360**	,315**	,134	,143	,380**	,197	,411**	,258*	,407**	,268*	,261*	,065	,239*	,333**	,433**
Sig. (2-tailed)		,002	,006	,253	,222	,001	,090	,000	,025	,000	,020	,024	,577	,039	,003	,000
IE02 Pearson Correlation	,360**	1	,624**	,012	,109	,299**	,230*	,201	,379**	,265*	,083	,046	,204	,248*	,042	,203
Sig. (2-tailed)	,002		,000	,920	,352	,009	,047	,083	,001	,022	,479	,695	,079	,032	,720	,081
IE03 Pearson Correlation	,315**	,624**	1	,031	,085	,314**	,375**	,367**	,279*	,297**	,178	,048	,109	,457**	,132	,300**
Sig. (2-tailed)	,006	,000		,794	,470	,006	,001	,001	,015	,010	,126	,684	,353	,000	,260	,009
IE04 Pearson Correlation	,134	,012	,031	1	,618**	,401**	,390**	,217	,082	,187	,276*	,244*	-,041	,281*	,310**	,367**
Sig. (2-tailed)	,253	,920	,794		,000	,000	,001	,061	,485	,109	,017	,035	,730	,014	,007	,001
IE05 Pearson Correlation	,143	,109	,085	,618**	1	,500**	,341**	,277*	,197	,355**	,501**	,399**	,143	,476**	,364**	,566**
Sig. (2-tailed)	,222	,352	,470	,000		,000	,003	,016	,091	,002	,000	,000	,222	,000	,001	,000
IE06 Pearson Correlation	,380**	,299**	,314**	,401**	,500**	1	,405**	,549**	,276*	,482**	,409**	,167	,219	,501**	,248*	,502**
Sig. (2-tailed)	,001	,009	,006	,000	,000		,000	,000	,017	,000	,000	,152	,059	,000	,032	,000
IE07 Pearson Correlation	,197	,230*	,375**	,390**	,341**	,405**	1	,230*	,106	,282*	,250*	,066	,109	,287*	,165	,279*
Sig. (2-tailed)	,090	,047	,001	,001	,003	,000		,047	,365	,014	,030	,572	,353	,013	,156	,015
IE08 Pearson Correlation	,411**	,201	,367**	,217	,277*	,549**	,230*	1	,449**	,389**	,320**	,181	,149	,309**	,223	,343**
Sig. (2-tailed)	,000	,083	,001	,061	,016	,000	,047		,000	,001	,005	,119	,203	,007	,055	,003
IE09 Pearson Correlation	,258*	,379**	,279*	,082	,197	,276*	,106	,449**	1	,155	,270*	,130	,100	,135	,133	,296**
Sig. (2-tailed)	,025	,001	,015	,485	,091	,017	,365	,000		,185	,019	,266	,395	,250	,255	,010
IE10 Pearson Correlation	,407**	,265*	,297**	,187	,355**	,482**	,282*	,389**	,155	1	,323**	,294*	,202	,393**	,080	,337**
Sig. (2-tailed)	,000	,022	,010	,109	,002	,000	,014	,001	,185		,005	,011	,082	,000	,494	,003
IE11 Pearson Correlation	,268*	,083	,178	,276*	,501**	,409**	,250*	,320**	,270*	,323**	1	,379**	,102	,356**	,258*	,496**
Sig. (2-tailed)	,020	,479	,126	,017	,000	,000	,030	,005	,019	,005		,001	,383	,002	,025	,000
IE12 Pearson Correlation	,261*	,046	,048	,244*	,399**	,167	,066	,181	,130	,294*	,379**	1	-,053	,224	,337**	,289*
Sig. (2-tailed)	,024	,695	,684	,035	,000	,152	,572	,119	,266	,011	,001		,652	,053	,003	,012
IE13 Pearson Correlation	,065	,204	,109	-,041	,143	,219	,109	,149	,100	,202	,102	-,053	1	,261*	-,063	,287*
Sig. (2-tailed)	,577	,079	,353	,730	,222	,059	,353	,203	,395	,082	,383	,652		,024	,589	,013
IE14 Pearson Correlation	,239*	,248*	,457**	,281*	,476**	,501**	,287*	,309**	,135	,393**	,356**	,224	,261*	1	,153	,595**
Sig. (2-tailed)	,039	,032	,000	,014	,000	,000	,013	,007	,250	,000	,002	,053	,024		,189	,000
IE15 Pearson Correlation	,333**	,042	,132	,310**	,364**	,248*	,165	,223	,133	,080	,258*	,337**	-,063	,153	1	,340**
Sig. (2-tailed)	,003	,720	,260	,007	,001	,032	,156	,055	,255	,494	,025	,003	,589	,189		,003
IE16 Pearson Correlation	,433**	,203	,300**	,367**	,566**	,502**	,279*	,343**	,296**	,337**	,496**	,289*	,287*	,595**	,340**	1
Sig. (2-tailed)	,000	,081	,009	,001	,000	,000	,015	,003	,010	,003	,000	,012	,013	,000	,003	

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

* . Correlation is significant at the 0.05 level (2-tailed).

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,779
Bartlett's Test of Sphericity	Approx. Chi-Square
	420,844
	df
	120
	Sig.
	,000

Communalities

	Initial	Extraction
Information01	1,000	,559
Information02	1,000	,657
Information03	1,000	,726
Information04	1,000	,704
Information05	1,000	,750
Information06	1,000	,611
Information07	1,000	,671
Information08	1,000	,489
Information09	1,000	,445
Information10	1,000	,429
Information11	1,000	,518
Information12	1,000	,536
Information13	1,000	,665
Information14	1,000	,594
Information15	1,000	,533
Information16	1,000	,640

Extraction Method: Principal Component Analysis.

Component Transformation Matrix

Component	1	2	3	4
1	,511	,529	,484	,474
2	,760	-,540	-,338	,129
3	,340	,589	-,409	-,608
4	-,213	,284	-,696	,624

Extraction Method: Principal Component Analysis.

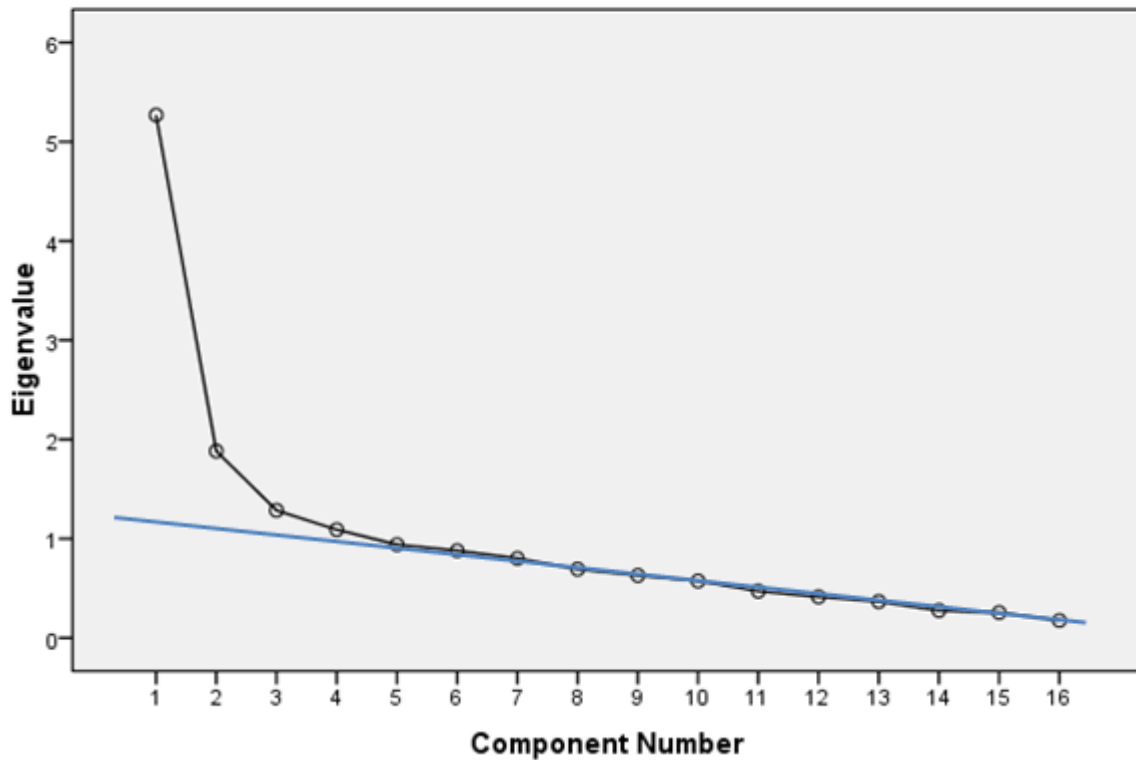
Rotation Method: Varimax with Kaiser Normalization.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5,269	32,931	32,931	5,269	32,931	32,931	2,763
2	1,882	11,765	44,696	1,882	11,765	44,696	3,227
3	1,286	8,034	52,731	1,286	8,034	52,731	3,075
4	1,090	6,814	59,545	1,090	6,814	59,545	3,004
5	,940	5,876	65,420				
6	,879	5,494	70,914				
7	,801	5,005	75,919				
8	,693	4,332	80,251				
9	,630	3,934	84,185				
10	,573	3,584	87,769				
11	,471	2,941	90,711				
12	,414	2,590	93,300				
13	,366	2,287	95,587				
14	,276	1,727	97,314				
15	,255	1,595	98,909				
16	,175	1,091	100,000				

Extraction Method: Principal Component Analysis.

Scree Plot



a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	Component			
	1	2	3	4
Information13	,841			
Information14	,544			-,345
Information16	,466		,387	
Information10	,411			
Information02		,803		
Information03		,798		
Information01		,575	,421	
Information09		,552	,306	
Information08		,475	,331	
Information12			,745	
Information15	-,311		,599	
Information11	,314		,540	
Information07				-,773
Information04				-,770
Information05	,312		,422	-,546
Information06	,357			-,388

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 25 iterations.

Component Correlation Matrix

Component	1	2	3	4
1	1,000	,265	,174	-,220
2	,265	1,000	,188	-,185
3	,174	,188	1,000	-,263
4	-,220	-,185	-,263	1,000

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix 6: Resources

Resources = RS

Correlations

	RS01	RS02	RS03	RS04	RS05	RS06	RS07	RS08	RS09	RS10	RS11	RS12	RS13	RS14
RS01 Pearson Correlation	1	,654**	,139	,117	,174	,317**	,254*	,203	,047	-,014	,138	,272*	,136	,363**
Sig. (2-tailed)		,000	,234	,317	,135	,006	,028	,081	,687	,902	,239	,018	,246	,001
RS02 Pearson Correlation	,654**	1	,315**	,275*	,077	,427**	,353**	,352**	,343**	,213	,237*	,345**	,394**	,476**
Sig. (2-tailed)	,000		,006	,017	,513	,000	,002	,002	,003	,067	,041	,002	,000	,000
RS03 Pearson Correlation	,139	,315**	1	,307**	,023	,048	,146	,186	,125	,300**	,168	,047	,140	,168
Sig. (2-tailed)	,234	,006		,007	,846	,682	,210	,110	,286	,009	,150	,692	,231	,149
RS04 Pearson Correlation	,117	,275*	,307**	1	,055	,347**	,452**	,432**	,296*	,325**	,217	,154	,281*	,330**
Sig. (2-tailed)	,317	,017	,007		,637	,002	,000	,000	,010	,004	,061	,188	,015	,004
RS05 Pearson Correlation	,174	,077	,023	,055	1	,081	,012	,005	-,160	-,036	-,033	-,045	-,003	,178
Sig. (2-tailed)	,135	,513	,846	,637		,491	,918	,964	,169	,757	,782	,702	,978	,127
RS06 Pearson Correlation	,317**	,427**	,048	,347**	,081	1	,739**	,720**	,626**	,305**	,409**	,492**	,569**	,487**
Sig. (2-tailed)	,006	,000	,682	,002	,491		,000	,000	,000	,008	,000	,000	,000	,000
RS07 Pearson Correlation	,254*	,353**	,146	,452**	,012	,739**	1	,866**	,561**	,323**	,363**	,356**	,402**	,280*
Sig. (2-tailed)	,028	,002	,210	,000	,918	,000		,000	,000	,005	,001	,002	,000	,015
RS08 Pearson Correlation	,203	,352**	,186	,432**	,005	,720**	,866**	1	,683**	,270*	,340**	,432**	,381**	,372**
Sig. (2-tailed)	,081	,002	,110	,000	,964	,000	,000		,000	,019	,003	,000	,001	,001
RS09 Pearson Correlation	,047	,343**	,125	,296*	-,160	,626**	,561**	,683**	1	,275*	,282*	,523**	,528**	,413**
Sig. (2-tailed)	,687	,003	,286	,010	,169	,000	,000	,000		,017	,014	,000	,000	,000
RS10 Pearson Correlation	-,014	,213	,300**	,325**	-,036	,305**	,323**	,270*	,275*	1	,604**	,352**	,326**	,312**
Sig. (2-tailed)	,902	,067	,009	,004	,757	,008	,005	,019	,017		,000	,002	,004	,006
RS11 Pearson Correlation	,138	,237*	,168	,217	-,033	,409**	,363**	,340**	,282*	,604**	1	,493**	,391**	,431**
Sig. (2-tailed)	,239	,041	,150	,061	,782	,000	,001	,003	,014	,000		,000	,001	,000
RS12 Pearson Correlation	,272*	,345**	,047	,154	-,045	,492**	,356**	,432**	,523**	,352**	,493**	1	,563**	,583**
Sig. (2-tailed)	,018	,002	,692	,188	,702	,000	,002	,000	,000	,002	,000		,000	,000
RS13 Pearson Correlation	,136	,394**	,140	,281*	-,003	,569**	,402**	,381**	,528**	,326**	,391**	,563**	1	,479**
Sig. (2-tailed)	,246	,000	,231	,015	,978	,000	,000	,001	,000	,004	,001	,000		,000
RS14 Pearson Correlation	,363**	,476**	,168	,330**	,178	,487**	,280*	,372**	,413**	,312**	,431**	,583**	,479**	1
Sig. (2-tailed)	,001	,000	,149	,004	,127	,000	,015	,001	,000	,006	,000	,000	,000	

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

* . Correlation is significant at the 0.05 level (2-tailed).

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,797
Bartlett's Test of Sphericity	Approx. Chi-Square
	514,976
	df
	91
	Sig.
	,000

Communalities

	Initial	Extraction
Resources01	1,000	,758
Resources02	1,000	,699
Resources03	1,000	,671
Resources04	1,000	,587
Resources05	1,000	,281
Resources06	1,000	,786
Resources07	1,000	,835
Resources08	1,000	,866
Resources09	1,000	,703
Resources10	1,000	,738
Resources11	1,000	,669
Resources12	1,000	,748
Resources13	1,000	,570
Resources14	1,000	,658

Extraction Method: Principal Component Analysis.

Component Transformation Matrix

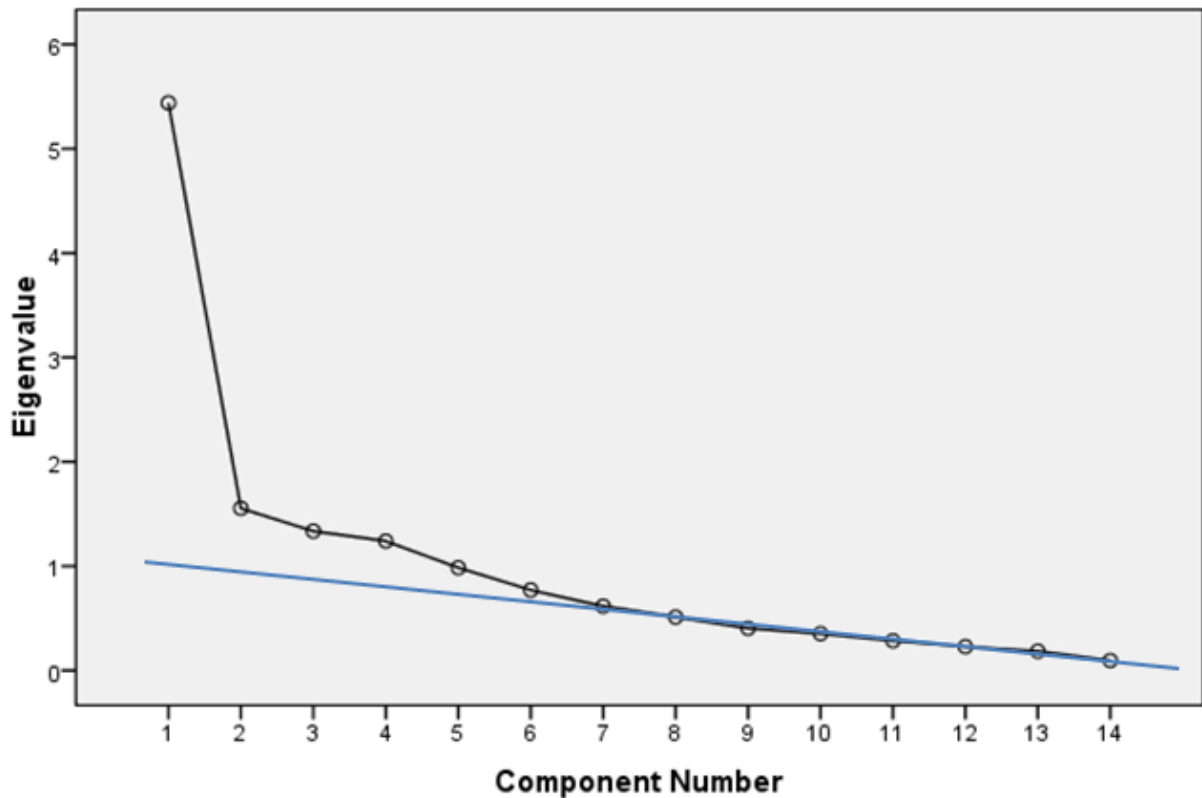
Component	1	2	3	4
1	,700	,610	,269	,256
2	-,297	-,097	,949	,045
3	-,605	,525	-,164	,576
4	,236	-,586	-,023	,775

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5,439	38,853	38,853	5,439	38,853	38,853	4,462
2	1,554	11,098	49,951	1,554	11,098	49,951	2,117
3	1,335	9,537	59,488	1,335	9,537	59,488	3,808
4	1,240	8,854	68,342	1,240	8,854	68,342	1,487
5	,985	7,033	75,376				
6	,771	5,506	80,881				
7	,616	4,401	85,283				
8	,511	3,653	88,936				
9	,404	2,887	91,822				
10	,353	2,518	94,341				
11	,285	2,033	96,374				
12	,228	1,626	98,000				
13	,185	1,320	99,320				
14	,095	,680	100,000				

Scree Plot



Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	Component			
	1	2	3	4
Resources08	,949			
Resources07	,931			
Resources06	,754			
Resources09	,736			
Resources01		,852		
Resources02		,681		
Resources05		,523		
Resources11			,803	
Resources12			,742	
Resources10			,688	,470
Resources14		,413	,615	
Resources13			,566	
Resources03				,778
Resources04	,481			,560

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 15 iterations.

Component Correlation Matrix

Component	1	2	3	4
1	1,000	,183	,451	,100
2	,183	1,000	,121	,058
3	,451	,121	1,000	,103
4	,100	,058	,103	1,000

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Appendix 7: Commitment

Commitment = CM

Correlations

	CM01	CM02	CM03	CM04	CM05	CM06	CM07	CM08	CM09	CM10	CM11	CM12	CM13	CM14	CM15
CM01 Pearson Correlation	1	,806**	,255*	,010	,279*	,109	,392**	,417**	,229*	,208	,583**	,643**	,437**	,430**	,404**
Sig. (2-tailed)		,000	,027	,934	,015	,350	,001	,000	,048	,074	,000	,000	,000	,000	,000
CM02 Pearson Correlation	,806**	1	,385**	-,113	,331**	,097	,455**	,460**	,175	,272*	,577**	,635**	,542**	,498**	,410**
Sig. (2-tailed)	,000		,001	,333	,004	,410	,000	,000	,134	,018	,000	,000	,000	,000	,000
CM03 Pearson Correlation	,255*	,385**	1	-,103	,284*	,307**	,101	,167	,045	,272*	,453**	,277*	,365**	,345**	,001
Sig. (2-tailed)	,027	,001		,378	,014	,007	,386	,151	,702	,018	,000	,016	,001	,002	,993
CM04 Pearson Correlation	,010	-,113	-,103	1	,094	,140	-,061	,162	-,112	-,176	,010	-,094	-,112	,175	,008
Sig. (2-tailed)	,934	,333	,378		,421	,232	,605	,164	,339	,132	,930	,424	,340	,133	,948
CM05 Pearson Correlation	,279*	,331**	,284*	,094	1	,409**	,422**	,370**	,311**	,308**	,355**	,336**	,449**	,454**	,139
Sig. (2-tailed)	,015	,004	,014	,421		,000	,000	,001	,007	,007	,002	,003	,000	,000	,236
CM06 Pearson Correlation	,109	,097	,307**	,140	,409**	1	,283*	,340**	,108	,317**	,233*	,158	,232*	,116	-,028
Sig. (2-tailed)	,350	,410	,007	,232	,000		,014	,003	,355	,006	,045	,176	,045	,324	,808
CM07 Pearson Correlation	,392**	,455**	,101	-,061	,422**	,283*	1	,574**	,259*	-,006	,313**	,453**	,526**	,285*	,146
Sig. (2-tailed)	,001	,000	,386	,605	,000	,014		,000	,025	,961	,006	,000	,000	,013	,211
CM08 Pearson Correlation	,417**	,460**	,167	,162	,370**	,340**	,574**	1	,116	,105	,271*	,455**	,329**	,288*	,219
Sig. (2-tailed)	,000	,000	,151	,164	,001	,003	,000		,321	,370	,019	,000	,004	,012	,059
CM09 Pearson Correlation	,229*	,175	,045	-,112	,311**	,108	,259*	,116	1	,513**	,053	,062	,115	,066	,145
Sig. (2-tailed)	,048	,134	,702	,339	,007	,355	,025	,321		,000	,653	,599	,328	,575	,215
CM10 Pearson Correlation	,208	,272*	,272*	-,176	,308**	,317**	-,006	,105	,513**	1	,154	,129	,150	,126	,094
Sig. (2-tailed)	,074	,018	,018	,132	,007	,006	,961	,370	,000		,187	,269	,198	,281	,421
CM11 Pearson Correlation	,583**	,577**	,453**	,010	,355**	,233*	,313**	,271*	,053	,154	1	,643**	,405**	,543**	,346**
Sig. (2-tailed)	,000	,000	,000	,930	,002	,045	,006	,019	,653	,187		,000	,000	,000	,002
CM12 Pearson Correlation	,643**	,635**	,277*	-,094	,336**	,158	,453**	,455**	,062	,129	,643**	1	,632**	,622**	,367**
Sig. (2-tailed)	,000	,000	,016	,424	,003	,176	,000	,000	,599	,269	,000		,000	,000	,001
CM13 Pearson Correlation	,437**	,542**	,365**	-,112	,449**	,232*	,526**	,329**	,115	,150	,405**	,632**	1	,484**	,153
Sig. (2-tailed)	,000	,000	,001	,340	,000	,045	,000	,004	,328	,198	,000	,000		,000	,190
CM14 Pearson Correlation	,430**	,498**	,345**	,175	,454**	,116	,285*	,288*	,066	,126	,543**	,622**	,484**	1	,263*
Sig. (2-tailed)	,000	,000	,002	,133	,000	,324	,013	,012	,575	,281	,000	,000	,000		,023
CM15 Pearson Correlation	,404**	,410**	,001	,008	,139	-,028	,146	,219	,145	,094	,346**	,367**	,153	,263*	1
Sig. (2-tailed)	,000	,000	,993	,948	,236	,808	,211	,059	,215	,421	,002	,001	,190	,023	

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

* . Correlation is significant at the 0.05 level (2-tailed).

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,754
Bartlett's Test of Sphericity	Approx. Chi-Square
	492,728
	df
	105
	Sig.
	,000

Communalities

	Initial	Extraction
Commitment01	1,000	,726
Commitment02	1,000	,778
Commitment03	1,000	,727
Commitment04	1,000	,854
Commitment05	1,000	,609
Commitment06	1,000	,659
Commitment07	1,000	,836
Commitment08	1,000	,658
Commitment09	1,000	,764
Commitment10	1,000	,801
Commitment11	1,000	,698
Commitment12	1,000	,764
Commitment13	1,000	,673
Commitment14	1,000	,631
Commitment15	1,000	,635

Extraction Method: Principal Component Analysis.

Component Transformation Matrix

Component	1	2	3	4	5
1	,758	,510	,345	,215	-,005
2	-,485	,139	,373	,778	-,027
3	-,328	,481	,265	-,394	,660
4	-,029	,473	-,817	,294	,146
5	,287	-,516	-,060	,325	,737

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

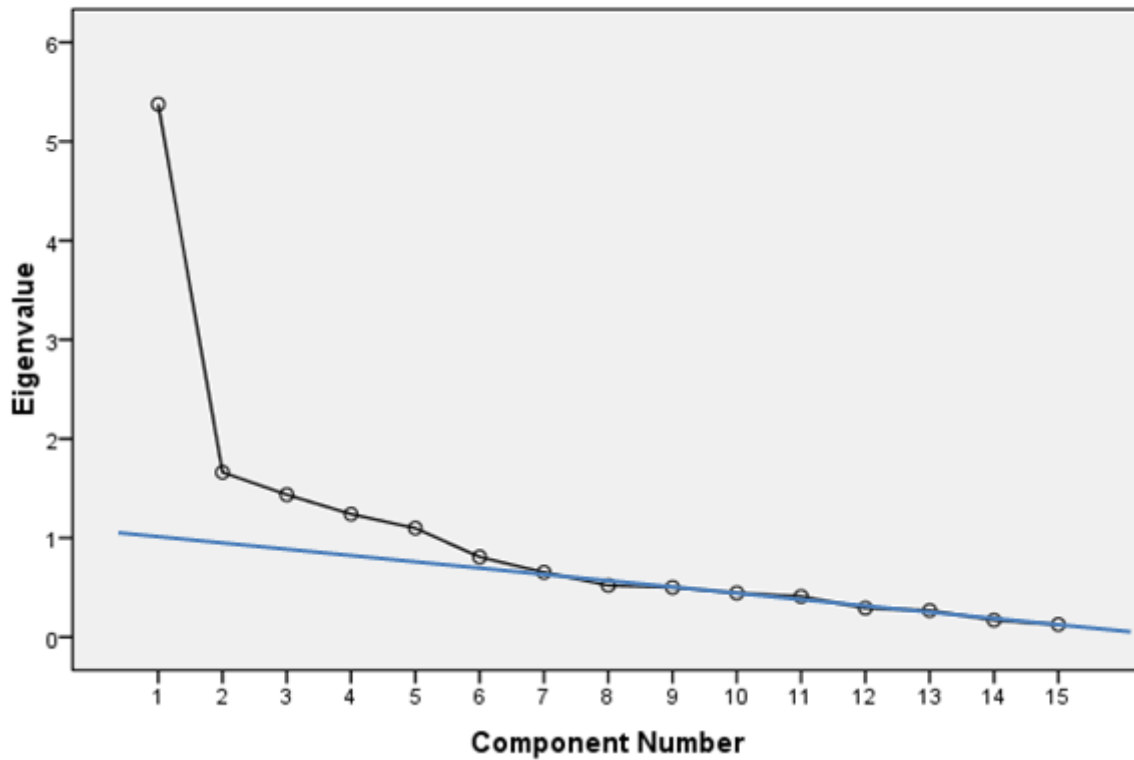
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5,376	35,838	35,838	5,376	35,838	35,838	3,532
2	1,662	11,077	46,915	1,662	11,077	46,915	1,986
3	1,436	9,575	56,489	1,436	9,575	56,489	3,659
4	1,240	8,266	64,755	1,240	8,266	64,755	2,874
5	1,098	7,323	72,078	1,098	7,323	72,078	1,300
6	,807	5,381	77,460				
7	,652	4,348	81,808				
8	,520	3,470	85,277				
9	,500	3,334	88,612				
10	,444	2,961	91,572				
11	,409	2,728	94,301				
12	,292	1,947	96,248				
13	,267	1,782	98,030				
14	,169	1,129	99,159				
15	,126	,841	100,000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Scree Plot



Pattern Matrix^a

	Component				
	1	2	3	4	5
Commitment15	,803				
Commitment01	,711				
Commitment02	,642				
Commitment12	,551		,373		
Commitment11	,545			-,519	
Commitment14	,477			-,451	
Commitment10		,844			
Commitment09		,834			
Commitment07			,951		
Commitment08			,737		
Commitment13			,558	-,373	
Commitment05		,335	,428		
Commitment03				-,861	
Commitment06	-,363		,362	-,387	,336
Commitment04					,916

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 42 iterations.

Component Correlation Matrix

Component	1	2	3	4	5
1	1,000	,069	,305	-,198	-,017
2	,069	1,000	,182	-,138	,028
3	,305	,182	1,000	-,311	,098
4	-,198	-,138	-,311	1,000	-,043
5	-,017	,028	,098	-,043	1,000

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Appendix 8: Learning

Learning = LN

Correlations

	LN01	LN02	LN03	LN04	LN05	LN06	LN07	LN08	LN09	LN10	LN11	LN12	LN13	LN14	LN15
LN01 Pearson Correlation	1	,765**	,378**	,615**	,424**	,181	,325**	,254*	,282*	,233*	,191	,402**	,253*	,400**	,376**
Sig. (2-tailed)		,000	,001	,000	,000	,121	,004	,028	,014	,045	,101	,000	,029	,000	,001
LN02 Pearson Correlation	,765**	1	,398**	,482**	,441**	,238*	,420**	,338**	,334**	,245*	,079	,392**	,286*	,362**	,268*
Sig. (2-tailed)	,000		,000	,000	,000	,039	,000	,003	,003	,034	,502	,001	,013	,001	,020
LN03 Pearson Correlation	,378**	,398**	1	,524**	,324**	,190	,493**	,091	,118	-,012	,202	,235*	,105	,086	,171
Sig. (2-tailed)	,001	,000		,000	,005	,103	,000	,436	,315	,920	,082	,043	,368	,461	,143
LN04 Pearson Correlation	,615**	,482**	,524**	1	,597**	-,003	,403**	,286*	,389**	,273*	,230*	,434**	,120	,308**	,283*
Sig. (2-tailed)	,000	,000	,000		,000	,978	,000	,013	,001	,018	,047	,000	,304	,007	,014
LN05 Pearson Correlation	,424**	,441**	,324**	,597**	1	,157	,363**	,388**	,284*	,322**	,156	,276*	,230*	,394**	,383**
Sig. (2-tailed)	,000	,000	,005	,000		,178	,001	,001	,014	,005	,181	,017	,047	,000	,001
LN06 Pearson Correlation	,181	,238*	,190	-,003	,157	1	,142	,089	-,043	,120	,117	,053	,036	,042	,279*
Sig. (2-tailed)	,121	,039	,103	,978	,178		,224	,448	,713	,305	,317	,650	,760	,718	,015
LN07 Pearson Correlation	,325**	,420**	,493**	,403**	,363**	,142	1	,129	,013	,074	-,137	,281*	,011	,099	,147
Sig. (2-tailed)	,004	,000	,000	,000	,001	,224		,270	,909	,528	,240	,015	,925	,400	,209
LN08 Pearson Correlation	,254*	,338**	,091	,286*	,388**	,089	,129	1	,373**	,266*	,209	,304**	,279*	,242*	,453**
Sig. (2-tailed)	,028	,003	,436	,013	,001	,448	,270		,001	,021	,072	,008	,015	,037	,000
LN09 Pearson Correlation	,282*	,334**	,118	,389**	,284*	-,043	,013	,373**	1	,442**	,434**	,305**	,040	,100	,252*
Sig. (2-tailed)	,014	,003	,315	,001	,014	,713	,909	,001		,000	,000	,008	,732	,395	,029
LN10 Pearson Correlation	,233*	,245*	-,012	,273*	,322**	,120	,074	,266*	,442**	1	,227*	,284*	,163	,393**	,279*
Sig. (2-tailed)	,045	,034	,920	,018	,005	,305	,528	,021	,000		,050	,014	,161	,000	,015
LN11 Pearson Correlation	,191	,079	,202	,230*	,156	,117	-,137	,209	,434**	,227*	1	,264*	,016	,079	,209
Sig. (2-tailed)	,101	,502	,082	,047	,181	,317	,240	,072	,000	,050		,022	,892	,498	,071
LN12 Pearson Correlation	,402**	,392**	,235*	,434**	,276*	,053	,281*	,304**	,305**	,284*	,264*	1	,222	,232*	,067
Sig. (2-tailed)	,000	,001	,043	,000	,017	,650	,015	,008	,008	,014	,022		,056	,045	,569
LN13 Pearson Correlation	,253*	,286*	,105	,120	,230*	,036	,011	,279*	,040	,163	,016	,222	1	,604**	,143
Sig. (2-tailed)	,029	,013	,368	,304	,047	,760	,925	,015	,732	,161	,892	,056		,000	,221
LN14 Pearson Correlation	,400**	,362**	,086	,308**	,394**	,042	,099	,242*	,100	,393**	,079	,232*	,604**	1	,273*
Sig. (2-tailed)	,000	,001	,461	,007	,000	,718	,400	,037	,395	,000	,498	,045	,000		,018
LN15 Pearson Correlation	,376**	,268*	,171	,283*	,383**	,279*	,147	,453**	,252*	,279*	,209	,067	,143	,273*	1
Sig. (2-tailed)	,001	,020	,143	,014	,001	,015	,209	,000	,029	,015	,071	,569	,221	,018	

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

* . Correlation is significant at the 0.05 level (2-tailed).

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,732
Bartlett's Test of Sphericity	Approx. Chi-Square
	408,600
	df
	105
	Sig.
	,000

Communalities

	Initial	Extraction
Learn01	1,000	,637
Learn02	1,000	,645
Learn03	1,000	,611
Learn04	1,000	,723
Learn05	1,000	,520
Learn06	1,000	,665
Learn07	1,000	,633
Learn08	1,000	,452
Learn09	1,000	,713
Learn10	1,000	,473
Learn11	1,000	,558
Learn12	1,000	,488
Learn13	1,000	,701
Learn14	1,000	,760
Learn15	1,000	,651

Extraction Method: Principal Component Analysis.

Component Transformation Matrix

Component	1	2	3	4
1	,711	,488	,439	,252
2	-,668	,657	,348	,008
3	,130	,564	-,815	-,036
4	-,175	-,112	-,148	,967

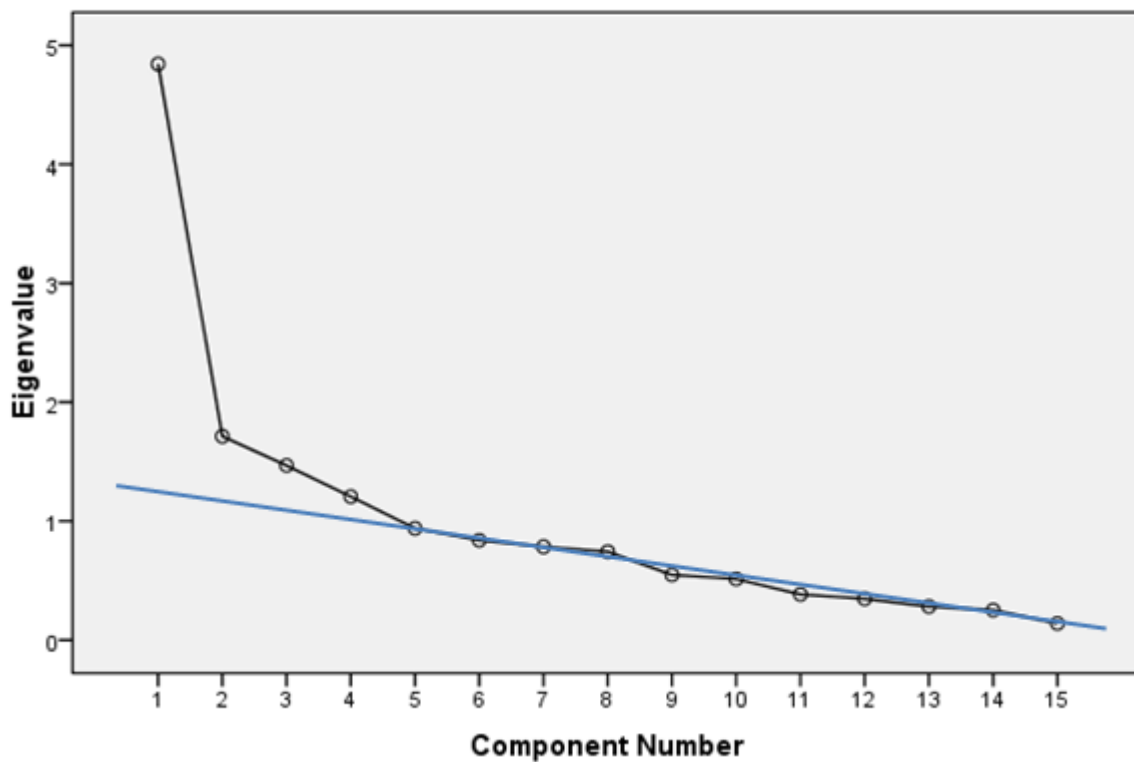
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4,843	32,289	32,289	4,843	32,289	32,289	3,795
2	1,713	11,421	43,709	1,713	11,421	43,709	2,861
3	1,468	9,784	53,494	1,468	9,784	53,494	2,715
4	1,206	8,043	61,537	1,206	8,043	61,537	1,687
5	,939	6,260	67,797				
6	,838	5,590	73,387				
7	,784	5,230	78,617				
8	,743	4,955	83,572				
9	,548	3,652	87,224				
10	,513	3,420	90,644				
11	,384	2,557	93,201				
12	,347	2,313	95,514				
13	,282	1,880	97,394				
14	,251	1,677	99,071				
15	,139	,929	100,000				

Extraction Method: Principal Component Analysis.

Scree Plot



a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	Component			
	1	2	3	4
Learn07	,813			
Learn03	,797			
Learn04	,730			
Learn02	,647			
Learn01	,631			
Learn05	,462			
Learn12	,452	,347		
Learn09		,843		
Learn11		,767		
Learn10		,532	-,316	
Learn08		,424		
Learn13			-,872	
Learn14			-,861	
Learn06				,809
Learn15				,668

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 11 iterations.

Component Correlation Matrix

Component	1	2	3	4
1	1,000	,236	-,236	,172
2	,236	1,000	-,262	,116
3	-,236	-,262	1,000	-,136
4	,172	,116	-,136	1,000

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Appendix 9: Independency

Independency = ID

Correlations

	ID01	ID02	ID03	ID04	ID05	ID06	ID07	ID08	ID09	ID10	ID11	ID12	ID13
ID01 Pearson Correlation	1	,537**	-,066	-,126	,217	,380**	,102	,374**	,105	,071	,328**	,112	,103
Sig. (2-tailed)		,000	,573	,281	,062	,001	,383	,001	,371	,547	,004	,340	,378
ID02 Pearson Correlation	,537**	1	-,063	-,109	,317**	,310**	,011	,489**	,125	,092	,432**	,337**	,003
Sig. (2-tailed)	,000		,591	,351	,006	,007	,929	,000	,284	,430	,000	,003	,979
ID03 Pearson Correlation	-,066	-,063	1	,354**	,056	-,020	,037	-,067	-,012	-,180	-,081	-,038	,184
Sig. (2-tailed)	,573	,591		,002	,636	,862	,753	,565	,916	,123	,492	,743	,113
ID04 Pearson Correlation	-,126	-,109	,354**	1	,157	,249*	,250*	,089	,074	-,044	,114	,022	,100
Sig. (2-tailed)	,281	,351	,002		,178	,031	,030	,448	,525	,705	,332	,853	,393
ID05 Pearson Correlation	,217	,317**	,056	,157	1	,329**	,119	,330**	,518**	,242*	,509**	,468**	,254*
Sig. (2-tailed)	,062	,006	,636	,178		,004	,311	,004	,000	,036	,000	,000	,028
ID06 Pearson Correlation	,380**	,310**	-,020	,249*	,329**	1	,478**	,386**	,154	,053	,496**	,200	,275*
Sig. (2-tailed)	,001	,007	,862	,031	,004		,000	,001	,186	,652	,000	,085	,017
ID07 Pearson Correlation	,102	,011	,037	,250*	,119	,478**	1	-,030	,040	-,013	-,032	-,166	,402**
Sig. (2-tailed)	,383	,929	,753	,030	,311	,000		,795	,731	,912	,784	,154	,000
ID08 Pearson Correlation	,374**	,489**	-,067	,089	,330**	,386**	-,030	1	,393**	,012	,681**	,493**	,063
Sig. (2-tailed)	,001	,000	,565	,448	,004	,001	,795		,000	,922	,000	,000	,594
ID09 Pearson Correlation	,105	,125	-,012	,074	,518**	,154	,040	,393**	1	,287*	,533**	,552**	,163
Sig. (2-tailed)	,371	,284	,916	,525	,000	,186	,731	,000		,012	,000	,000	,161
ID10 Pearson Correlation	,071	,092	-,180	-,044	,242*	,053	-,013	,012	,287*	1	,343**	,248*	,043
Sig. (2-tailed)	,547	,430	,123	,705	,036	,652	,912	,922	,012		,003	,032	,712
ID11 Pearson Correlation	,328**	,432**	-,081	,114	,509**	,496**	-,032	,681**	,533**	,343**	1	,681**	,166
Sig. (2-tailed)	,004	,000	,492	,332	,000	,000	,784	,000	,000	,003		,000	,154
ID12 Pearson Correlation	,112	,337**	-,038	,022	,468**	,200	-,166	,493**	,552**	,248*	,681**	1	,209
Sig. (2-tailed)	,340	,003	,743	,853	,000	,085	,154	,000	,000	,032	,000		,072
ID13 Pearson Correlation	,103	,003	,184	,100	,254*	,275*	,402**	,063	,163	,043	,166	,209	1
Sig. (2-tailed)	,378	,979	,113	,393	,028	,017	,000	,594	,161	,712	,154	,072	

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

* . Correlation is significant at the 0.05 level (2-tailed).

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,711
Bartlett's Test of Sphericity	334,348
Approx. Chi-Square	
df	78
Sig.	,000

Communalities

	Initial	Extraction
Independency01	1,000	,654
Independency02	1,000	,675
Independency03	1,000	,633
Independency04	1,000	,599
Independency05	1,000	,557
Independency06	1,000	,701
Independency07	1,000	,799
Independency08	1,000	,703
Independency09	1,000	,649
Independency10	1,000	,572
Independency11	1,000	,801
Independency12	1,000	,723
Independency13	1,000	,492

Extraction Method: Principal Component Analysis.

Component Transformation Matrix

Component	1	2	3	4
1	,770	,585	,252	,007
2	-,182	-,110	,796	,567
3	,605	-,732	-,157	,272
4	-,086	,331	-,527	,778

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

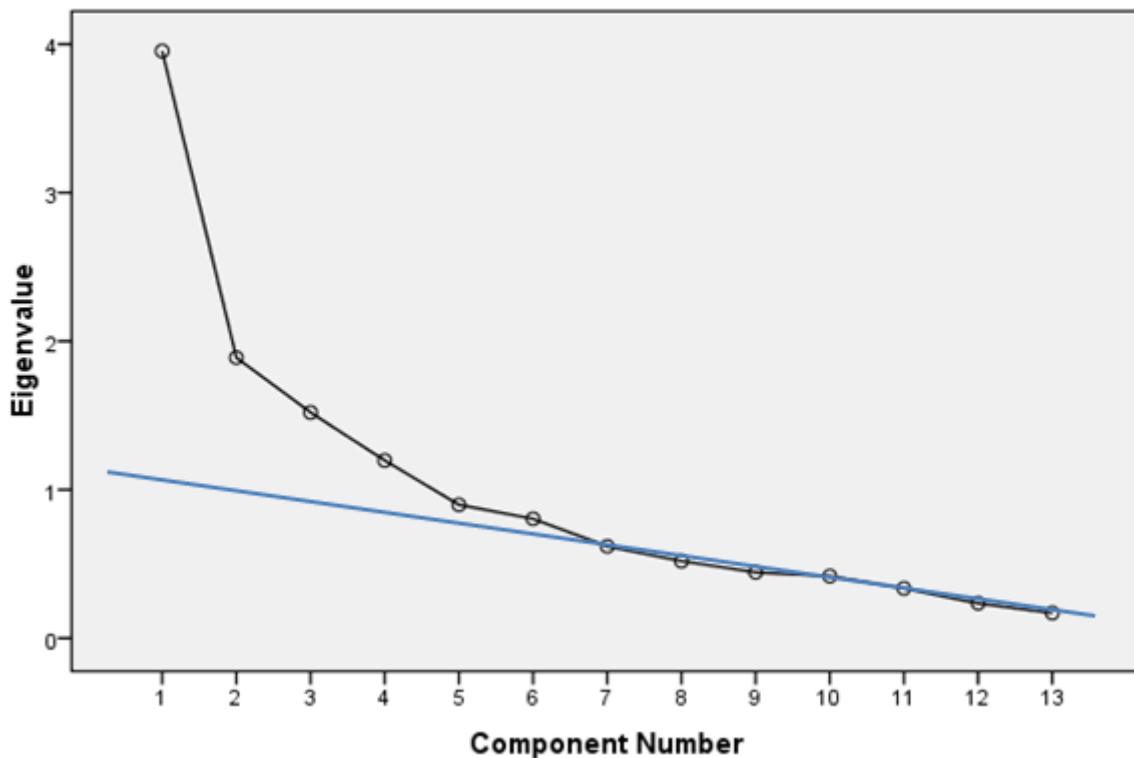
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3,954	30,416	30,416	3,954	30,416	30,416	3,301
2	1,889	14,533	44,949	1,889	14,533	44,949	1,940
3	1,520	11,692	56,641	1,520	11,692	56,641	2,572
4	1,197	9,204	65,846	1,197	9,204	65,846	1,479
5	,898	6,911	72,757				
6	,804	6,184	78,941				
7	,619	4,758	83,699				
8	,519	3,991	87,690				
9	,443	3,410	91,100				
10	,418	3,214	94,314				
11	,335	2,577	96,891				
12	,235	1,807	98,698				
13	,169	1,302	100,000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Scree Plot



Pattern Matrix^a

	Component			
	1	2	3	4
Independency12	,824			
Independency09	,819			
Independency11	,726		-,384	
Independency05	,652			
Independency10	,538			-,502
Independency07		,899		
Independency13		,638		
Independency06		,596	-,502	
Independency02			-,787	
Independency01			-,784	
Independency08	,427		-,624	
Independency03				,790
Independency04				,685

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 11 iterations.

Component Correlation Matrix

Component	1	2	3	4
1	1,000	,151	-,223	-,003
2	,151	1,000	-,065	,108
3	-,223	-,065	1,000	-,002
4	-,003	,108	-,002	1,000

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix 10 Correlation matrix

	Success	IE_Proce ss	IE_Comp rehensive	RS_Exam ination	RS_Appli cation	CM_Dedi cation	CM_Invo lvement	LN_Activ e	ID_Persp ective	ID_Objec tivity	Experienc e	Experienc eSame	Project	Gender	Age	Duration	Contact Hours
Success	1																
IE_Process	,738**	1															
IE_Comprehensive	,198	,468**	1														
RS_Examination	,193	,164	-,226	1													
RS_Application	,182	,173	-,131	,439**	1												
CM_Dedication	,575**	,755**	,446**	,130	,089	1											
CM_Involvement	,506**	,596**	,301**	,196	,003	,536**	1										
LN_Active	,273*	,188	-,122	,498**	,445**	,238*	,208	1									
ID_Perspective	,406**	,359**	,011	,482**	,230*	,374**	,375**	,658**	1								
ID_Objectivity	,727**	,804**	,330**	,233*	,269*	,646**	,502**	,326**	,489**	1							
Experience	,292*	,331**	,192	,218	,057	,156	,218	-,049	,120	,317**	1						
ExperienceSame	-,107	-,012	-,038	,128	-,004	-,036	-,131	-,028	-,009	,017	,405**	1					
Project	,050	-,012	,055	,006	,148	,033	,053	,054	,103	-,122	,093	-,072	1				
Gender	-,037	-,175	-,171	-,069	-,015	-,116	-,052	,017	,010	-,204	-,207	-,200	,016	1			
Age	,092	,170	-,070	,299**	,053	,032	,004	,093	,058	,183	,281*	,229*	-,173	-,323**	1		
Duration	,040	-,144	,113	,010	-,068	,034	-,023	-,033	-,101	-,147	,042	-,097	,160	-,056	-,041	1	
ContactHours	,028	-,074	,000	-,061	-,069	,042	,011	,295*	,304**	,008	-,204	-,131	,114	,133	-,237*	-,053	1

Appendix 11 Model summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,292 ^a	,085	,073	,85080	,085	6,811	1	73	,011
2	,794 ^b	,631	,573	,57715	,546	10,515	9	64	,000

a. Predictors: (Constant), Experience

b. Predictors: (Constant), Experience, LN_Active, IE_Comprehensive, CM_Involvement, RS_Application, RS_Examination, CM_Dedication, ID_Perspective, ID_Objectivity, IE_Process

ANOVA^c

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,930	1	4,930	6,811	,011 ^a
	Residual	52,842	73	,724		
	Total	57,772	74			
2	Regression	36,453	10	3,645	10,943	,000 ^b
	Residual	21,319	64	,333		
	Total	57,772	74			

a. Predictors: (Constant), Experience

b. Predictors: (Constant), Experience, LN_Active, IE_Comprehensive, CM_Involvement, RS_Application, RS_Examination, CM_Dedication, ID_Perspective, ID_Objectivity, IE_Process

c. Dependent Variable: Success

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3,505	,114		30,628	,000					
	Experience	,011	,004	,292	2,610	,011	,292	,292	,292	1,000	1,000
2	(Constant)	,366	,701		,523	,603					
	Experience	,002	,003	,066	,762	,449	,292	,095	,058	,773	1,294
	IE_Process	,646	,223	,474	2,901	,005	,738	,341	,220	,216	4,630
	IE_Comprehensive	-,307	,153	-,190	-2,003	,049	,198	-,243	-,152	,641	1,559
	RS_Examination	-,063	,088	-,073	-,719	,475	,193	-,090	-,055	,554	1,805
	RS_Application	-,018	,092	-,019	-,199	,843	,182	-,025	-,015	,649	1,541
	CM_Dedication	,040	,172	,029	,232	,818	,575	,029	,018	,379	2,639
	CM_Involvement	,102	,123	,083	,828	,411	,506	,103	,063	,578	1,729
	LN_Active	,072	,137	,061	,526	,601	,273	,066	,040	,435	2,301
	ID_Perspective	,041	,138	,035	,299	,766	,406	,037	,023	,425	2,355
	ID_Objectivity	,336	,151	,314	2,230	,029	,727	,268	,169	,291	3,431

a. Dependent Variable: Success

Appendix 12: Alternative analysis

This appendix is attached to reinforce the results of this research. In the first theoretical framework it was assumed that the theory of the facets of client-consultant collaboration was supportive enough to assume that the facets are a true representation of the concept of client-consultant collaboration and to use them for further analysis. Since the research only showed that the elements IE_Process, IE_comprehensive and ID_Objectivity had a sufficient effect on the successful completion of the consultancy project, another principal component analysis is executed to examine if these outcomes give a clear indication of the effects on the successful completion of the consultancy project. In this analysis therefore all aspects of all facets of client-consultant collaboration are entered in the principal component analysis. Since according to the theoretical framework there only are five facets/components, the maximum amount of components is set on five. The pattern matrix is presented below.

The outcome of this analysis shows that the aspects are somewhat spread among the components, but also that there is some consistency of the aspects that are loading in some of the components. The aspects of information exchange mostly are loading on component one and the aspects of the awareness of resources are mostly loading in component two. Some of the aspects of commitment also are loading on component one, but are underrepresented according to the aspects of information exchange. The aspects of learning and independency are both loading on component five. There however is chosen to use independence since according although Kubr (2002), learning is embedded in the context of consulting, but the effect of active learning might be minor. This since the client can learn from the consultancy project, but possibly only can use this gained experience in subsequent project. This also is in line with Block (2000) and Gable (1996) who state that through a better understanding the client could deal with similar future projects with reduced external assistance. Furthermore this research does not take into account the learning of the client in previous projects.

To look after the effects of the facets of client-consultant collaboration on the successful completion of the consultancy project, the aspects that are loading on each component and belong to one of the above named facets, will be computed to one variable. Therefore the variable information exchange, awareness of resources and independency are constructed. The reliability of the variables is presented below.

Variable	Reliability (Cronbach's alpha)
Information exchange	.848
Awareness of resources	.874
Independency	.761

Reliability of the constructed facets.

The variables information exchange, awareness of resources, and independency were then entered in the hierarchical multiple regression, controlling for the control variable experience, just as done in the analysis before. Looking at the output of the analysis, there is no multicollinearity since the VIF value in the coefficients table is lower than 10 and the tolerance in the same table is higher than .10 (Pallant 2007). The R^2 in model one is .085 and significant ($p = .011$). This means that experience explains 8.5% of the variance in the successful completion of the consultancy project. The R^2 in model two is .527 and significant ($p = .000$) which means that the model as a whole explains 52.71% of the variance in the successful completion of the consultancy project. The elements present in client-consultant collaboration therefore explain an additional 44.2% of the variance in the successful completion of the consultancy project, after controlling for the control variable in model 1 (R^2 Change = 0.442).

To determine which variable has the strongest effect on the successful completion of the consultancy project, the standardized coefficients are used. The second model, in which the elements present in client-consultant collaboration are added, shows that the control variable experience is not significant. This means that the amount of times the client participated in a consultancy project has no effect on the successful completion of the consultancy project. Looking at the effects of the facets, it shows that only the facet information exchange ($\beta = .437$, $p = .000$) and independency ($\beta = .373$, $p = .001$) have a positive effect on the successful completion of the consultancy process. The awareness of resources does not have a significant ($p = .976$) effect on the successful completion of the consultancy project. The results are presented below.

Model	Variable	Beta	Significance	Tolerance	VIF
1	Experience	,292	,011	1,000	1,000
2	Experience	,090	,314	,853	1,173
	INFORMATION_EXCHANGE	,437	,000	,705	1,418
	RESOURCES	-,003	,976	,680	1,470
	INDEPENDENCY	,373	,001	,574	1,741

Results of the hierarchical multiple regression. (Dependent variable: Success).

If learning was constructed instead of independency, learning would have had an insignificant effect on the successful completion of the consultancy project. This indicates that it indeed was better to include the facet independency instead of the facet learning.

These results indicate that according to the principal component analysis only three facets could be proved. With the hierarchical multiple regression it is demonstrated that only the facets information exchange and independency contribute to the successful completion of the consultancy project. In the previous analysis (chapter 7) it is showed that the elements IE_Process, IE_Comprehensive and ID_Objectivity have an effect on the successful completion of the consultancy project. These results are somewhat similar to each other. The elements in the analysis in chapter seven are all elements of the facets that have an effect in this analysis. IE_Process and IE_Comprehensive are elements of the facet information exchange, and ID_Objectivity is an element present in the facet independency. This therefore shows that with the assumption that the facets were supported enough in the client-consultant literature similar results could be presented. Yet, it can be assumed that the analysis in chapter seven is superior to the analysis described above, given the small sample size of this research.

Pattern Matrix^a

	Component				
	1	2	3	4	5
Information01	,473		,345		
Information02	,384		,440		
Information03	,508		,326		
Information04	,419		-,307		-,303
Information05	,589				-,353
Information06	,788				
Information07	,380				-,301
Information08	,680				
Information09	,494				,335
Information10	,556				
Information11	,668				
Information12	,383	,304			
Information13				-,426	
Information14	,668				
Information15		,488			
Information16	,691			-,316	
Resources01		,434	-,302		
Resources02		,619			
Resources03		,388			
Resources04		,672			
Resources05					
Resources06		,771			
Resources07		,833			
Resources08		,826			
Resources09		,611			
Resources10		,478			
Resources11		,516			
Resources12		,517	-,349		
Resources13		,500			-,307
Resources14		,565	-,326		
Commitment01	,780				
Commitment02	,813				
Commitment03					-,455
Commitment04					
Commitment05				-,417	-,499
Commitment06					-,486
Commitment07	,453				
Commitment08	,460				

Commitment09		,334			
Commitment10					-,607
Commitment11	,757				
Commitment12	,768				
Commitment13	,530				
Commitment14	,628				
Commitment15	,512				,380
Learn01				,478	-,424
Learn02		,321		,440	-,306
Learn03			-,370		-,505
Learn04					-,648
Learn05		,410		,341	-,324
Learn06	,582				
Learn07		,332	-,476		
Learn08		,418			
Learn09		,312			-,427
Learn10					
Learn11					-,539
Learn12					-,512
Learn13			,406	,576	
Learn14				,712	
Learn15					
Independency01	,578				
Independency02	,689				
Independency03			,394		
Independency04					
Independency05					-,547
Independency06	,380			-,463	
Independency07				-,516	
Independency08	,551		-,365		
Independency09		,344			-,571
Independency10					-,359
Independency11	,454				-,472
Independency12					-,543
Independency13			,366		-,428

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 22 iterations.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,292 ^a	,085	,073	,85080	,085	6,811	1	73	,011
2	,726 ^b	,527	,500	,62488	,442	21,776	3	70	,000

a. Predictors: (Constant), Experience

b. Predictors: (Constant), Experience, INDEPENDENCY, INFORMATION_EXCHANGE, RESOURCES

ANOVA^c

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,930	1	4,930	6,811	,011 ^a
	Residual	52,842	73	,724		
	Total	57,772	74			
2	Regression	30,439	4	7,610	19,489	,000 ^b
	Residual	27,333	70	,390		
	Total	57,772	74			

a. Predictors: (Constant), Experience

b. Predictors: (Constant), Experience, INDEPENDENCY, INFORMATION_EXCHANGE, RESOURCES

c. Dependent Variable: Success

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3,505	,114		30,628	,000					
	Experience	,011	,004	,292	2,610	,011	,292	,292	,292	1,000	1,000
2	(Constant)	-1,246	,661		-1,886	,064					
	Experience	,003	,003	,090	1,014	,314	,292	,120	,083	,853	1,173
	INFORMATION_EXCHANGE	,763	,171	,437	4,468	,000	,642	,471	,367	,705	1,418
	RESOURCES	-,004	,125	-,003	-,030	,976	,308	-,004	-,002	,680	1,470
	INDEPENDENCY	,497	,145	,373	3,435	,001	,592	,380	,282	,574	1,741

a. Dependent Variable: Success