

# The Relation Between Loyalty and Control: Establishing Goal Congruence

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## Abstract

Loyalty is a concept examined since the work of Porter and his colleagues in the 70's. In the early 90's, Becker (1992) started to disentangle the concept of loyalty into different foci and bases of commitment. This was the first time a pronounced relation was found between loyalty and performance in the form of commitment to the supervisor.

In this thesis, the focus shifts to loyalty in the form of a foci of organizational commitment and a base of congruence of employee and organizations norms and values, as an answer for the agency conflict, and the relation with in-role performance. The survey results provide, for the first time, evidence of a positive statistically significance of this relation.

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Establishing Goal Congruence

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## Preface

The motivation for this thesis is the failure of the management control system. Whether it is based on Merchants controls or has a less soft PDCA-based orientation, it doesn't work properly. Why? Just take a look around. Have you seen it the last two decades? Fraud, greed, unethical behavior. It defines the cultures of the most leading multinationals in the western economies. One extraordinary case after another and with the current Volkswagen diesel affair it seems that we have not seen the end of it.

Management control cannot prevent people from misconduct if they are unethical and do not care about the consequences of their actions. Classic management control and internal controls aiming at motivation have just a detective mechanism, trying to steer employees one way or the other, without controlling for whom these people really are and what they believe are about. Do you think you can prevent an unethical person from committing fraud by putting in a code of conduct in the annual statements or by motivating and rewarding?

Merely a preventive control can mould the behavior and intentions of a person and really control for employees actions and align their goals with the goals of the organization (owners). This is not a new thing with a fancy name. It is just loyalty. It is old school. The relationship between you and the organization you work for, in fact used to be way different. Many blue collar laborers worked in an organization, such as a factory, often nearby town. They received payment and in return, they worked hard. But that's not it. They worked there for years and years, often a lifetime. A relationship existed based on mutual trust, where the organization took care of its employees, and the employees provided the most important force they can deliver for the organization: loyalty. The laborers were proud to wear the firms' colors and took honor in their job.

My father is the perfect example. He is a mechanic and started working at age 16. He is 63 now. When he retires at age 66 in a couple of years, he has worked for the same firm for precisely 50 years. Of course, these days, this is outstanding, and could even be called something negative for different reasons. But he says; 'time just goes by'. But it is not as simple as that. Although he often struggles with new managers and new policies he still works very hard. He is never late, never sick, works overtime when he is required to do so and when he works in the yard in the weekend, he wears the firms labeled work wear. Above all else, he is proud of what he does and where he does it and has a solid relationship with his firm. He would never do anything to harm the organization like take longer breaks, stealing, let alone do anything really unheard of. He is loyal to the organization and the organization provided job security and a pension for his entire life. I can only ask the question if this path of loyalty is also set for my career.

This does not only apply to blue colored jobs. I know that the real frauds are not committed by mechanics. Just take a look at the eldest Dutch bank, ABN AMRO, fused from the former ABN bank and AMRO bank. People worked there truly for a lifetime. They felt part of the organization and were proud to be part of it. And when the two banks fused in 1990, the new ABN AMRO had major

difficulties to connect the two cultures, the people in the bank, because of the strong connection, the loyalty the employees felt towards their old banks. And now still, when I worked for ABN AMRO MeesPierson, the private banking fraction, a few years ago, there still was a ‘thing’ in the air. There is still an invisible presence of former ABN AMRO and MeesPierson employees and even former ABN and AMRO employees. Let me remind you that this was over 20 years after the ABN AMRO fusion. Of course, after all these years they feel they belong to the new organization, also because of their mutual success, but still, the eldest bankers still bore their gold cufflinks from ABN.

Maybe banking is not the best example to explain loyalty as a preventive fraud control mechanism, but these organizations used to be privately owned by risk averse and loyalty treasuring entrepreneurs. Used to be.

With this thesis I focus on one aspect of loyalty, a foci and a base to grasp a small piece of the concept and try to relate it to performance, as prior research has tried and failed to do. Instead they found a relation with supervisorial loyalty, which is an alternate form which I cannot support. With a survey, I collected data that I examined empirically leading to a result which showed a positive significant relation between my loyalty focus and performance. This result confirms that loyalty in the form of employee loyalty towards the organization matters as it relates to performance. It proves that these soft controls aren’t just philosophical theory, but that they exist, also bottom line.

With this thesis and my bachelor thesis, where I designed a soft control framework, I hope to have acquired a special skill as a future controller; some knowledge and feeling for the most basic of control targets; the person. But of course, the bottom line, the figures, the financial statements, that’s what it’s all about. Or is it? Turn the page and let’s find out!

I would like to thank my thesis supervisor Dr. Alex Klein for the regular interaction and instructions in creating and written this thesis. Only few students receive such solid support.

Also, I would like to thank Drs. Ted Welten for hosting the seminar Management Control and providing the inspiration for this thesis by discussing my research proposal.

Of course, I owe gratitude to my home front. Without their compassion and support I would not be able to do what I do. Without a good home no one has a decent life. My family and Evelien.

Tim Hoetelmans

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# 1. Introduction

The motivation for this thesis is (a) the practical need for the implementation of loyalty in the management control framework due to the current business climate of fraud and misconduct, and (b) the absence of a decisive result in loyalty research on the relationship with organizational performance and, in current research, the absence of results in the agency theory supporting organizational foci and organizational norms and values based focus of loyalty in relation with organizational in-role performance. This thesis revisits the basic questions on loyalty research and attempts to answer the research question: “Can organizational loyalty enhance performance and ensure goal alignment?”

Prior literature examined the relation between loyalty and performance and found a positive link between supervisorial commitment and performance. Also in successive research, this form of loyalty is the only relevant aspect found and commitment towards the organization as the original loyalty concept is still unrelated to performance. Researchers formed a theory on why supervisorial commitment is relevant and the organizational foci has shifted to the background of research.

This thesis again examines the original concept of loyalty in the foci towards the organization and a base of goal alignment and congruence between the employees and organizations norms and values in the attempt to establish a relation with performance.

Similar to prior research, this thesis used a survey to collect data on loyalty and performance opinions. The target group consist of financial professionals to create a solid an trustable response. The survey items are handpicked from existing research and match with the foci and base of the theory. A positive significant correlation between the commitment and performance variable shows that the relation is more than a theory. The factor analysis confirms the foci and base of the theory as the results show a clear distribution between the items which consist of these aspects. Singular regression between the survey items confirm the factor analysis as a distinction between the factor loaded items is clearly visible. Some highly positive relations between different commitment and performance items are present. The main regression shows a solid relation between the loyalty foci and loyalty base and in-role performance.

The results provide evidence that there is a positive relation between this loyalty focus and performance and that goal congruence is most important as it showed high significant in relation with in-role performance. This is a more clear result than prior research has found on the specific foci and base in relation with performance (Becker and Billings, 1993; Becker, Billings, Eveleth and Gilbert, 1996; Chen Tsui and Farh, 2002; Becker and Kernan, 2003) as it was often found to be insignificant or even negative. The evidence shows that the organizational foci is highly relevant as a component of the concept of loyalty and in relation towards performance.

In practice, organizations should use this evidence to incorporate the loyalty soft controls in their management control framework and aim at a loyal culture as it prevents misconduct and improves performance.

## 2. Theory and hypothesis development

### 2.1 Theoretical background

#### 2.1.1 Topic Introduction

The Agency Theory. One of the fundamental theories in management accounting. The separation between ownership and leadership is in many organizations a main cause of the cracking of the brains. Basic questions are how to establish goal congruence between the owners and managers and how to create a transparent information environment. These two main focuses create an incentive to control for the actions of the agents, the employees. In the ESE master seminar Management Control, as in management control research, the control aspects are more or less fixed on the motivation of people and the existence of an information environment and skill of employees. This framework seems to be incomplete.

Where a lot of research focuses particularly on the motivation of employees, which is an obvious necessity, other soft aspects are also most important. Loyalty is one of them, and could, next to the motivation of employees, be of utmost relevance in establishing goal congruence. Where motivating personnel is in practice often characterized as extrinsic, short term and aiming at physical targets, a real connection between the employee and the organization needs a more soft approach, which stands closer to the person; intrinsic, long term, aiming at personal life targets. Loyalty replies on this need as it approaches a deeper layer of a person's conscious and establishes a relationship between the employee and the organization which, when directed properly, will answer the call for goal alignment and result in organizational performance.

The second motivation for this thesis is the extensive decline in pure decency in organizations worldwide, manifesting in cases of scandals and outright fraud. Naming Enron, Ahold, Imtech, the recent Volkswagen scandal and closer to home; 'de vastgoedfraude' and recently, nearby the Erasmus university campus in Rotterdam, the 2014 Vestia scandal. Whether it is actual fraud or just a cultural thing, the cause lies with personal aspects as supported by literature as for example Zahawi and Hancock: 'Masters of Nothing: How the crash will happen again unless we understand human nature' (2012) about the importance of behaviour and behaviour as fundamental starting point of cause and effect.

Hard controls can never stop an individual from trying to commit fraud. Motivation in the management control framework is aimed at the assurance of the employee's effort. But when things go wrong, as in cases of fraud, other factors of the human aspect have already failed. When for example fraud is committed, the person concerned does not per se suffer from insufficient motivation. His motivation to commit effort is in fact probably plenty present as he pinches himself backwards to boost his figures in gathering more wealth, as is often the case. This is an issue connected to other soft



aspects like loyalty and ethics. When undesirable behavior is present, the people involved just do not care about the faith and wellbeing of the organization, which is possibly also the other way around, a lack of involvement, trust and loyalty.

The model of Kraimer (1997, p. 428) describes the sequence in which organizational social awareness takes places. Before attitudinal and behavioral outcome, knowledge of organizational goals and values and belief of work value congruence are settled. She concludes on the congruence, behavior relation: “When there is low work value congruence, the individual may engage in determinable behavior if the individual has a strong belief in his/her own values” (Kraimer, 1997, p. 425). Loyalty, in the form of goal and value congruence, as will be explained in the consecutive paragraphs, takes place before actions take place, and goal congruence ensures desirable behavior (i.e. performance).

The above mentioned sequence is similar for the component ‘trust’. As described by Blommaert and Van den Broek (2013), trust leads to motivation, which leads to behavior where decision space and involvement, as components of trust, have a strong correlation with motivation. In this formula, trust can be replaced by the concept loyalty as loyalty is (expected to be) a conditional factor for motivation and performance. Like with trust, loyalty consists of a relation between two entities. The term loyalty has its origins in Greek philosophy and religious gospels and means ‘where one is faithful, devoted, dedicated to a cause, a group, organization or person’. In this thesis a business economic perspective is used where the term ‘loyalty’ is formulated as the relation between the employee and the organization. Trust is part of this loyalty relation as a conditional factor. Loyalty can only exist if a trust relation exists. The organization, functioning as top entity, should give up control and trust the employee, the bottom entity, who answers this given trust with reliability, accountability and commitment. This is where the concepts of loyalty and trust touch each other. Trust is a condition in the loyalty relation. The exact focus of this thesis will be explained in the next subparagraph and is presented in figure 1 on page eight.

Both terms ‘loyalty’ and ‘trust’ have become significantly more important in the last decade. Business and markets have become more volatile, less stable and predictable. Hard controls are no longer leader in controlling the organization. There is a greater need for flexibility and change management which requires the involvement of the organization participants, the employees. There is a demand for the clarification of the mission, vision and strategy of the firm and on which values these goals are based. The objectives can only be controlled for using soft measurements, soft controls. Both trust and loyalty are considered a core soft control, a focus variables (De Heus and Stremmelaar, 2000).

In the paper of William Werther, titled “loyalty at work” (1988), a description of loyalty is discussed based on interviews with more than fifty top executives. He argues that loyalty arises because of different layers of conditions. After the first loyalty layer of the leaders’ awareness and the

second layer stating loyalty requires a shared organizational vision, Werther states that the third layer is involvement: “(...) the more people who feel that they personally helped shape the vision, the more people who will be loyal to the vision. The leader’s vision becomes their vision. Simply put, involvement creates ownership in the vision (...)”, a shared vision (Werther, 1988, p.32). Loyalty in organizations, Werther describes, is two-layered: the leader must let loose control and delegate from the top, based on trust, while the subordinate should take up responsibility, answering trust with accountability and show commitment bottom up, based on awareness and believe. See figure 1 for the loyalty framework figure created for the understanding of the concept of loyalty for this thesis. Employees’ commitment to the firms’ visions is the most pure form of goal alignment which results from a loyal situation in an organization where employees are given a purpose as they contribute to something greater than their own achievements, awakening feelings of pride. A most powerful intrinsic motivation. When loyalty is an aspect of the control system, this main focus point of goal alignment, resulting from the agency theory, will be addressed.

### 2.1.2 Loyalty foci

The effect of loyalty in an organization exists of multiple dimensions and bases as will be explained further, relating on theory, in the next paragraph, 2.2 Hypothesis development. The most basic differentiation can be made between loyalty among the firm and the employee and loyalty among the supervisor and the employee. Since supervisors are often seen by the employees as the direct embodiment of the firm, loyalty can take a twisted and undesirable form of a bond to the supervisor. As Werther (1988) explains, personal loyalty is a common occurrence, especially with powerful executives. It is a natural and strong tool to bind your employees to the boss as they will do anything to satisfy and obey. This is particularly the case in military environments, criminal organizations and in some corporate environments like Enron and its former masculine and indivertible leader Jeffrey Skilling.

Personal loyalty is undesirable as it is not a direct contribution to the organization and corporate loyalty. Although research shows that supervisory commitment, as the employee part of the loyalty relationship, has a relation with performance (Becker et al. 1996, Chen et al. 2002, Becker and Kernan, 2003), personal loyalty disappears when the leader does. “This type of loyalty rests upon the relationship between the leader and subordinate. Although better than no loyalty at all, it binds people to one another, not to the organization. (...) personal loyalty misses the mark, consumes resources, and provides few royalties to the organization once the leader is gone. Organizational loyalty pays back the firm with extra effort and dedication that is not lost when leaders change. But the surrogate of personal loyalty often obscures the leader’s awareness of organizational loyalty” (Werther, 1988, p. 32). In the

master course of Business Ethics the material (Mintz and Morris, 2014) clearly state that ‘loyalty to the boss’ is one of the seven signs of ethical collapse. As mentioned in the eponymous book of Marianne Jennings (2006) an excessive form of loyalty to the boss, often occurring in an environment with young and eager associates, leads to unethical situations. Loyalty to the supervisor is concluded to be unwanted.

As described earlier, loyalty consists of a relation between two entities. In organizational theory, these entities are the organization and the individual or the supervisor and the individual. Loyalty, as described by Werther (1988), works top down (trust, released control, delegation) and bottom up (accountability, responsibility and commitment). Commitment is the part of loyalty, from the bottom perspective, where the employee is loyal to the second entity, the supervisor or the organization as a whole.

Based on the theory of Werther (1988) and practical need for goal alignment based on organizational loyalty, in this thesis, loyalty is defined as the reinforcing binding relationship between the employee and the organization which will be measured from the employee perspective in the form of employee commitment towards the organization.

In figure 1, a model of the term ‘loyalty’ is presented as the form of loyalty as will be partaken in this thesis. The next subparagraph will focus more on the empirical theory related to loyalty used for the formulation of the research question. The figure is for illustrative purpose and will not be part of the research.

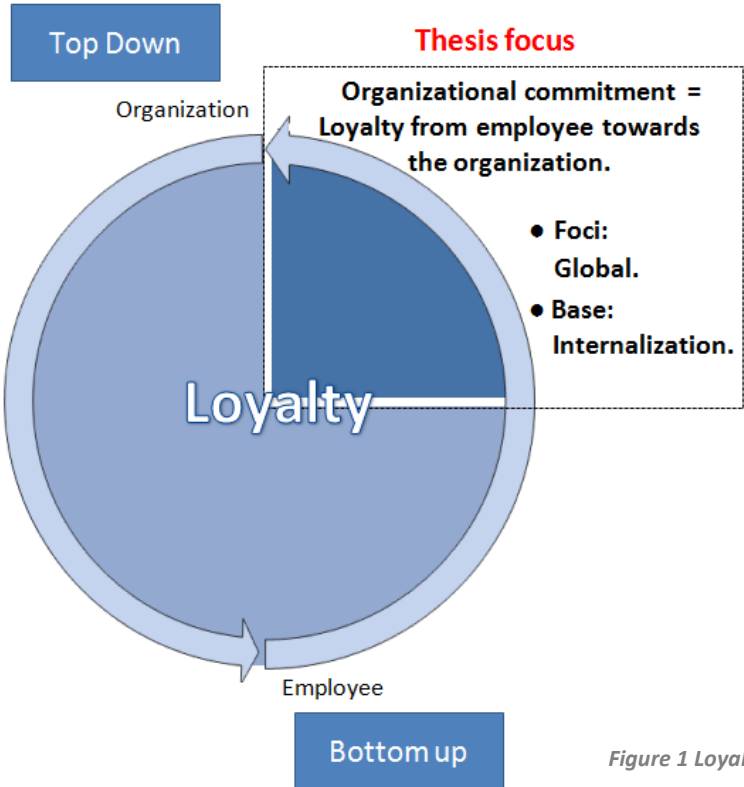


Figure 1 Loyalty framework and Thesis focus

### 2.1.3 Loyalty typology

As described in the previous subparagraph, loyalty consists of multiple dimensions. To disentangle the term loyalty, is to discover more on of what loyalty consists of and how the different forms of loyalty are related to other variables.

The most commonly studied type of organizational commitment is ‘attitudinal commitment’, developed by Porter and his colleagues (Porter, Steers, Mowday and Boulian, 1974) and is defined as “the relative strength of an individual’s identification with and involvement in a particular organization, characterized by three factors: (1) a strong believe in and acceptance of the organizational goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization. Attitudinal commitment is present when the identity of the person is linked to the organization and when the goals of the organization and those of the individual become increasingly integrated or congruent” (Porter et al. 1974, p.604). “Attitudinal commitment thus represents a state in which an individual identifies with a particular organization and its goals and wishes to maintain membership in order to facilitate these goals” (Mowday, Steers and Porter, 1979, p. 225). This most classic and fundamental research on loyalty studies has a similar view on organizational commitment as being the bond between the individual and the organization, contributing to the agency conflict of goal congruence, described and explained in the definition of loyalty in the previous section. Therefore, organizational commitment will be the measuring tool of loyalty as loyalty perceived from the perspective of the employee towards the organization. The perspective of the organization, as the second entity in the relation, will consist of trust, released control and delegation and is, as a separate extensive topic, not a part of this thesis. Also the employee to organization component of the loyalty relationship in answering trust with reliability and accountability will not be a part of this examination. The focus of this thesis is directed towards organizational attitudinal commitment with a specific base on which will be elaborated in the next paragraph 2.2.

The second form of organizational commitment is ‘calculated’ commitment’ which builds upon the work of Becker (1960) and is defined as “a structural phenomenon which occurs as a result of individual organizational transactions and alterations in side bets or investments over time” (Hrebiniak and Alutto, 1972, p.556) as the ‘sunk costs’ which binds employees to the organization, a more egoistic approach. Both forms of organizational commitment are not entirely stand alone concepts as both consist of intertwined elements. The calculated approach is a unauthentic form of commitment and an undesirable and forced relation between the individual and the organization. Because of the sunk costs, as , for example, the results of being of older age with more risk of departure because less opportunities for alternatives jobs, the employee is ‘handcuffed’ to the organization. This contains not true loyalty but just a combination of binding factors to the organization like disengagement and

alienation because there is an absence of involvement with the job. The link serves only one-way; from the firm to the individual as it restrains the person to leave. With calculated commitment, there is no loyalty to the organization in an employee to organization return relationship, a mutual relationship. Furthermore, calculated commitment is similar to continuance commitment as continuance commitment is describes as a tendency to engage in consistent lines of activity due to the perceived costs of doing otherwise (Allen and Meyer, 1990). As Becker and Kernan show, “continuance commitment to supervisors and organizations was unrelated to our four types of performance. These findings suggest that organizations do not benefit, at least in terms of performance, from encouraging continuance commitment among employees” (Becker and Kernan, 2003, p. 344). In the concrete disentanglement of attitudinal commitment, mentioned in the following paragraph, it will be explained that one of the components of attitudinal commitment is closely related to calculated commitment, thus including the complete theoretical aspect of commitment in the framework.

#### 2.1.4 Research question development

As loyalty exists of different components and conditions, multiple factors can lead to a decrease in loyalty. A safe environment based on given trust, responsibility and commitment is a necessity for loyalty. Without the trust of the leader in the form of delegation, employees cannot feel safe to fail and create a responsible and committed role. Without the awareness of responsibility and commitment of employees, no leader will give up control and place trust in their employees. Incorporating loyalty in management control systems ensures employees desirable behavior and the existence of goal alignment. Multiple practical cases provide a strong incentive to control for these aspects.

This thesis argues that loyalty is a personnel control, in the form of employee commitment towards the organization, that can be actively managed as a non financial performance indicator and that investments in loyalty enhancement systems are complement to internal control. This examination is important to improve our understanding of what constitutes a management control system.

The research question summarizes the purpose of this thesis.

*RQ: “Can organizational loyalty enhance performance and ensure goal alignment?”*

## 2.2 Hypotheses development

### 2.2.1 Introduction to hypothesis development

As stated earlier, loyalty can be a solution for the, from the agency theory evolved, goal alignment phenomena, which many organizations struggle to control for. As stated in the paper of Werther (1988), loyalty can be achieved through the first steps of leadership awareness, organizational vision and involvement. When the employee is involved in the organizational vision, he or she feels part of the organization, which is the bases for loyalty. Simultaneously, this involvement in the believes and goals of the organization creates and ensures an alignment between the goals of the organization and the goals of the employee. This is one of the basic targets of the agency theory. When the existence of loyalty is related to performance, organizations will be incentivized to incorporate loyalty controls in the management control system. The relation between loyalty and performance is hard to establish as prior research shows mixed evidence at best (Mathieu and Zajac, 1990). This is mainly due to a comprehensive use of the term loyalty instead of a nuanced, specified form. In this thesis, a specific component of loyalty will be examined using the foci of the organizational commitment profiles following Becker and Billings (1993) and a commitment base aimed at the organization values, related to performance, to establish a relation between both variables. The next subparagraph will discuss the theory which will be used, followed by the hypothesis development where the thesis' objective and theory come together in the thesis' hypothesis.

### 2.2.2 Theory

Prior research (Organ, 1988; Randall, 1990; Mathieu and Zajac, 1990; Becker, 1992) states that higher employee commitment to organizations is positively related to desirable levels of satisfaction (Bateman and Stasser, 1984; Mowday, Porter and Steers, 1982), motivation (Mowday, Steers and Porter, 1979) and attendance (Mathieu and Zajac, 1990; Steers and Rhodes, 1978), while lower employee commitment to organizations is negatively related to higher intend to quit (Mathieu and Zajac, 1990), turnover (Clegg, 1983; Cotton and Tuttle, 1986) and tardiness. Previous research, Becker and Billings (1993), will be followed in the use of loyalty proxies and the use of controls for organizational commitment. The approximation on types of commitment will be used in the attempt to establish the relationship between loyalty and performance. This is part of the suggestions for future research in Becker and Billings (1993, p.189): "(...) additional consequences of the different profiles should be explored. (...) while most work has shown that overall commitment to the organization is not strongly related to performance of productivity (Mathieu and Zajac, 1990; Randall, 1990), it is possible that certain patterns of commitment do influence these variables". This is lacking in the bulk of prior research which uses a more comprehensive understanding of commitment. Including this

differentiation and distinguishing between commitment foci and bases gives new opportunity for evidence of a commitment-performance relation. “Prior investigations on the commitment-performance relationship may have been confounded by the failure to distinguish among different commitment profiles” (Becker and Billings, 1993, p.189).

Following Becker and Billings (1993), employee commitment is split into four categories based on foci of commitment. Quoting Becker and Billings (1993, p. 177): “Foci of commitment are the individuals and groups to whom an employee is attached, and bases of commitment are the motives engendering attachment.” Their research using these foci and bases has developed four profiles of commitment: (1) The Locally Committed (employees who are attached to their supervisor and work group), (2) The Globally Committed (employees who are attached to top management and the organization), (3) The Committed (who are attached to both local and global factors) and (4) the Uncommitted (who are attached to neither local or global factors).

Next to the foci, Becker and Billings (1993) use a distinction in bases for commitment (O’reily and Chatman, 1986), deriving from a Porter et al. (1974) based, attitudinal commitment theory. The bases for commitment are (1) Compliance, (2) Identification and (3) Internalization. “Compliance occurs when attitudes are adopted in order to obtain certain specific rewards or to avoid certain specific punishment” (Becker and Billings, 1993, p.177) and is related to the alternative calculative commitment, thereby completing an integral commitment framework. “Identification occurs when attitudes and behaviors are adopted in order to be associated with a satisfying self-defining relationship with another person or group. Internalization occurs when attitudes and behaviors are adopted because the content of the attitude or behavior is congruent with the individual’s value system” (Becker and Billings, 1993, p.177). Becker and Billings (1993) refer to earlier work (Becker, 1992) stating that separating commitment in foci and bases explained additional variance in commitment variables as job satisfaction, intent to quit and prosocial organizational behaviors accounted for using Porter’s Organizational Commitment Questionnaire (OCQ). This provides evidence for the reconceptualization of commitment as a multifocus and multibases phenomenon. This distinction in foci and bases enlarges the conventional perspective of organizational commitment.

The goal of this thesis is to establish a relation between the internalization based and foci of global committed employees and performance to provide evidence on the importance of loyalty in the management control framework and the contribution of loyalty to goal congruence.

### 2.2.3 Development of hypotheses

Becker et al. (1996) and Chen et al. (2002) state that organizational commitment to supervisor is leading and ensures the highest performance. This should not be the case. Following Wertner (1988), and the work of Porter et al. (1974), loyalty is a result of involvement in a shared vision with the organization (see paragraph 2.1.1). This answers the need for goal alignment in the agency theory. This is loyalty how it is needed in management control and how loyalty should be incorporated in management control systems.

Supervisor commitment instead of organizational commitment aims at, as stated in Becker et al. (1996) and Chen et al. (2002), the interaction between supervisor and subordinates and the need for performance because of the supervisors observation and reward. This is short term thinking which leads to extrinsic motivation and is undesirable and distances itself from loyalty as a long term, intrinsic, goal alignment enabler as argued by Werther (1988) and defined by Porter et al. (1974). Especially in the work of Chen et al. (2002), the strongest two dimensions of supervisor loyalty contain: dedication, and attachment. These dimensions are a lesser loyalty characteristic but more of a submissive trade arising from a Chinese culture based on Communism and Confucianism. This is a twisted form of loyalty. The Netherlands is not such a relationship-oriented society but a much less personal society and should provide with a sample group less attached to the supervisor compared to the organization.

Becker and Kernan support this questionable conformity on supervisor commitment: “For neither subsample is the mean level of (affective) commitment to supervisors greater than that to organizations. Therefore, it is not the case that our results demonstrating a closer link between commitment to supervisors and performance than between commitment to organizations” (Becker and Kernan, 2003, p.343). In this thesis, the sample group contains of members of the Financials for Financials association (FFF). Because of the staff department, organizational supportive work, instead of separated business unit work, the sample subjects are closer involved with the organization then, for example, a member of a sales team who does see the organization projected in his supervisor, strengthening supervisor commitment. With this sample, this thesis tries to avoid the commonly used argument in theory that supervisors are stronger related to employees commitment than the organizations itself. The average FFF member is often a financial (controller) and member of top management and stands closer to the organizations core values and goals representing directly the organization.

Given the fact that goal congruence is a result of a involvement in the organizational vision (Wertner, 1988), employees who are committed to the organization, should be strongest related to performance.



Next to this foci of organization commitment, a positive relation is expected with the commitment base of internalization of goals and values and performance. This is similar to the goal-setting theory and research since the work of Locke and Bryan (1966a), which provides evidence that commitment to goals leads to high performance (Locke, Shaw, Saari and Latham, 1981; Hollenbeck and Klein, 1987, Locke and Latham 1990a). When a person has specific goals, the performance effects would be more pronounced, then when specific goals were lacking. However goals and values of the organization are usually formulated in an abstract way. It provides the employees with the insights of the reasons and thoughts behind the delegated work goals and targets, making them clearer and thus providing a performance incentive in conformity with the goal alignment theory. As described by Locke and Bryan (1967, p. 260): “Adjustment requires first that the subject perceive the task, that he be conscious of the fact that there is a task to be performed, and that he have some idea or knowledge of what the task requires of him. Then, depending upon the situation and the individuals perception of it in relation to his own values, he will set himself a goal or standard in term of which he will regulate and evaluate his performance (...). (...) once the goal is set, it is argued that effort and performance level will be regulated by and with reference to this goal”. Miner (2005) makes a clear statement related to the work of Lock and Latham (2002): “Goal Commitment is expected to relate to performance as a direct positive effect. In addition, it should serve to moderate the effects of goals on performance. Goal level should be more highly (and positively) related to performance under conditions where the individuals involved have high commitment than where commitment is at a low level.”

Employees who are committed to their organizations and who internalize the goals of this foci will perform at a higher level than employees with less or without commitment. The result of an increased employees commitment creates an increased organizational performance.

The establishment of this form of commitment in relation with performance would provide evidence of the importance of loyalty in the management control system as it enhances performance and creates goal alignment, answering the fundament of the agency conflict.

The hypothesis addresses the described purpose of this thesis.

H1: “Global commitment with an internalization base is positively related to organizational performance.”

To examine the full body of the framework, the following disempowering negative hypotheses complete the concept with an alternative crossover position and at the same time support the argumentation of H1.

H2: “Low global commitment with an internalization base is not positively related to organizational performance.”

H3: “High global commitment with an internalization base is not negatively related to organizational performance.”

## 2.3 Current research on loyalty

Referring to the first paragraph of this chapter and the decline in the relationship between the employee and the organization, after the restraint in job security due to of the financial crisis, there is a current shift in trend, ‘the war on talent’. This phenomena already expresses itself in Germany, as the demographic ageing has began early compared to Europe, due to the loss of an entire generation in the Second World War. Also in the Netherlands, the first signs of a shortage of talented young professionals are presented as for example Het Financieel Dagblad headlined on the tenth may 2016: “ING kaapt twee zakenbankiers weg bij rivaal ABN AMRO”. In the environment of students, this phenomena particularly manifests itself. The Erasmus ESE master students of the Accounting, Auditing and Control program are in demand by the big four accounting firms and other organizations. On many occasions these organizations try to recruit students for an internship and contracting them for thereafter.

Talented young professionals now bind less likely ‘for life’ to an employer and have a different perceptive on the traditional labor conditions, leading not only to a decline in loyalty but to an absence of loyalty or any kind of feelings towards the organization since the relation is short term based and less important. Beechler and Woodward (2009) carefully assessed the war on talents phenomena as they reviewed more than 400 contemporary academic and business press articles. As they conclude, multiple factors like global trends, mobility, business transformation and changes in diversity have caused dynamic and pervasive changes in work participation causing both a ‘talent war’, resulting in a scarcity response in the form of aggressive hiring and top talent obsession and a ‘talent solution’, as a creative response resulting in a desirable conscious of development and cooperation.

The current economical situation makes organizations less stable and predictable. The society is more individual based, as Pink (2001, p.100) stated: Employers now view employees as “(...) free agents responsible for their own employability and employees now assume an active role in monitoring their own learning, skill and career development (...). Free agents give their talent in exchange for opportunity”. The increase in employee (voluntary) turnover however is costly and causes a decline in labor productivity. With the establishment of a relation between loyalty and performance, this thesis will provide evidence of the importance of organizational commitment in the current situation opposite to the individualization and shift to focus on the self.

To examine the current state of loyalty and the cost of avoiding voluntary turnover, the survey will commence with a teaser question where it presents the participants with the following loyalty dilemma: “ Will you change from your current employer to a competitor for € X, - additional net monthly salary?”. Results will show the average cost of loyalty and retaining employers.

## 3. Research design

### 3.1 Introduction

The relationship between loyalty and performance is perceived to be tenuous. A cogent theory on the direct relation is also not yet developed. The meta-analysis of Mathieu and Zajac (1990) shows a minimal correlation between both variables resulting in a conclusion that “commitment has relatively little direct influence on performance” (Mathieu and Zajac, 1990, p. 184). However, the variable of commitment that is used in the bulk of prior research is more of an overall understanding of the term loyalty which does not grasp the concept well. Prior research also often uses a sample group from a single organization (Becker, 1992), often students, which causes a questionable generalizability.

Recently, researchers started to disentangle the concept of loyalty and shift focus to the foci and bases of commitment. As argued by and as the primary motivation of the work of Becker et al. (1993,1996), a nuanced form of commitment is used in their research with differentiation in foci and bases and additionally a more nuanced form of performance with the use of in-role and extra-role performance (Becker and Kernan, 2003). This thesis will follow the research of Becker and his colleagues in the survey method, the use of a more specific commitment profile to attempt to establish a pronounced relation between the variables of commitment and performance.

As argued earlier, the most ideal form of loyalty is commitment (foci) from the employee towards the organization with a base of goal congruency. This thesis aims to establish a relation with organizational performance as the sum of the performance of all personnel. The specific form of performance that is used is in-role performance as also used in Becker et al. (1996), Chen et al. (2002) and Becker and Kernan (2003). In-role performance refers to the behavior directed towards formal tasks, duties and responsibilities such as those included in a job description (Williams and Anderson, 1991). As previous research shows evidence of a weak positive effect (Mathieu and Zajac, 1990), with the disentanglement of the concept of commitment and the focus on solely internalized organizational commitment, this thesis attempts to find a strong positive relation with performance. The measures of the variables will be discussed in paragraph 3.3. For a complete overview, a validity framework, ‘Libby boxes’, is included in appendix A.

### 3.2 Measurements

#### 3.2.1 Measurement of loyalty

The loyalty measurement consist of items from multiple questionnaires. These questionnaire are part of academic research and prove to be relevant and valid and contribute to the validity of this thesis. Appropriate items to question loyalty are selected from a global commitment (organizational

foci) and internalization base point of view to test the organizational loyalty of the respondents. As mentioned in the third subparagraph, 3.3.3, additional controls will be used and impression management questions will be implemented to control for the subordinate to supervisor response bias. A teaser question based on the war on talent phenomena is implemented to question for which amount of additional monthly salary a financial is willing to switch jobs. Results will indicate the cost of retaining employees and show a boundary in financial job retainment.

The survey uses selected items from the classic Organizational Commitment Questionnaire (OCQ, 15 items) from Porter et al. (1974). Four selected items in the questions are aimed at the internalization related aspect of their theory: “ (...) a strong belief in and acceptance of the organizations goals and values.” (Porter et al. 1974, p. 604) and are incorporated in the survey. The items are two fold in simply rewording to specify supervisors or employees as the target. Examples are (a) “I/My team member feel(s) very little loyalty to this organization” (reverse scored) and (b) “I/My team member find(s) that my/his/her values and the organization's values are very similar”. Second two items from the variant of British Organizational Commitment Scale (BOCS, 9 items) from Cook and Wall (1980) are selected. They have an ‘involvement’ point of view, as they are similar to the goal alignment focus and the Porter theory. Third, four items from the questionnaire of Becker and Billings (1993) are used with an internalization base and global foci (towards the organization).

For all items a five-point scale ranging from ‘strongly disagree’, ‘disagree’, ‘neutral’, ‘agree’ to ‘completely agree’ is used with an additional ‘inapplicable’ answering possibility to keep the completed items clear of uncertain answering.

The survey questions are included in appendix C.

### 3.2.2 Measurement of performance

Similar to the measurement of loyalty, the performance measures consist of items of multiple questionnaires from prior academic research that show relevance and validity and that strengthen the internal validity of this thesis. The proxies that are used by Becker and Kernan (2003) for organization performance consist of in-role and extra-role performance as two foci of performance. Although in-role performance is supposed to be related with commitment towards supervisors because of the supervisors judging role, the in-role performance, opposite to the other performance measures, shows statistical significance and are assumed to be fit to use as a performance proxy. Additionally, the extra-role items are less fit as performance proxy as they are more of a derivative of performance and measure the promotion of the organization to outsiders, in considering pride. Extra-role performance is more discretionary in nature. The items seem a direct derivative of commitment and are less suited to be used as a proxy for performance where in-role performance is clear and straightforward. Becker and Kernan additionally conclude that the extra-role performance measure of ‘civic virtue’ is rather

general and should be replaced with a more precise and concrete dimension. For this reason, the multiple performance foci intend of Becker and Kernan is not adopted and in-role performance items (Williams and Anderson, 1991) are used to measure performance. Seven items from Becker and Kernan (2003) are used in the survey. Additionally three items are used to assess performance following Becker et al. (1996).

For all items a five-point scale ranging from ‘strongly disagree’, ‘disagree’, ‘neutral’, ‘agree’ to ‘completely agree’ is used with an additional ‘inapplicable’ answering possibility to keep the completed items clear of uncertain answering.

The survey questions are included in appendix C.

### 3.2.3 Control measures

Becker and Billings (1993, p.188) state: “(...) our results suggest that older workers, more educated workers and worker with greater job tenure tend to be member of the Committed and Loyal Committed (...)”, the highest commitment groups, and “(...) it is likely that the profiles of commitment found in a given organization are affected by organization variables (e.g. size,) .” This thesis follows this evidence for control variables using age, gender, education, job tenure and engagement as control variables to control for personal circumstances affecting loyalty and firm size, the number of employees, to control for organizational circumstances affecting loyalty. These basic controls are corresponding with the bulk of prior research on loyalty as mentioned in the meta-analysis paper of Mathieu and Zajac (1990).

A second control mechanism controls for the bias of the subjects. As mentioned in the prior paragraph, the survey is intended to be held in two ways. The subordinate fills in the questionnaire from a self perceived point of view on his loyalty and performance, as will the supervisor on its own perspective of the subordinate as a control mechanism which will strengthen the internal validity. Research by Fandt and Ferris (1990) and Deluga (1991) show that subordinates manage the impression of their supervisors. Because of the two way survey method and the possibility of the subordinates’ tendency to manage their response towards their supervisors, this requires a control for the respondents’ impression management. To control for the respondents impression management bias, nine appropriate items from the BIDR-16 (Hart, Ritchie, Hepper, Gebauer, 2015), the short version of the BIDR-40 (Paulhus, 1998) are selected and incorporated in the survey with for example (a) “I am/my team member is not always honest” (reversed scored) and (b) “I /my team member never cover(s) up mistakes”.

For all items a five-point scale ranging from ‘strongly disagree’, ‘disagree’, ‘neutral’, ‘agree’ to ‘completely agree’ is used with an additional ‘inapplicable’ answering possibility to keep the completed items clear of uncertain answering.

As discussed in the limitation section, it was not possible to accomplish a two way survey response. The impression management items are filled in and provide information on the respondents.

The survey questions are included in appendix C.

### 3.3 Sample

#### 3.3.1 Sample group

The target sample group consists of members of the association Financials for Financials (FFF). The association provides their members with events to share and gather knowledge and provide a deepening of specialty learning, also for permanent education, for controllers, chartered controllers and accountants. Networking and socializing is also an important aspect of the association. The association consists of over 500 professional's financials who participate in the seminars, workshops and other events.

The sample consists largely of business/financial controllers. This subject group is often member of the management team, has leadership experience and knowledge in management control and often holds a (post) masters degree. This gives them the knowledge about management control, behavior and performance and provide a professional and trustable sample group. Furthermore does this subject group has access to organizational information.

The survey invitation is included in appendix B.

#### 3.3.2 Sample process

The survey is created using the online software of SurveyMonkey. With a weblink in the invitation text, the readers are directed towards the online survey webpage. The software automatically informs on response, generates information and transfers the final data information to relevant software applications (Excel, SPSS).

Via the FFF LinkedIn page, other social media (Facebook, Twitter), the website and the newsletter the members are invited to participate in the survey. The survey commenced with the posting of the survey invitation on LinkedIn and the associations other social media online pages. The FFF board member with online excess rights to the forums placed the invitation which was also directed to the members by mail.

Ten days after putting the survey online via LinkedIn and the social media, the response number was 19. A reminder is sent via LinkedIn and social media and the newsletter was sent to the members via email. In the following week the response number increased with 30 to a total of 49. A number of six responses were dropped due to the completion of the survey with answering all questions with

inapplicable or without answering the questions. The number of usable responses is 43. The total number of members is 524 providing a response rate of 9,35 percent. It was not necessary to drop any responses due to a low score for the impression management items and low impression management bias.

Recent literature on survey methodology strongly emphasizes that the right target rather than size is of importance for the sample representativeness (Sauro, 2005) and that survey response rates are poor indicators of non-response bias (Bethlehem, Cobben, and Schouten, 2008).

Academic literature states that averages of response rates for academic studies lies higher than the observed 9.3%. Baruch (1999) states that for top management and organizational representatives an average response rate is set on 36.1 %. Baruch and Holtom (2008) state that, based on 1.607 studies, for individuals the average response rate is 52.7%. These numbers are related to professional academic studies with a long time period and possibility a rewarding structure for participants, including students. These conditions are not applicable or possible for this thesis. Furthermore, academic literature shows very different opinions on factors influencing response rates and a fixed standard response rate number is not set. This thesis targeted professional financials and the response information shows that the respondents are representative of the intended target group. The sample does suffer from a low response ratio but the number of 43 is sufficient to perform empirical research as a minimum of 30 is approved to be sufficient to adopt normality in conformity with the central limit theory (Moore, McCabe, Duckworth and Alwan, 2009). The variable analysis will elude on this topic of representativeness. The response rate and data collection are discussed in the limitations.

The median age for the respondents is 42 years and 91 percent of the respondents are male. 56 percent owns an academic degree or higher and 30 percent has a professional, HBO degree. The average tenure with the current employer is ten years and 91 percent of the sample group works full time. A third of the sample group works for a firm in size of 1 to 50 employees. Most of these firms are sole proprietorships because a large portion of the FFF members are self employed or work as interim employees. For this reason the survey is in almost all cases completed for one person in the self perceived posture. The control method using a supervisor perceived versus an employee self perceived view will not be used and the sample group consist of 43 singular respondents.

The teaser question shows that, dropping eight respondents who filled out 'inapplicable' and taking €2.500,- for the > €2.000,- option, the average amount for which a financial will leave the firm for a competing organization is €1.480,-. The standard deviation is €600, - showing a large diversity in answers. Although the sample group is small, the results imply that, when demand for financials will rise in the near future, retaining these employees will be costly, €1.480,- per month or €17.750,- per year.

## 4. Results

### 4.1 Analyses strategy

#### 4.1.1 Variable analysis

To measure the variables, the scores of the items with a reversed scoring are corrected to normal by reversing the Likert-scale scores. Table 1 contains the descriptive statistics and correlations for all variables. The total means and standard deviations are presented for the control variables and main variables commitment and performance.

**TABLE 1**  
**Descriptive Statistics and Correlations.**

Variables	Means	s.d.	1	2	3	4	5	6	7	8	9
1 Gender	.910	.294									
2 Age	3.67	1.107	.124								
3 Education	3.65	1.044	.125	.023							
4 Job tenure	3.12	1.179	.101	.559***	-.044						
5 Firm size	2.86	1.552	.284	-.221	.175	-.004					
6 Job engagement	1.14	.467	-.597***	-.048	-.093	-.117	-.137				
7 Teaser	4.43	1.803	.339*	.644***	.335*	.454**	.173	-.367*			
8 Impression management	4.00	.516	.229	.044	-.013	.238	.122	-.375*	.228		
9 Commitment	4.23	.474	.123	.010	-.113	.194	.032	-.267	.176	.583***	
10 Performance	4.39	.508	-.007	.202	.026	.313*	.086	-.154	.397*	.557***	.631***

, N = 43. Gender is coded 1 = male, 0 = female. Age is coded 1 = <20 year, 2 = 20-30 year, 3 = 30-40 year, 4 = 40-50 year, 5 = 50-60 year, 6 = >60 year. Education is coded 1 = <MBO, 2 = MBO, 3 = HBO, 4 = WO, 5 = WO+. Job tenure is coded 1 = 0-2 year, 2 = 2-5 year, 3 = 5-10 year, 4 = 10-20 year, 5 = >20 year. Firm size is coded 1 = 1-50 employees, 2 = 50-100 employees, 3 = 100-500 employees, 4 = 500-2.000 employees, 5 = >2.000 employees. Job engagement is coded 1 = 1.0-0.9 fte, 2 = 0.9-0.75 fte, 3 = 0.75-0.5 fte, 4 = <0.5 fte. Teaser question is coded 1 = € 500,-, 2 = € 750,-, 3 = € 1.000,-, 4 = € 1.250,-, 5 = € 1.500,-, 6 = € 2.000,-, 7 = >€ 2.000,-.

\* Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed). \*\*\* Correlation is significant at the 0.001 level (2-tailed).

With a mean of 0.91 for the control variable gender, 91% of the respondents are male (1= male). The mean age lies high in the group 30-40 years. The education mean lies high in the group HBO. The average job tenure lies in the category 5-10 years. A firm size average of 2.86 shows a average employee range of 50-100 employees. Most respondents are self employed but can also work as interim employers with (larger) firms, allowing them to fill in a firm size greater than one. The job engagement control shows that most respondents work fulltime. The teaser question mean lies in the category of € 1.250,- - €1.500,- and with an average impression management score of 4, the respondents show high honesty and integrity and provide no reason to assume an impression management bias.

The variable means show that the typical respondent is a male of average age with higher education and a full time job engagement for a longer tenure. The correlation results show some logical correlation between the control variables of age and job tenure supporting the typical respondent providing support for the representativeness of the results as they correspond with the targeted sample group.



The significance on the main variables already show the presence of a significant positive correlation. Impression management, commitment and performance all move together and are significantly correlated. There is no sign of multicollinearity since the correlations are not suspiciously high (Moore, McCabe, Duckworth and Alwan, 2009).. There is no sign of items representing a similar content and having to be removed. The highest relevant correlation is .631 between performance and commitment.

There is no strong evidence of a consistent relation between the control variables and main variables and there is no need to control for these variables when performing regressions between the main variables.

#### 4.1.2 Factor analyses

To analyze the structure of the response, a factor analyses is conducted to determine whether employees in the sample distinguished between the foci and base of loyalty, between the ten performance items and the nine impression management items.

Table 2 shows the distribution of the items on the factors for all three variables. The factor development and variance contribution is included in appendix F.

**TABLE 2**  
**Results of Factor Analysis<sub>a</sub>**

Commitment			Performance			Impression management			
	Factor			Factor			Factor		
	1	2		1	2		1	2	3
COM1	.676	.357	PER1	.914	.105	IM1	.922	.088	.170
COM2	.716	.182	PER2	.895	.030	IM2	.896	.026	.264
COM3	.502	.358	PER3	.754	.169	IM3	.606	.387	.036
COM4	.784	-.151	PER4	.712	.241	IM4	.124	.238	.826
COM5	.842	.180	PER5	.134	.920	IM5	.220	.019	.858
COM6	.886	.119	PER6	.690	.483	IM6	.602	.595	-.135
COM7	.128	.700	PER7	.186	.941	IM7	.126	.732	.308
COM8	-.020	.866	PER8	.740	.407	IM8	-.126	.633	.500
COM9	.648	.503	PER9	.706	.543	IM9	.275	.833	.016
COM10	.285	.795	PER10	.806	.218				

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations.

Two factors are created on the commitment variable representing a total variance of 63%. Item one, three and nine are discarded because of a value below the minimum of 0.7. (Weisstein, 2002) Items two, four, five and six are included in factor one and load very low on factor two. They represent the survey questions regarding the similarity with the organizations norms and values in conformity with the theorized loyalty base. Items seven, eight and ten are included in factor two and represent the survey questions regarding the attachment towards the organization as the foci of loyalty in conformity with the theory. Commitment factor one is used as a new variable under the name

'Commitment Base' and commitment factor two is used as a new variable under the name 'Commitment Foci'. The discarded items one, three and nine are of similar kind as the items that are included in the factors. A slightly different questioning and interpretation has given these items medium values for both factors. As the factor development almost created four factors, component three and four have Eigenvalues of almost one; 0.911 and 0.812, the items are not perceived as less relevant but tenuous in the formulation of the question (Weisstein, 2002).

Two factors are created on the ten items of the performance variable representing a total variance of 75%. Items one, two, three, four and eight, nine and ten are loaded on factor one with a clear low score on factor two. They represent the survey questions regarding a content task execution in conformity with in-role performance as theorized. Items five and seven load clearly on factor two and contain questions regarding meeting requirements and expectations of others and are in retrospect more adjoining the concept of extra role performance, because of their formulation and interpretation. Performance factor one is used as a new variable under the name 'In-Role Performance' and performance factor two is used as a new variable under the name 'Extra-Role Performance'. A third factor shows closely a minimum Eigenvalue of 1; 0.811. This is related to item 6, which is discarded because of a value below 0.7. This item is believed to be multi interpretable since it is a reversed item with a negative intent but a positive sentence subject. The item has a value for factor one of 0.690 but also a value for factor two of 0.483. The higher values for factor two makes the item not clear enough to include as an item in factor 1.

Factor analysis on the impression management variable provides information on the nine survey items. Three factors are created with a total variance of 74%. Factor one includes items one and two which question honesty. Factor two includes items seven and nine on the concept of respect. Items four and five load on the third factor and contain questions on getting better at the expense of others. A fourth component has an Eigenvalue of 0.851 and closely serves as a fourth factor. The variable of impression management is not a part of the regression analysis.

The newly formed factors function as new variables and will be used in the main regression analyses between the main variables.

### 4.1.3 Validity

In the correlation analysis, the main variables of commitment and performance are significantly correlated in the similar, positive direction as theorized, but not too highly in measuring the same rather than different constructs.

The factor analysis provides a clear distribution of factors for both main variables of loyalty and performance as supported by the formulated theory. The items loaded on the factors have clear values for one factor and low values for the second one. The two factors created for the loyalty variable divide the variable in a factor for the foci of loyalty and a factor for the base of loyalty. Similar with the variable of performance two factors divide the variable in a factor for in-role performance and a factor for extra-role performance. The results gives a strong confirmation of the construct validity of the research (Churchill, 1997) as the measurements of the survey were able to capture the concept and underlying theoretical construct as it was intended; the foci and base for loyalty as the focus point of this thesis.

In the discussion, the different survey items will be considered on the topic of relevance.

### 4.1.4 Reliability

The reliability is based on the origin of the research data, the sample group. The targeted sample group consisted of financial professionals, who are often management team member, higher educated and trustable individuals with knowledge on the questioned topics. The descriptive statistics show that the average respondent is of medium age, higher education with higher job tenure with no remarkable standard deviations. This is in conformity with the target sample of professional financials. When the survey is repeated with a similar sample group, it is likely that the results are equal. Although the sample group is smaller, it is perceived that, due to the nature of the respondents, the quality of the measurement is trustable and reliable. The limitations and recommendations for future research are presented in the discussion.

A second reliability confirming factor is the decisiveness of the results. In singular regression, between the ten commitment and ten performance items, 11 of the relations show a significant positive results of  $P < 0.001$  and 21 show a significance of  $P < 0.01$ . This high significance shows high conformity of the results (Moore, McCabe, Duckworth and Alwan, 2009). The main results show a high significance which support the statistical strength of the relation between the variables and leads to the belief that in repeated research a similar result should be found.

## 4.2 Regression analyses

### 4.2.1 Singular regression

To examine the relation between the main variables of commitment and performance, first a singular linear regression analysis on all the single commitment and performance items is performed. In table 3, the results of the hundred singular regressions are presented. The output tables of the relevant results are included in appendix H.

**TABLE 3**  
**Results Item Regression Analysis<sub>a</sub>**

Commitment Items	R (Beta)	Performance Items									
		PER1	PER2	PER3	PER4	PER5	PER6	PER7	PER8	PER9	PER10
COM1		.632***	.462**	.501**	.349*	.180	.452**	.261	.582***	.660***	.475**
COM2		.522***	.370*	.390*	.577***	.268	.301*	.356*	.495**	.420**	.431**
COM3		.285	.138	.515***	.049	.026	.254	.096	.277	.255	.196
COM4		.374*	.212	.430**	.256	.414**	.436**	.638***	.393**	.491**	.317*
COM5		.395**	.260	.400**	.326*	.180	.396**	.243	.353*	.414**	.424**
COM6		.373*	.303*	.373*	.384*	.161	.258	.281	.330*	.379*	.424**
COM7		.088	.015	.058	.036	.078	.232	.094	.176	.143	.023
COM8		.298	.220	.216	.238	.081	.363*	.016	.349*	.320*	.258
COM9		.608***	.505**	.660***	.458**	.228	.304*	.278	.632***	.593***	.567***
COM10		.314*	.321*	.512***	.205	.337*	.304*	.326*	.525***	.434**	.325*

<sup>a</sup>Commitment Items are Independent Variables. Performance Items are Dependent Variables.

\* p < .05. \*\* p < .01. \*\*\* p < .001. Red beta coefficients are insignificant, p > .05.

The results are clearly in conformity with the factor analysis. Commitment item three, not loaded on a factor, shows not a significant relation with the performance items, except for item three. Commitment items one and nine show the strongest significant relations with individual performance items. Commitment factor two contains items seven, eight and ten of which seven and eight do not show a significant relation with the performance items.

Performance items five and seven are the items that are loaded on factor 2 and theorized to be extra-role performance items. In the singular regressions, these items show less of a relation with the commitment items.

The singular regression between the ten commitment and ten performance items shows that for both the variables the factor one loaded items show the strongest relation between commitment and performance. This is logical because the first factor explains the most of the variance of the variables;

38.5% for commitment and 49.3 % for performance. And the relations between the factor one items are relatively strong with high significations and strong betas and adjusted R squares.

The strongest relations in the singular regression analysis contain the relation between commitment item one and performance item one, one and nine, four and seven, nine and one and nine and eight, all with a high significance and beta coefficient higher than .6.

This result gives reason to assume that a significant positive relation is present between commitment factor one and performance factor one and between commitment factor one and performance factor two. The weak singular relations resulting from the performance factor two items make the assumption that these extra role performance items are not related to commitment.

#### 4.2.2 Main regression

The purpose of this thesis is to examine a specific focus of loyalty and the relation with performance. The loyalty focus is theorized in (a) a foci and (b) a base for organizational commitment. This is supported by the factor analysis were these focus points are statistically clarified. Likewise the performance variable is reduced to the concept of in-role performance as created by factor one of the variable. The main hypothesis shows the thesis where both variables commitment and performance are positively related. The second and third hypothesis show an alternative negative thesis where different relations are excluded and undesirable.

H1: “Global commitment with an internalization base is positively related to organizational performance.”

H2: “Low global commitment with an internalization base is not positively related to organizational performance.”

H3: “High global commitment with an internalization base is not negatively related to organizational performance.”

Table 4 shows the results of the main regression between the factors of the variables commitment and performance.

The regression analysis of commitment base on in-role performance shows a strong significant positive relation ( $\beta = .466$ ,  $P < .05$ ). The beta of  $\cong .47$  shows a positive correlation between the variables with a R square and adjusted R square of around .20 which explains for the variance in the performance variable for a fifth. The positive F-test shows that there is a positive linear relation between the variables. The t-test result of .002 shows that the regression model is highly statistically significant with a P-value smaller than .01.

The results of the regression analysis between commitment foci and in-role performance are similarly significantly positive but less strong ( $\beta = .35, P < .05$ ). The regression analysis between commitment base and extra-role performance shows a positive relation but is insignificant ( $\beta = .286, P > .05$ ). The results of the regression analysis between the factors two of the variables, commitment foci and extra-role performance, is weak and not significant ( $\beta = .013, P > .05$ ).

**TABLE 4**  
**Results Main Regression Analysis<sub>a</sub>**

Variables	$\beta$	R <sup>2</sup>	$\Delta R^2$	F	t	Sig.
<b>Commitment Base x In-Role Performance</b>	.466	.217	.197	10.599	3.249*	.002
<b>Commitment Foci x In-Role Performance</b>	.350	.122	.099	5.295	2.301*	.027
<b>Commitment Base x Extra-Role Performance</b>	.286	.082	.058	3.396	1.843	.073
<b>Commitment Foci x Extra-Role Performance</b>	.013	.000	-.026	.006	-.079	.938

<sub>a</sub> N = 43. Commitment Factors are Independent Variables. Performance Factors are Dependent Variables. Commitment F1 contains the loyalty base construct. Commitment F2 contains the loyalty foci construct. Performance F1 contains the in-role performance construct. Performance F2 contains the extra-role performance construct. \* P < .05.

The results show a positive significant relation between organizational commitment in the foci of the organization and the base of norms and values and organizational in-role performance. This provides evidence to adopt H1 and support H2 and H3 in the absence of a different directed relation.

The strongest relation is found between the commitment base of loyalty, which supports the agency theory of goal congruence, and organizational performance. The explanation of this meaning is part of the discussion.

Becker et al. (1996) show an insignificant negative relation between the foci of organization ( $\beta = -.03, P > .05$ ) and base of commitment of internalization ( $\beta = -.01, P > .05$ ) and when controlling for the demographic variables an significant negative relation for organization internalization ( $\beta = -.20, P < .05$ ) in relation with performance. Becker and Kernan (2003) provide evidence that affective commitment towards organizations has no relation with in-role performance ( $\beta = .00, P > .05$ ). Both papers do find a significant positive relation between supervisorial commitment and performance.

## 5. Discussion

### 5.1 Main conclusion

The motivation for this thesis is (a) the practical need for the implementation of loyalty in the management control framework due to the current business climate of fraud and misconduct, and (b) the absence of a decisive result in loyalty research on the relationship with organizational performance and, in current research, the absence of results in the agency theory supporting focus of organizational foci and organizational norms and values base focus of loyalty in relation with organizational performance. This thesis revisits the basic questions of loyalty research and attempts to answer the research question: “Can organizational loyalty enhance performance and ensure goal alignment?”

The main hypothesis, H1; “Global commitment with an internalization base is positively related to organizational performance”, shows the specific focus of the concept of loyalty in this thesis. The survey, created for this thesis, contains specific handpicked items from relevant related research papers to pinpoint this loyalty focus. The factor analysis on the survey results provide a clear distribution on factors for both main variables of loyalty and performance as theorized and supported by the literature. The two factors created for the loyalty variable divide the variable in a factor for the foci of loyalty and a factor for the base of loyalty. Again with the variable of performance, two factors divide the variable in a factor for in-role performance and a factor for extra-role performance. This result gives a strong confirmation of the validity of the research as the survey was able to grasp the concept as it was intended; the foci and base for loyalty as the focus point of this thesis.

The clear factors on both the variables create a strong base for regression analysis. In the singular regression analysis, between the ten commitment survey-items and the ten performance survey-items, there are strong significant relations between the single commitment and the performance items. The main regression analysis, which used the condensed item factors, shows a positive significant relation between commitment factor one and performance factor one, representing commitment with a base of norm and value congruence between the employee and organization and in-role performance. Also the second regression between commitment factor two and performance factor one, which represent commitment towards the organization and in-role performance, shows a strong positive significant relation between both variables. The second performance factor shows a insignificant positive relation with both the commitment variables. This is explainable due to the nature of the performance questions of this factor, which also shows no relation in the singular regression analysis, and are perceived not to be in-role performance items.

The positive results of the regression analysis on the main variables confirm the thesis of H1 and do not show any different relation as hypothesis in H2 and H3. In conclusion, hypothesis one is accepted and a positive relation between loyalty, in the form of commitment towards the organization

as a foci and congruence between the norms and values of employees and the organization as a base, and performance, in the form of in-role performance, is confirmed.

The strongest relation is found between the commitment base and in-role performance. This provides evidence on the importance of commitment as goal congruence between employees and the organization and the positive relation with performance and commitment as a performance enhancer. This result clearly answers the research question and states that organization loyalty is indeed positively related with performance and that goal alignment, as an agency theory supporting phenomena, is most relevant in the relation between loyalty and performance.

In the existing body of knowledge in academic literature, a statistically significant relation between loyalty and performance was only found in organizationally commitment towards the supervisor. Any loyalty towards the organization was never concluded to be statistically relevant. This led to a theory of relevance of personal commitment, loyalty towards the supervisor. As theorized in the first chapters of this thesis, this form of commitment is short term orientated and absolutely. This thesis provides evidence of the relevance of the pure form of organization loyalty and a performance enhancing relation in the form of employee commitment towards the organization and employee congruence with the organizations' norms and values.

The implications for stakeholders and future research are formulated as recommendations in the third paragraph.

## 5.2 Limitations

This thesis suffers from typical student research limitations. Examples are the short time period which restrains in possibilities of extending the research to more interesting proportions and limited experience in research methods.

The main limitation of this thesis is the sample size. Although the sample respondents are of the targeted group, a response of 100+ would enhance the representativeness of the research. For the survey response collection, social media as LinkedIn, Facebook and Twitter is used. In the additional reminder the survey is also presented by a newsletter and via a website. The social media did not deliver a fast and convincing response. In retrospect it is concluded that news items via this form of media are 'snacks' and not interpreted as real, serious items that require a response. This is probably because of the nature of social media as a partly anonymous and free of response form of communication platform. The expectations were higher because of the enthusiasm about social media and the large commitment to the membership of these online groups. In retrospect, an alternative would have been to present the research in face-to-face meetings, which are regularly organized by the sample group association, and to distribute the survey by hand, one at the time. A high response rate



per meeting would be expected and with a average of 30 persons per meeting, only four meetings would be sufficient to gather 100 responses. Of course time scheduling would be an important matter and the possibilities of presentations and participation would be a important condition.

The second limitation on the survey is the personal contact before the distribution of the questionnaire. At first, months before the start of the thesis research, contact was established with a board member of the FFF association group. The thesis goals were explained and the survey parameters discussed. At the last moment the actual survey placement tasks were delegated to a second person who was not informed on the situation and did not exactly understand the intentions of the survey. This slowed down the placement of the survey and created an alternative invitation image that was sufficient but not as intended. The placement of the survey invitation on the associations website was also delegated which resulted in a delay, due to the slow response in contact. In retrospect the feeling to be more in control rises. But it came also clear that a student's survey is not taken as serious as other, job related, issues.

Next to the survey distribution, there were some issues with the survey software program SurveyMonkey. Before the decision to use SurveyMonkey, contact was tried to establish with the universities IT services to request information on the use of the universities survey support software, but no response was received. When developing the survey via SurveyMonkey, the basic free profile was used. This profile does not support all the survey functions that are required, so a paid profile was needed. As for a student, the cheapest one of €300,- was chosen with the disadvantage of the lack of randomization. To use randomization and more advanced functions profiles of €400,- and €900,- are required. This was simply not a reasonable option. Also in the upgrade process to a paid profile, there were some issues with payment because of a two week period it takes to verify the payment and upgrade the profile. The payment, and upgrade, were made just before the survey was intended to be finished and distributed. After quick contact with SurveyMonkey a temporary upgraded free profile was received before the actual upgraded profile was created. In conclusion, the delay on sending out the survey was in total about two weeks. Some software support from the university, as SPSS was used for the statistical analyses, could have really been of major support in developing the survey.

The third limitation is the inability to create a control group. The survey was intended to be two-fold between an employee and a supervisor to create a control mechanism. With the impression management questions, a control is created to control for dishonesty in answering the survey items. The respondents however, did not find the possibility to submit the survey in a two-way form. In the reactions there were some comments on the nature of the items as to sensitive and the respondents would not present these to their personnel. The inability to perform a two-way survey was conventional for a large proportion of the respondents as they are self-employed or interim workers with no option to partake the survey with a second person. The survey is therefore performed in a singular way, with the respondents fulfilling the items from a self perceived perspective.

The last major limitation of this thesis is the lack of academic literature on the subject. There are lots of books written on the topic of loyalty but relevant academic research on loyalty is limited. This has led to little support for the theory of this thesis and created the necessity to investigate other theories and models that supported the theorized concepts of foci and bases. The lack of a complete theory on the topic of loyalty does provide a lot of opportunities and gives freedom for interpretation and new insights.

## 5.3 Recommendations

### 5.3.1 Future research

Most recent research on loyalty reports on a positive relation between supervisorial commitment and performance. As explained in the first chapters, this form of loyalty is undesirable but, because it is the only significant form of loyalty that is related to performance, researchers use it as a relevant alternative. They theorize that the supervisor is the direct embodiment of the organization and the one the employees actually meet face to face. The supervisor also rules on reward and punishment and is the most important entity in the employees work environment. Loyalty to this person is argued to be relevant. The cons of this form of loyalty are not included in these papers and it is simply described that the form of organizational loyalty, opposed to supervisorial loyalty, does not have a significant relation.

This thesis has disputed the existing results and loyalty perspective and concludes that there is a significant positive relation between the pure form of organizational commitment and performance. This provides no need to defend supervisorial commitment and it is, as argued, extensively discouraged. On the other hand, the examined loyalty perspective of employee loyalty to the organization with alignment of norms and values is perceived to be theoretical valuable as it is intrinsic, long term based and focuses on goal congruence and supports the agency theory. The statistical significant positive relation with in-role performance, as a result of this examination, contributes to the importance of this form of loyalty.

It is recommended to repeat this research in a larger form, for example as a PhD research study. With a larger time period it is possible to gather information from a large and different sample group(s) and perform deepening empirical research. The single loyalty focus of this thesis can be dropped to enable comparable research between different loyalty foci and bases.

In the individual item regression, some items show high positive relations with a very large significance. Table 3 reports on the singular regression results. Commitment item one: “I/My team member feel(s) very little loyalty to this organization” (reverse scored) (Porter, 1979, OCQ) and commitment item nine “Since starting this job, my/my team members personal values and those of the

organization have become more similar” (Becker et al., 1996), shows high relations with the performance items and are recommended to be included in futures loyalty research on this foci and base.

### 5.3.2 Recommendations for practice

The goal of the thesis is to demonstrate that loyalty, as a soft topic, is of importance for organizations, with the one way to prove it, in the form of a positive relation with performance. The results demonstrate that an increase in loyalty does lead to an increase in employee performance.

This provides a motive for organizations to examine their employees loyalty and whether it is aimed at the organization or the supervisor. Also to examine whether the employees loyalty is based on goal alignment or other bases. When this is not the case, the organization should clearly set goal on supporting organization loyalty with an internalization base on congruence of the organizations and employees norms and values to increase loyalty and performance.

Organizations should incorporate loyalty controls in the management control framework to ensure and increase the loyalty of their personnel and therefore their organizational performance as the sum of all employees performance. Often motivational factors are used to boost personnel performance but the cons of these short term and extrinsic motivational methods are obvious and even dangerous. Loyalty, in the form of organizational commitment and congruence with the organizations norms and values, is intrinsic, long term based and with the pure form of goal alignment with the organizations goals an answer for the agency conflict.

In the current business culture, there is a excess of misconduct, fraud and unethical behavior. All forms of unloyal behavior. When controlling for loyalty, the organization also controls on unwanted behavior in banning out the desire to trespass the rules as the intrinsic values are addressed and a culture of desirable soft aspects as loyalty, motivation, trust, and ethics is created to strengthen the employees loyalty and employees performance to a sum of increased organizations performance.

Soft controls are a phenomenon that arose this decade as the answer for the failure of hard control systems with the financial crisis as peak catastrophe and numerous different examples during the years until the present day. It is often believed that people will not change if the current system in which they work does not change. Banking is an example. Employees work in a rollercoaster of stimuli of which it is hard to break away from. The system is anti-loyal with extreme employee turnover numbers, individualism and it feeds misconduct. Soft controls should be implemented and focus on integrity aspect to ensure long term continuance. In a system that focuses only on bottom line, it should be interesting to incorporate a method that increases performance: loyalty.

### 5.3.3 Personal reflection

I have a preference for the softer aspects in managerial control, and loyalty is one of the main concepts. As discussed in the preface, one of the inspirations for this thesis is my father and his job engagement for almost 50 years. The relationship between my father and his employer is exceptional for its duration. At least in a modern perspective. Of course, I discussed my thesis (topic), the meaning of loyalty and how I should use this for my own life with my father. I am, after all, a financial of higher education with lower connection to the organizations core business and it is highly unlikely that I will work for only one or few firms in my career. So, why should I care about these organizations? Why should I be loyal? And, why invest in a relation that is not expected to last very long? When following this thesis' results, the answer is simple; because of the relation of loyalty with performance, for my own benefit. But that is not an intrinsic source of loyalty, but more connected to career and financial goals. When I asked my father about this ambivalence he said to me the same thing he said when I took over his membership as a blood donor. At first, I protested against the high salary of the foundation's board members as I discovered the world of blood donation as a business. My father said: "It is not about someone else. It is about yourself and your decision on doing what you judge to be right. You do this because you want to do some good. All else is irrelevant". And he is right. When an organization has similar norms and values, I will be loyal, because I choose that I want to be so. Not because of external factors. I don't need a promise of payment or a long lasting contract to be loyal and show commitment. I will because I choose to and I am that kind of a person.

And my father? Well, his loyalty and commitment ensured him job security for the larger part of his life and a solid pension for the last few chapters. So maybe answering the question on the personal loyalty dilemma did not need this thesis after all. The answer was close, real close. Thanks dad!

## 6. References

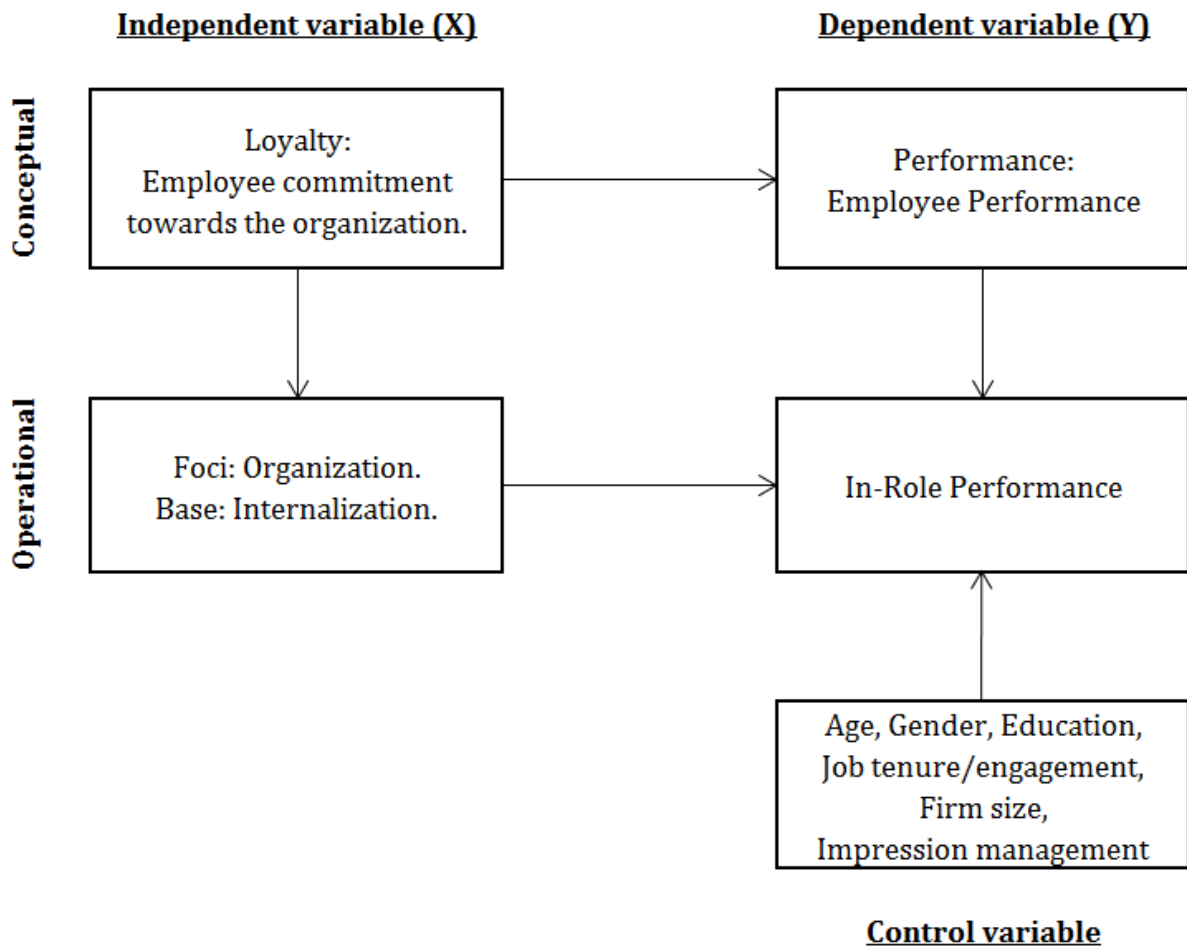
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# Appendix

## A. Predictive validity framework





## B. Survey invitation text

### Loyalty & Control, a lack in the Management Control framework.

Do you see it? Not just the high-profile fraud cases but a general increase in the distance between the employee and the organization.

By motivating we try to assure us of the efforts of our employees. But isn't this just a repressive measure aimed at short-term, aimed at hard targets?

Organizations need a strong preventive control in the management control system. Targeting the long-term, intrinsic commitment that fit personal goals.

Loyalty seems to be the answer. When your goals are similar to those of your employees (agency theory) and when your employees develop a strong relationship with the organization, performance will follow!

-

I invite you to participate in my research, where I, by means of a survey, try to show that loyalty is of value for each management control system.

I would like to ask you to visit the link below and complete the survey. The survey is anonymous and takes only 5 to 10 minutes.

<https://nl.surveymonkey.com/r/Loyaltyandcontrol>

Thank you for your cooperation! Your questions and / or comments are very welcome!

Sincerely,

Tim Hoetelmans

[timhoetelmans@outlook.com/431024th@eur.nl](mailto:timhoetelmans@outlook.com/431024th@eur.nl)

## C. Survey Loyalty & Control

### Loyalty & Control - employee

Welcome!

Thank you for your participation in the survey.  
Completing the questionnaire is anonymous and takes only 5 to 10 minutes.  
The text below gives a short explanation.  
Sincerely, Tim Hoetelmans

The survey aims to examine the loyalty of the employee towards the organization.

In order to link you and your teamleaders' respons, I would ask you to enter the unique code that allows me to match both your results.

- \* 1 Enter the unique code from your teamleader.  
( 3 letters, 3 numbers and 1 punctuation mark).

- \* 2 What is your gender?

Male

- \* 3 What is your age?

<20

20-30

30-40

40-50

50-60

>60

- \* 4 What is your highest level of education?

Trade Diploma

Associate Degree

BSc

MSc

MSc+

- \* 5 What is the tenure you are with your current employer?

0-2 years

2-5 years

5-10 years

10-20 years

>20 years

\* 6 What is the size of your organization?

- 1-50 employees
- 50-100 employees
- 100-500 employees
- 500-2.000 employees
- >2.000 employees

\* 7 What is the scope of your employment?

- 1.0-0,9 fte
- 0.9-0.75 fte
- 0.75-0.5 fte
- <0.5 fte

8 Answer this question for yourself.

As the 'war on talent' is rising, you are a wanted employee for many firms.

For which additional monthly net salary will you transfer from your current employer to a competitor?

- € 250,-
- € 500,-
- € 750,-
- € 1.000,-
- € 1.250,-
- € 1.500,-
- € 2.000,-
- > € 2.000,-
- Inapplicable

9 I am not always honest.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10 I sometimes tell lies if I have to.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11 I never cover up mistakes.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 12 There have been occasions when I have taken advantage of someone.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 13 I sometimes try to get even rather than to forgive and forget.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 14 I said something bad about a colleague.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 15 I avoid listening, when I hear people talking privately.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 16 I never take things that don't belong to me.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 17 I do not gossip about other people's business.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 18 I feel very little loyalty towards this organization.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 19 I find that my values and the organization's values are very similar.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 20 Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 21 I really care about the fate of the organization.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 22 To know that my own work had made a contribution to the good of the organization could please me.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
- 
- 23 In my work, I like to feel that I make some effort not just for myself, but for the organization as well.
- Strongly disagree    Disagree    Neutral    Agree    Completely agree    Inapplicable
-

24 If the values of this organization were different, I would not be as attached to this organization.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25 My attachment to this organization is primarily based on the similarity of my values and those represented by the organization.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26 Since starting this job, my personal values and those of the organization have become more similar.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27 The reason I prefer this organization to others is because of where it stands for, its values.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28 I complete work in a timely and effective manner.

Strongly disagree	Disagree	Neutral	Agree	Complete agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

34 I fulfill responsibilities specified in the job description.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

35 I engage in activities that can positively affect my performance evaluation.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

36 I perform tasks that are expected of me.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

37 I always complete job assignments on time.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29 I performe high-quality work.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30 I complete tasks in an unsatisfactory manner.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31 I adequately complete assigned duties.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32 I meet formal performance requirements of my job.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33 I neglect aspects of the job I am obliged to perform.

Strongly disagree	Disagree	Neutral	Agree	Completely agree	Inapplicable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you!

Thanks for your participation.

Do you want to receive the results and the master thesis 'The Relation between Loyalty and Control'? Please send a message to 431024th@eur.nl or timhoetelmans@outlook.com.

Sincerely,  
Tim Hoetelmans

38 Questions and comments.

## D. Descriptive Statistics

Descriptive statistics all variables.

**Descriptive Statistics**

	N	Mean	Std. Deviation
Geslacht	43	.91	.294
Leeftijd	43	3.67	1.107
Opleiding	43	3.65	1.044
Tenure	43	3.12	1.179
Omvang	43	2.86	1.552
Fte	43	1.14	.467
Teaser	35	4.43	1.803
TOTIM	43	4.0019	.51622
TOTCOM	43	4.2302	.47436
TOTPER	43	4.3895	.50852
Valid N (listwise)	35		

**Descriptive Statistics**

	N	Mean	Std. Deviation
IM1	43	3.8605	.88859
IM2	43	3.8605	.80420
IM3	43	3.6744	.86523
IM4	43	4.3488	.89665
IM5	43	4.6047	.58308
IM6	43	3.6977	.93948
IM7	43	3.6279	1.06956
IM8	43	4.3023	.63751
IM9	43	3.7674	.78185
Valid N (listwise)	43		

**Descriptive Statistics**

	N	Mean	Std. Deviation
PER1	43	4.3023	.63751
PER2	43	4.3721	.69087
PER3	43	4.4651	.79728
PER4	42	4.2619	.62701
PER5	43	4.3488	.86969
PER6	43	4.4884	.50578
PER7	43	4.2326	.94711
PER8	43	4.3256	.64442
PER9	43	4.4186	.54478
PER10	41	4.5122	.55326
Valid N (listwise)	40		

**Descriptive Statistics**

	N	Mean	Std. Deviation
COM1	43	4.5814	.49917
COM2	43	4.3721	.65550
COM3	43	4.1395	.94065
COM4	43	4.6744	.52194
COM5	43	4.5116	.50578
COM6	43	4.5349	.50468
COM7	43	3.8372	.89789
COM8	43	3.5349	1.00827
COM9	43	4.3953	.72832
COM10	43	3.7209	.90831
Valid N (listwise)	43		

## E. Correlations

Pearson Correlations all variables.

**Correlations**

		Geslacht	Leeftijd	Opleiding	Tenure	Omvang	Fte	Teaser	TOTIM	TOTCOM	TOTPER
Geslacht	Pearson Correlation	1	.124	.125	.101	.284	-.597**	.339*	.229	.123	-.007
	Sig. (2-tailed)		.427	.426	.521	.065	.000	.046	.140	.432	.966
	N	43	43	43	43	43	43	35	43	43	43
Leeftijd	Pearson Correlation	.124	1	.023	.559**	-.221	-.048	.644**	.044	.010	.202
	Sig. (2-tailed)	.427		.884	.000	.154	.759	.000	.781	.949	.193
	N	43	43	43	43	43	43	35	43	43	43
Opleiding	Pearson Correlation	.125	.023	1	-.044	.175	-.093	.335*	-.013	-.113	.026
	Sig. (2-tailed)	.426	.884		.781	.262	.553	.049	.932	.471	.870
	N	43	43	43	43	43	43	35	43	43	43
Tenure	Pearson Correlation	.101	.559**	-.044	1	-.004	-.117	.454**	.238	.194	.313*
	Sig. (2-tailed)	.521	.000	.781		.980	.457	.006	.124	.214	.041
	N	43	43	43	43	43	43	35	43	43	43
Omvang	Pearson Correlation	.284	-.221	.175	-.004	1	-.137	.173	.122	.032	.086
	Sig. (2-tailed)	.065	.154	.262	.980		.382	.320	.434	.840	.584
	N	43	43	43	43	43	43	35	43	43	43
Fte	Pearson Correlation	-.597**	-.048	-.093	-.117	-.137	1	-.367*	-.375*	-.267	-.154
	Sig. (2-tailed)	.000	.759	.553	.457	.382		.030	.013	.084	.324
	N	43	43	43	43	43	43	35	43	43	43
Teaser	Pearson Correlation	.339*	.644**	.335*	.454**	.173	-.367*	1	.228	.176	.397*
	Sig. (2-tailed)	.046	.000	.049	.006	.320	.030		.188	.313	.018
	N	35	35	35	35	35	35	35	35	35	35
TOTIM	Pearson Correlation	.229	.044	-.013	.238	.122	-.375*	.228	1	.583**	.557**
	Sig. (2-tailed)	.140	.781	.932	.124	.434	.013	.188		.000	.000
	N	43	43	43	43	43	43	35	43	43	43
TOTCOM	Pearson Correlation	.123	.010	-.113	.194	.032	-.267	.176	.583**	1	.631**
	Sig. (2-tailed)	.432	.949	.471	.214	.840	.084	.313	.000		.000
	N	43	43	43	43	43	43	35	43	43	43
TOTPER	Pearson Correlation	-.007	.202	.026	.313*	.086	-.154	.397*	.557**	.631**	1
	Sig. (2-tailed)	.966	.193	.870	.041	.584	.324	.018	.000	.000	
	N	43	43	43	43	43	43	35	43	43	43

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

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



## F. Results Factor Analysis

Factor development on commitment variable items.

**Total Variance Explained**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.648	46.485	46.485	3.849	38.494	38.494
2	1.685	16.849	63.334	2.484	24.840	63.334
3	.911	9.108	72.442			
4	.815	8.153	80.595			
5	.560	5.605	86.199			
6	.467	4.668	90.867			
7	.358	3.585	94.452			
8	.324	3.236	97.688			
9	.141	1.405	99.093			
10	.091	.907	100.000			

Extraction Method: Principal Component Analysis.

Factor development on performance variable items.

**Total Variance Explained**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.005	60.054	60.054	4.937	49.370	49.370
2	1.504	15.045	75.099	2.573	25.729	75.099
3	.811	8.107	83.206			
4	.477	4.767	87.973			
5	.393	3.926	91.899			
6	.295	2.947	94.846			
7	.204	2.041	96.887			
8	.165	1.653	98.540			
9	.103	1.028	99.568			
10	.043	.432	100.000			

Extraction Method: Principal Component Analysis.

Factor development on impression management variable items.

**Total Variance Explained**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.814	42.379	42.379	2.554	28.381	28.381
2	1.564	17.380	59.759	2.200	24.442	52.824
3	1.258	13.976	73.735	1.882	20.912	73.735
4	.851	9.459	83.194			
5	.656	7.284	90.478			
6	.377	4.192	94.670			
7	.239	2.658	97.328			
8	.162	1.799	99.127			
9	.079	.873	100.000			

Extraction Method: Principal Component Analysis.

## G. Results Main Regression Analysis

### Linear regression Commitment F1 on Performance F1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.466 <sup>a</sup>	.217	.197	.89618561

a. Predictors: (Constant), REGR factor score 1 for analysis 1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.480	1	8.480	10.559	.002 <sup>b</sup>
	Residual	30.520	38	.803		
	Total	39.000	39			

a. Dependent Variable: REGR factor score 1 for analysis 1

b. Predictors: (Constant), REGR factor score 1 for analysis 1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.029	.142		-.201	.842
	REGR factor score 1 for analysis 1	.477	.147	.466	3.249	.002

a. Dependent Variable: REGR factor score 1 for analysis 1

### Linear regression Commitment F2 on Performance F1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.350 <sup>a</sup>	.122	.099	.94910298

a. Predictors: (Constant), REGR factor score 2 for analysis 1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.770	1	4.770	5.295	.027 <sup>b</sup>
	Residual	34.230	38	.901		
	Total	39.000	39			

a. Dependent Variable: REGR factor score 1 for analysis 1

b. Predictors: (Constant), REGR factor score 2 for analysis 1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.021	.150		-.137	.891
	REGR factor score 2 for analysis 1	.354	.154	.350	2.301	.027

a. Dependent Variable: REGR factor score 1 for analysis 1

## Linear regression Commitment F1 on Performance F2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.286 <sup>a</sup>	.082	.058	.97063308

a. Predictors: (Constant), REGR factor score 1 for analysis 1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.199	1	3.199	3.396	.073 <sup>b</sup>
	Residual	35.801	38	.942		
	Total	39.000	39			

a. Dependent Variable: REGR factor score 2 for analysis 1

b. Predictors: (Constant), REGR factor score 1 for analysis 1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.018	.154		-.114	.910
	REGR factor score 1 for analysis 1	.293	.159	.286	1.843	.073

a. Dependent Variable: REGR factor score 2 for analysis 1

## Linear regression Commitment F2 on Performance F2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.013 <sup>a</sup>	.000	-.026	1.01298976

a. Predictors: (Constant), REGR factor score 2 for analysis 1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.006	1	.006	.006	.938 <sup>b</sup>
	Residual	38.994	38	1.026		
	Total	39.000	39			

a. Dependent Variable: REGR factor score 2 for analysis 1

b. Predictors: (Constant), REGR factor score 2 for analysis 1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.001	.160		.005	.996
	REGR factor score 2 for analysis 1	-.013	.164	-.013	-.079	.938

a. Dependent Variable: REGR factor score 2 for analysis 1

## H. Results Singular Item Regression Analysis

Linear regression Commitment item 1 on Performance item 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632 <sup>a</sup>	.399	.384	.50024

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.810	1	6.810	27.213	.000 <sup>b</sup>
	Residual	10.260	41	.250		
	Total	17.070	42			

a. Dependent Variable: PER1

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.607	.713		.851	.399
	COM1	.807	.155	.632	5.217	.000

a. Dependent Variable: PER1

Linear regression Commitment item 1 on Performance item 2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.462 <sup>a</sup>	.214	.195	.61999

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.287	1	4.287	11.151	.002 <sup>b</sup>
	Residual	15.760	41	.384		
	Total	20.047	42			

a. Dependent Variable: PER2

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.440	.883		1.631	.111
	COM1	.640	.192	.462	3.339	.002

a. Dependent Variable: PER2

Linear regression Commitment item 1 on Performance item 3

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.501 <sup>a</sup>	.251	.233	.69843

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.698	1	6.698	13.730	.001 <sup>b</sup>
	Residual	20.000	41	.488		
	Total	26.698	42			

a. Dependent Variable: PER3

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.800	.995		.804	.426
	COM1	.800	.216	.501	3.705	.001

a. Dependent Variable: PER3

Linear regression Commitment item 1 on Performance item 4

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.349 <sup>a</sup>	.122	.100	.59498

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.959	1	1.959	5.534	.024 <sup>b</sup>
	Residual	14.160	40	.354		
	Total	16.119	41			

a. Dependent Variable: PER4

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.240	.864		2.591	.013
	COM1	.440	.187	.349	2.352	.024

a. Dependent Variable: PER4

## Linear regression Commitment item 1 on Performance item 6

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 <sup>a</sup>	.204	.185	.45669

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.193	1	2.193	10.515	.002 <sup>b</sup>
	Residual	8.551	41	.209		
	Total	10.744	42			

a. Dependent Variable: PER6

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.391	.651		3.676	.001
	COM1	.458	.141	.452	3.243	.002

a. Dependent Variable: PER6

## Linear regression Commitment item 1 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.582 <sup>a</sup>	.339	.322	.53048

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.904	1	5.904	20.980	.000 <sup>b</sup>
	Residual	11.538	41	.281		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.884	.756		1.171	.249
	COM1	.751	.164	.582	4.580	.000

a. Dependent Variable: PER8

Linear regression Commitment item 1 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.660 <sup>a</sup>	.435	.421	.41438

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.425	1	5.425	31.595	.000 <sup>b</sup>
	Residual	7.040	41	.172		
	Total	12.465	42			

a. Dependent Variable: PER9

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.120	.590		1.898	.065
	COM1	.720	.128	.660	5.621	.000

a. Dependent Variable: PER9

Linear regression Commitment item 1 on Performance item 10

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.475 <sup>a</sup>	.226	.206	.49296

a. Predictors: (Constant), COM1

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.766	1	2.766	11.384	.002 <sup>b</sup>
	Residual	9.478	39	.243		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM1

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.057	.732		2.812	.008
	COM1	.533	.158	.475	3.374	.002

a. Dependent Variable: PER10

Linear regression Commitment item 2 on Performance item 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.522 <sup>a</sup>	.273	.255	.55033

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.652	1	4.652	15.361	.000 <sup>b</sup>
	Residual	12.418	41	.303		
	Total	17.070	42			

a. Dependent Variable: PER1

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.082	.573		3.637	.001
	COM2	.508	.130	.522	3.919	.000

a. Dependent Variable: PER1

Linear regression Commitment item 2 on Performance item 2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.370 <sup>a</sup>	.137	.116	.64949

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.751	1	2.751	6.523	.014 <sup>b</sup>
	Residual	17.295	41	.422		
	Total	20.047	42			

a. Dependent Variable: PER2

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.665	.676		3.944	.000
	COM2	.390	.153	.370	2.554	.014

a. Dependent Variable: PER2



Linear regression Commitment item 2 on Performance item 3

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.390 <sup>a</sup>	.152	.131	.74308

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.058	1	4.058	7.350	.010 <sup>b</sup>
	Residual	22.639	41	.552		
	Total	26.698	42			

a. Dependent Variable: PER3

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.392	.773		3.094	.004
	COM2	.474	.175	.390		

a. Dependent Variable: PER3

Linear regression Commitment item 2 on Performance item 4

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.577 <sup>a</sup>	.333	.317	.51828

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.374	1	5.374	20.008	.000 <sup>b</sup>
	Residual	10.745	40	.269		
	Total	16.119	41			

a. Dependent Variable: PER4

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.862	.543		3.432	.001
	COM2	.548	.122	.577		

a. Dependent Variable: PER4

## Linear regression Commitment item 2 on Performance item 6

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.301 <sup>a</sup>	.090	.068	.48823

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.971	1	.971	4.073	.050 <sup>b</sup>
	Residual	9.773	41	.238		
	Total	10.744	42			

a. Dependent Variable: PER6

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.474	.508		6.839	.000
	COM2	.232	.115	.301	2.018	.050

a. Dependent Variable: PER6

## Linear regression Commitment item 2 on Performance item 7

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356 <sup>a</sup>	.127	.105	.89584

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.771	1	4.771	5.945	.019 <sup>b</sup>
	Residual	32.903	41	.803		
	Total	37.674	42			

a. Dependent Variable: PER7

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.985	.932		2.129	.039
	COM2	.514	.211	.356	2.438	.019

a. Dependent Variable: PER7

Linear regression Commitment item 2 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.495 <sup>a</sup>	.246	.227	.56654

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.282	1	4.282	13.341	.001 <sup>b</sup>
	Residual	13.160	41	.321		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.196	.589		3.725	.001
	COM2	.487	.133	.495	3.653	.001

a. Dependent Variable: PER8

Linear regression Commitment item 2 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.420 <sup>a</sup>	.177	.156	.50035

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.201	1	2.201	8.792	.005 <sup>b</sup>
	Residual	10.264	41	.250		
	Total	12.465	42			

a. Dependent Variable: PER9

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.892	.521		5.555	.000
	COM2	.349	.118	.420	2.965	.005

a. Dependent Variable: PER9

Linear regression Commitment item 2 on Performance item 10

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.431 <sup>a</sup>	.186	.165	.50549

a. Predictors: (Constant), COM2

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.279	1	2.279	8.918	.005 <sup>b</sup>
	Residual	9.965	39	.256		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM2

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.937	.533		5.508	.000
	COM2	.361	.121	.431	2.986	.005

a. Dependent Variable: PER10

Linear regression Commitment item 3 on Performance item 3

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.515 <sup>a</sup>	.265	.247	.69190

a. Predictors: (Constant), COM3

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.070	1	7.070	14.768	.000 <sup>b</sup>
	Residual	19.628	41	.479		
	Total	26.698	42			

a. Dependent Variable: PER3

b. Predictors: (Constant), COM3

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.660	.482		5.523	.000
	COM3	.436	.113	.515	3.843	.000

a. Dependent Variable: PER3

### Linear regression Commitment item 4 on Performance item 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.374 <sup>a</sup>	.140	.119	.59831

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.393	1	2.393	6.685	.013 <sup>b</sup>
	Residual	14.677	41	.358		
	Total	17.070	42			

a. Dependent Variable: PER1

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.165	.832		2.602	.013
	COM4	.457	.177	.374		

a. Dependent Variable: PER1

### Linear regression Commitment item 4 on Performance item 2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.212 <sup>a</sup>	.045	.022	.68336

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.900	1	.900	1.928	.173 <sup>b</sup>
	Residual	19.146	41	.467		
	Total	20.047	42			

a. Dependent Variable: PER2

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.061	.950		3.222	.002
	COM4	.280	.202	.212		

a. Dependent Variable: PER2

Linear regression Commitment item 4 on Performance item 5

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.414 <sup>a</sup>	.171	.151	.80145

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.432	1	5.432	8.457	.006 <sup>b</sup>
	Residual	26.335	41	.642		
	Total	31.767	42			

a. Dependent Variable: PER5

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.128	1.114		1.012	.317
	COM4	.689	.237	.414	2.908	.006

a. Dependent Variable: PER5

Linear regression Commitment item 4 on Performance item 6

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436 <sup>a</sup>	.190	.171	.46062

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.045	1	2.045	9.638	.003 <sup>b</sup>
	Residual	8.699	41	.212		
	Total	10.744	42			

a. Dependent Variable: PER6

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.512	.640		3.923	.000
	COM4	.423	.136	.436	3.105	.003

a. Dependent Variable: PER6

### Linear regression Commitment item 4 on Performance item 7

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.638 <sup>a</sup>	.408	.393	.73778

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.357	1	15.357	28.214	.000 <sup>b</sup>
	Residual	22.317	41	.544		
	Total	37.674	42			

a. Dependent Variable: PER7

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.183	1.026		-1.153	.255
	COM4	1.159	.218	.638	5.312	.000

a. Dependent Variable: PER7

### Linear regression Commitment item 4 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.393 <sup>a</sup>	.155	.134	.59963

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.700	1	2.700	7.509	.009 <sup>b</sup>
	Residual	14.742	41	.360		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.055	.834		2.465	.018
	COM4	.486	.177	.393	2.740	.009

a. Dependent Variable: PER8

Linear regression Commitment item 4 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.491 <sup>a</sup>	.241	.222	.48043

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.002	1	3.002	13.005	.001 <sup>b</sup>
	Residual	9.463	41	.231		
	Total	12.465	42			

a. Dependent Variable: PER9

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.024	.668		3.031	.004
	COM4	.512	.142	.491	3.606	.001

a. Dependent Variable: PER9

Linear regression Commitment item 4 on Performance item 10

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.317 <sup>a</sup>	.100	.077	.53141

a. Predictors: (Constant), COM4

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.230	1	1.230	4.357	.043 <sup>b</sup>
	Residual	11.013	39	.282		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM4

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.937	.759		3.869	.000
	COM4	.336	.161	.317	2.087	.043

a. Dependent Variable: PER10



Linear regression Commitment item 5 on Performance item 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.395 <sup>a</sup>	.156	.135	.59278

a. Predictors: (Constant), COM5

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.663	1	2.663	7.578	.009 <sup>b</sup>
	Residual	14.407	41	.351		
	Total	17.070	42			

a. Dependent Variable: PER1

b. Predictors: (Constant), COM5

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.056	.821		2.505	.016
	COM5	.498	.181	.395	2.753	.009

a. Dependent Variable: PER1

Linear regression Commitment item 5 on Performance item 3

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.400 <sup>a</sup>	.160	.139	.73973

a. Predictors: (Constant), COM5

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.263	1	4.263	7.790	.008 <sup>b</sup>
	Residual	22.435	41	.547		
	Total	26.698	42			

a. Dependent Variable: PER3

b. Predictors: (Constant), COM5

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.623	1.024		1.585	.121
	COM5	.630	.226	.400	2.791	.008

a. Dependent Variable: PER3

Linear regression Commitment item 5 on Performance item 4

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326 <sup>a</sup>	.106	.084	.60009

a. Predictors: (Constant), COM5

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.715	1	1.715	4.761	.035 <sup>b</sup>
	Residual	14.405	40	.360		
	Total	16.119	41			

a. Dependent Variable: PER4

b. Predictors: (Constant), COM5

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.432	.844		2.882	.006
	COM5	.405	.185	.326	2.182	.035

a. Dependent Variable: PER4

Linear regression Commitment item 5 on Performance item 6

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.396 <sup>a</sup>	.157	.136	.47004

a. Predictors: (Constant), COM5

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.686	1	1.686	7.630	.009 <sup>b</sup>
	Residual	9.058	41	.221		
	Total	10.744	42			

a. Dependent Variable: PER6

b. Predictors: (Constant), COM5

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.701	.651		4.150	.000
	COM5	.396	.143	.396	2.762	.009

a. Dependent Variable: PER6

Linear regression Commitment item 5 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.353 <sup>a</sup>	.125	.104	.61016

a. Predictors: (Constant), COM5

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.178	1	2.178	5.850	.020 <sup>b</sup>
	Residual	15.264	41	.372		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM5

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.294	.845		2.715	.010
	COM5	.450	.186	.353	2.419	.020

a. Dependent Variable: PER8

Linear regression Commitment item 5 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.414 <sup>a</sup>	.171	.151	.50192

a. Predictors: (Constant), COM5

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.136	1	2.136	8.479	.006 <sup>b</sup>
	Residual	10.329	41	.252		
	Total	12.465	42			

a. Dependent Variable: PER9

b. Predictors: (Constant), COM5

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.407	.695		3.463	.001
	COM5	.446	.153	.414	2.912	.006

a. Dependent Variable: PER9

Linear regression Commitment item 5 on Performance item 10

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.424 <sup>a</sup>	.179	.158	.50758

a. Predictors: (Constant), COM5

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.196	1	2.196	8.524	.006 <sup>b</sup>
	Residual	10.048	39	.258		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM5

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.407	.726		3.317	.002
	COM5	.464	.159	.424	2.920	.006

a. Dependent Variable: PER10

Linear regression Commitment item 6 on Performance item 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.373 <sup>a</sup>	.139	.118	.59856

a. Predictors: (Constant), COM6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.381	1	2.381	6.645	.014 <sup>b</sup>
	Residual	14.689	41	.358		
	Total	17.070	42			

a. Dependent Variable: PER1

b. Predictors: (Constant), COM6

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.163	.835		2.591	.013
	COM6	.472	.183	.373	2.578	.014

a. Dependent Variable: PER1

### Linear regression Commitment item 6 on Performance item 2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.303 <sup>a</sup>	.092	.070	.66630

a. Predictors: (Constant), COM6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.844	1	1.844	4.154	.048 <sup>b</sup>
	Residual	18.202	41	.444		
	Total	20.047	42			

a. Dependent Variable: PER2

b. Predictors: (Constant), COM6

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.489	.929		2.678	.011
	COM6	.415	.204	.303		

a. Dependent Variable: PER2

### Linear regression Commitment item 6 on Performance item 3

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.373 <sup>a</sup>	.139	.118	.74874

a. Predictors: (Constant), COM6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.713	1	3.713	6.623	.014 <sup>b</sup>
	Residual	22.985	41	.561		
	Total	26.698	42			

a. Dependent Variable: PER3

b. Predictors: (Constant), COM6

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.793	1.044		1.717	.093
	COM6	.589	.229	.373		

a. Dependent Variable: PER3

Linear regression Commitment item 6 on Performance item 4

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.384 <sup>a</sup>	.148	.126	.58607

a. Predictors: (Constant), COM6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.380	1	2.380	6.929	.012 <sup>b</sup>
	Residual	13.739	40	.343		
	Total	16.119	41			

a. Dependent Variable: PER4

b. Predictors: (Constant), COM6

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.087	.831		2.511	.016
	COM6	.478	.182	.384	2.632	.012

a. Dependent Variable: PER4

Linear regression Commitment item 6 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.330 <sup>a</sup>	.109	.087	.61563

a. Predictors: (Constant), COM6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.903	1	1.903	5.020	.031 <sup>b</sup>
	Residual	15.539	41	.379		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM6

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.413	.859		2.810	.008
	COM6	.422	.188	.330	2.241	.031

a. Dependent Variable: PER8

Linear regression Commitment item 6 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.379 <sup>a</sup>	.143	.122	.51034

a. Predictors: (Constant), COM6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.787	1	1.787	6.861	.012 <sup>b</sup>
	Residual	10.678	41	.260		
	Total	12.465	42			

a. Dependent Variable: PER9

b. Predictors: (Constant), COM6

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.565	.712		3.604	.001
	COM6	.409	.156	.379		

a. Dependent Variable: PER9

Linear regression Commitment item 6 on Performance item 10

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.424 <sup>a</sup>	.179	.158	.50758

a. Predictors: (Constant), COM6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.196	1	2.196	8.524	.006 <sup>b</sup>
	Residual	10.048	39	.258		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM6

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.407	.726		3.317	.002
	COM6	.464	.159	.424		

a. Dependent Variable: PER10

### Linear regression Commitment item 8 on Performance item 6

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.363 <sup>a</sup>	.132	.110	.47706

a. Predictors: (Constant), COM8

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.413	1	1.413	6.209	.017 <sup>b</sup>
	Residual	9.331	41	.228		
	Total	10.744	42			

a. Dependent Variable: PER6

b. Predictors: (Constant), COM8

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.845	.268		14.341	.000
	COM8	.182	.073	.363	2.492	.017

a. Dependent Variable: PER6

### Linear regression Commitment item 8 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.349 <sup>a</sup>	.121	.100	.61134

a. Predictors: (Constant), COM8

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.119	1	2.119	5.670	.022 <sup>b</sup>
	Residual	15.323	41	.374		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM8

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.538	.344		10.297	.000
	COM8	.223	.094	.349	2.381	.022

a. Dependent Variable: PER8



### Linear regression Commitment item 8 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.320 <sup>a</sup>	.102	.080	.52248

a. Predictors: (Constant), COM8

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.273	1	1.273	4.663	.037 <sup>b</sup>
	Residual	11.192	41	.273		
	Total	12.465	42			

a. Dependent Variable: PER9

b. Predictors: (Constant), COM8

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.808	.294		12.968	.000
	COM8	.173	.080	.320		

a. Dependent Variable: PER9

### Linear regression Commitment item 9 on Performance item 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.608 <sup>a</sup>	.370	.355	.51219

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.314	1	6.314	24.069	.000 <sup>b</sup>
	Residual	10.756	41	.262		
	Total	17.070	42			

a. Dependent Variable: PER1

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.962	.483		4.060	.000
	COM9	.532	.109	.608		

a. Dependent Variable: PER1

## Linear regression Commitment item 9 on Performance item 2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.505 <sup>a</sup>	.255	.237	.60349

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.114	1	5.114	14.043	.001 <sup>b</sup>
	Residual	14.932	41	.364		
	Total	20.047	42			

a. Dependent Variable: PER2

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.266	.569		3.980	.000
	COM9	.479	.128	.505	3.747	.001

a. Dependent Variable: PER2

## Linear regression Commitment item 9 on Performance item 3

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.660 <sup>a</sup>	.435	.422	.60633

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.625	1	11.625	31.620	.000 <sup>b</sup>
	Residual	15.073	41	.368		
	Total	26.698	42			

a. Dependent Variable: PER3

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.290	.572		2.255	.030
	COM9	.722	.128	.660	5.623	.000

a. Dependent Variable: PER3

Linear regression Commitment item 9 on Performance item 4

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.458 <sup>a</sup>	.210	.190	.56424

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.384	1	3.384	10.630	.002 <sup>b</sup>
	Residual	12.735	40	.318		
	Total	16.119	41			

a. Dependent Variable: PER4

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.453	.562		4.368	.000
	COM9	.408	.125	.458	3.260	.002

a. Dependent Variable: PER4

Linear regression Commitment item 9 on Performance item 6

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.304 <sup>a</sup>	.092	.070	.48774

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.991	1	.991	4.164	.048 <sup>b</sup>
	Residual	9.754	41	.238		
	Total	10.744	42			

a. Dependent Variable: PER6

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.562	.460		7.739	.000
	COM9	.211	.103	.304	2.041	.048

a. Dependent Variable: PER6

### Linear regression Commitment item 9 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632 <sup>a</sup>	.400	.385	.50528

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.974	1	6.974	27.317	.000 <sup>b</sup>
	Residual	10.468	41	.255		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.866	.477		3.915	.000
	COM9	.559	.107	.632	5.227	.000

a. Dependent Variable: PER8

### Linear regression Commitment item 9 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.567 <sup>a</sup>	.321	.304	.46160

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.934	1	3.934	18.462	.000 <sup>b</sup>
	Residual	8.310	39	.213		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.643	.441		5.996	.000
	COM9	.423	.099	.567	4.297	.000

a. Dependent Variable: PER10

Linear regression Commitment item 9 on Performance item 10

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.567 <sup>a</sup>	.321	.304	.46160

a. Predictors: (Constant), COM9

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.934	1	3.934	18.462	.000 <sup>b</sup>
	Residual	8.310	39	.213		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM9

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.643	.441		5.996	.000
	COM9	.423	.099	.567	4.297	.000

a. Dependent Variable: PER10

Linear regression Commitment item 10 on Performance item 1

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.314 <sup>a</sup>	.098	.076	.61268

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.679	1	1.679	4.473	.041 <sup>b</sup>
	Residual	15.391	41	.375		
	Total	17.070	42			

a. Dependent Variable: PER1

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.483	.398		8.743	.000
	COM10	.220	.104	.314	2.115	.041

a. Dependent Variable: PER1

### Linear regression Commitment item 10 on Performance item 2

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.321 <sup>a</sup>	.103	.081	.66219

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.068	1	2.068	4.716	.036 <sup>b</sup>
	Residual	17.979	41	.439		
	Total	20.047	42			

a. Dependent Variable: PER2

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.463	.431		8.043	.000
	COM10	.244	.112	.321	2.172	.036

a. Dependent Variable: PER2

### Linear regression Commitment item 10 on Performance item 3

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.512 <sup>a</sup>	.262	.244	.69302

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.006	1	7.006	14.588	.000 <sup>b</sup>
	Residual	19.691	41	.480		
	Total	26.698	42			

a. Dependent Variable: PER3

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.792	.451		6.196	.000
	COM10	.450	.118	.512	3.819	.000

a. Dependent Variable: PER3

## Linear regression Commitment item 10 on Performance item 5

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.337 <sup>a</sup>	.114	.092	.82870

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.611	1	3.611	5.258	.027 <sup>b</sup>
	Residual	28.156	41	.687		
	Total	31.767	42			

a. Dependent Variable: PER5

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.148	.539		5.841	.000
	COM10	.323	.141	.337	2.293	.027

a. Dependent Variable: PER5

## Linear regression Commitment item 10 on Performance item 6

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.304 <sup>a</sup>	.092	.070	.48773

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.991	1	.991	4.167	.048 <sup>b</sup>
	Residual	9.753	41	.238		
	Total	10.744	42			

a. Dependent Variable: PER6

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.859	.317		12.168	.000
	COM10	.169	.083	.304	2.041	.048

a. Dependent Variable: PER6

### Linear regression Commitment item 10 on Performance item 7

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326 <sup>a</sup>	.106	.085	.90611

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.012	1	4.012	4.887	.033 <sup>b</sup>
	Residual	33.662	41	.821		
	Total	37.674	42			

a. Dependent Variable: PER7

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.966	.589		5.035	.000
	COM10	.340	.154	.326	2.211	.033

a. Dependent Variable: PER7

### Linear regression Commitment item 10 on Performance item 8

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.525 <sup>a</sup>	.276	.258	.55511

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.808	1	4.808	15.602	.000 <sup>b</sup>
	Residual	12.634	41	.308		
	Total	17.442	42			

a. Dependent Variable: PER8

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.940	.361		8.144	.000
	COM10	.372	.094	.525	3.950	.000

a. Dependent Variable: PER8



Linear regression Commitment item 10 on Performance item 9

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.434 <sup>a</sup>	.189	.169	.49671

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.350	1	2.350	9.524	.004 <sup>b</sup>
	Residual	10.115	41	.247		
	Total	12.465	42			

a. Dependent Variable: PER9

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.450	.323		10.681	.000
	COM10	.260	.084	.434		

a. Dependent Variable: PER9

Linear regression Commitment item 10 on Performance item 10

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.325 <sup>a</sup>	.106	.083	.52991

a. Predictors: (Constant), COM10

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.293	1	1.293	4.603	.038 <sup>b</sup>
	Residual	10.951	39	.281		
	Total	12.244	40			

a. Dependent Variable: PER10

b. Predictors: (Constant), COM10

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.785	.349		10.850	.000
	COM10	.195	.091	.325		

a. Dependent Variable: PER10