

# THE INFLUENCE OF FREE TIME AND PERCEIVED TRUST IN SUPERVISOR ON PERSONAL INITIATIVE



MASTER THESIS – MSc. BUSINESS ADMINISTRATION

A QUANTATIVE STUDY ON THE EFFECTS OF FREE TIME AND PERCEIVED TRUST IN SUPERVISOR ON PERSONAL INITIATIVE

ANOUK SCHEPERS (0378538)

PARTTIME MASTER BEDRIJFSKUNDE  
ROTTERDAM SCHOOL OF MANAGEMENT, ERASMUS UNIVERSITEIT

## COLOPHON

<b>Author</b>	A. (Anouk) Anouk Schepers
<b>Student #</b>	378538
<b>Document</b>	Master Thesis
<b>Document Title</b>	The Influence of Free Time and Perceived Trust in supervisor on Personal Initiative
<b>Version</b>	1.1
<b>Status</b>	Final
<b>Place</b>	Rotterdam
<b>Date</b>	October 13 <sup>th</sup> , 2014
<b>Education</b>	Business Administration
<b>Degree</b>	Master of Science (MSc.)
<b>Faculty</b>	Rotterdam School of Management (RSM)
<b>University</b>	Erasmus University, Rotterdam (EUR)
<b>Coach</b>	J. (Jan) Dul
<b>Co-reader</b>	J. (Jeroen) de Jong

“The best way to not feel hopeless is to get up and do something. Don’t wait for good things to happen to you. If you go out and make some good things happen, you will fill the world with hope, you will fill yourself with hope.”

— Barack Obama

## PREFACE

Vreugde, Angst, Woede, Verdriet, Verrassing/Verbazing, Schaamte, Walging en Liefde. Dit zijn de 8 basisemoties die wij kunnen inzetten om te tonen hoe wij over een situatie denken of voelen. In het proces van het maken van deze scriptie heb ik veel doorleefd.. Hierbij een tipje van de sluier.

### *Vreugde*

Alle keren als ik een hoofdstuk, paragraaf of tabel af had. De keren dat ik dé perfecte Engelse zin had geformuleerd bij lastige, theoretische, stukken tekst. Bij het lezen van super interessante artikelen of theorieën. De energieke gesprekken met mijn coach. De dag dat het kwartje viel hoe ik die formule in SPSS moest gebruiken en interpreteren. De dag dat ik deze thesis inlever.

### *Angst*

Ik krijg het niet af.. Er zijn nog geen organisaties die mee willen doen.. Andere studenten zijn verder.. ik ga het niet redden.. Ik wil geen “net voldoende”.. Kan ik dit eigenlijk wel?

### *Verdriet*

Ik wil niet elke keer achter de computer zitten, en dan ook nog met mooi weer.. Ik wil mijn vrienden en familie weer zien. Ik wil ook een leuk leven hebben, ik wil ook op vakantie, ik wil ook winkelen..

### *Verrassing/verbazing*

Het is mogelijk.. 2 weken lang elke nacht over statistiek dromen

### *Schaamte*

Oeps.. na een hele dag bezig te zijn geweest met SPSS, kom ik erachter dat ik de Likertschalen allemaal verkeerd om heb gecodeerd..

### *Liefde*

Liefde voor Engelse woorden- en synoniemenboeken.. het kan dus blijkbaar..

### *Dankbaarheid*

Ontzettend dankbaar ben ik velen. Daarvan wil noemen:

Jan Dul, mijn coach, voor zijn directe vragen waardoor ik meer inzicht kreeg. Voor zijn rust, geduld en de tijd die hij voor mij nam, ik was vast niet de enige student aan wie hij zijn tijd moest spenderen.

Jeroen de Jong, mijn meelezer, voor zijn directieve en concrete manier van handelen en feedback geven.

Familie en vrienden die mij altijd hebben gesteund en aangemoedigd wanneer nodig.

Mijn vriend Robin, omdat hij er altijd voor mij is wanneer ik hem nodig heb.

Bedankt! En nu ga ik genieten van mijn vrije tijd..

## ABSTRACT

There's a lot of external pressure on today's economy. Organizations have to be more flexible and innovative and employees have to show behavior that complies with this. One of behaviors is showing more Personal Initiative at work. This research will contribute to the theory of Personal Initiative by investigating the influence of the (amount of) reward Free Time and the employee's perceived level of trust in the direct supervisor on Personal Initiative, because neither of them was investigated in previous research. Quantitative research has been conducted, within 9 organizations with 271 respondents, mostly in the healthcare sector. The results show a positive relation between reward Free Time and Personal Initiative and also between perceived level of trust in the direct supervisor and Personal Initiative. The relation between Reward Free Time shows an inverted U effect on Personal Initiative. The turning point lies at about 80 hours per month, thus until 80 hours a month, Personal Initiative continues to increase. Besides reward Free Time, other independent variables as Job Autonomy and Status Striving had also a considerable effect, more than Trust. The effect of Trust on Personal Initiative and as moderator between Free Time and Personal Initiative was very small, but positive. The influence of Trust becomes of more importance when Free Time becomes less or is not given at all. The results of this research can be used by supervisors to implement these antecedents to stimulate Personal Initiative.

*Key Words: PI, Reward, Free Time, Perceived Trust, Supervisor*

## TABLE OF CONTENTS

<b>PREFACE .....</b>	<b>II</b>
<b>ABSTRACT .....</b>	<b>III</b>
<b>1. INTRODUCTION .....</b>	<b>1</b>
1.1 KEY FOCUS OF THE STUDY .....	1
1.2 BACKGROUND TO THE STUDY.....	1
1.3 WHAT WILL FOLLOW.....	2
<b>2. EXPLORATION PRACTICE .....</b>	<b>3</b>
<b>3. EXPLORATION THEORY .....</b>	<b>5</b>
3.1 PERSONAL INITIATIVE.....	5
3.1.1 <i>Related constructs of Personal Initiative</i> .....	5
3.1.2 <i>Defining Personal Initiative</i> .....	7
3.1.3 <i>Importance of Personal Initiative</i> .....	8
3.1.4 <i>Antecedents for Personal Initiative</i> .....	9
3.2 REWARDS.....	14
3.2.1 <i>Rewards and Organizational Commitment</i> .....	14
3.2.2 <i>Rewards and Intrapreneurship</i> .....	16
3.2.3 <i>Reward “Free Time”</i> .....	18
3.3 TRUST.....	19
3.3.1 <i>Defining trust</i> .....	19
3.3.2 <i>Framing and Establishing Trust / How does trust operate?</i> .....	21
3.3.3 <i>Consequences of trust</i> .....	24
3.4 CONCEPTUAL MODEL .....	26
<b>4. RESEARCH METHOD .....</b>	<b>27</b>
4.1 RESEARCH STRATEGY .....	27
4.1.1 <i>Survey</i> .....	28
4.2 SELECT INSTANCES .....	29
4.3 MEASUREMENT .....	30
4.3.1 <i>Dependent variable</i> .....	32
4.3.2 <i>Independent variables</i> .....	33
4.3.3 <i>Other Independent Variables (Control)</i> .....	35
4.4 DATA ANALYSIS .....	41
4.4.1 <i>Data</i> .....	41
4.4.2 <i>Visual analysis</i> .....	42
<b>5. RESULTS .....</b>	<b>44</b>
5.1 CORRELATIONS .....	44
5.2 MULTICOLLINEARITY AND FACTOR ANALYSIS .....	47
5.3 MULTIPLE REGRESSION ANALYSIS .....	48
<b>6. DISCUSSION.....</b>	<b>52</b>
6.1 LIMITATIONS AND FUTURE RESEARCH .....	55
<b>7. CONCLUSION AND CONTRIBUTION .....</b>	<b>57</b>
<b>REFERENCES.....</b>	<b>58</b>

<b>APPENDIX I:</b>	<b>FLYER .....</b>	<b>64</b>
<b>APPENDIX II:</b>	<b>C-OAR-SE METHOD .....</b>	<b>65</b>
<b>APPENDIX III:</b>	<b>SELF-COMPLETION QUESTIONNAIRE .....</b>	<b>70</b>





## 1. INTRODUCTION

### 1.1 Key focus of the study

There's a lot of external pressure on today's organizations. To comply with objectives such as, gaining more efficiency, higher productivity, lower levels of absenteeism, higher employee satisfaction and dealing with tighter budgets and stricter rules makes organizations reach for other ways of work organization. In order to fulfill the objectives, more tasks are being delegated to subordinates, and more Personal Initiative (PI) is being asked of them. But how can a supervisor stimulate PI?

The key focus of this study is to contribute to the theory of PI by investigating the influence of the (amount of) reward Free Time and the employee's perceived level of trust in the direct supervisor on PI, because neither of them was investigated in previous research. This is done by exploring practice and theory, providing an overview of the antecedents of PI and conducting empirical research. The empirical research will investigate the roll of two of the antecedents, namely the reward Free Time and the employee's perceived level of trust in the direct supervisor on PI. Free time is considered as an important issue to encourage PI, but literature does not seem to fill the gap between if and how much must be given to encourage PI. This is important point in practice as well, since some subordinates get more responsibilities and tasks to perform, and supervisors do not know how much time they have to give them to stimulate more PI in this new role. To give subordinates this new role and to stimulate PI, employee's perceived level of trust in the direct supervisor seems to be an important concept. The role or importance of (all kinds of) trust is widely reported in literature of various disciplines, but the relation between the perceived trust of the supervisor, judged by the subordinate, and the encouragement of showing PI through this, is not very clear. Thus the main research question is:

*Can Personal Initiative be encouraged by the influence of the reward "Free Time" and the employee's perceived level of trust in the direct supervisor?*

### 1.2 Background to the study

Showing PI doesn't always seem to be easy, concluding to managers. Is this because of personality? Or is this because of the management style that is used? Or the way the organization is structured? "In voor Zorg", a long term program subsidized by the department of healthcare, for example, refers to the theory of McGregor (1960). He developed two views of humanity that describes how people in organization function; theory X and theory Y. Theory X claims that all employees only look after their own interests, that workers are essentially lazy and want to avoid working as much as possible. They should therefore be given clear orders, be closely monitored and to give this necessary supervision at all levels, a hierarchal structure of the organization is needed. According to this theory, employees within an organization have little ambition, avoid responsibility, are little dynamic and they do not want change. Theory Y claims the opposite view of humanity. Theory Y assumes that people by very nature like to

work, are creative and can take on the responsibility for the quality and quantity of their work. In this perspective, motivation and commitment will increase through giving the employees more autonomy and responsibility and to involve them by change and innovation. In an organization where managers operate with the point of view of theory X, there is a strong demand and control culture and PI is not appreciated. If you encounter a problem, first you must inform your supervisor, who will tell you how the problem should be solved, and then the employee carries it out.

That it's difficult to develop a management style in an organization that supports PI is also argued by Frohman (1998) who argues that most organizations today do not foster conditions in which PI can ignite change. While the leaders may defend themselves as wanting, valuing, and rewarding initiative, their behavior actually suggests the opposite. Thus, it's a challenge to establish a culture to encourage PI because we actually still have little knowledge of the micro processes that elicit the development of PI (Frese & Fay, 2001).

Availability of Free Time for employees is a critical factor for their both daily routines and intrapreneurial ideas and activities, i.e. time to imagine, observe, experiment and develop (Alpkan et al., 2010). Fay & Sonnentag (2002) mention a related issue to this; PI suggests a long-term focus, it's not handling on acute stressors. Consequently, it can be presupposed that PI is taken in a time when stressors are not pressing. In literature the importance of time availability is emphasized, but it is not obvious how much time has to be given to an employee, which will lead to (more) PI. It is assumed that the relation between the reward Free Time, given to an employee, and PI will likely show an inverted U, when more Free Time is given, thus this will be examined.

Besides the effect of Free Time on PI, employee's perceived level of trust in the direct supervisor is also examined. Yang & Mossholder (2010) argue that trust in the supervisor is a predictor of extra role behavior. Extra role behavior is been seen as a form of Organizational Citizen Behavior, and is defined by Paine & Organ (2000) as: "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization". Therefore there good be seen similarities between extra role behavior and PI. This research therefore argues that perceived level of trust in the direct supervisor will result in more PI and will also act as a moderator between reward Free Time and PI.

#### **Main research question**

*Can Personal Initiative be encouraged by the influence of the reward "Free Time" and the employee's perceived level of trust in the direct supervisor?*

### **1.3 What will follow**

First an exploration of practice and theory will follow to get more insight in the main constructs, this will be concluded with the conceptual model. After that the research method, results, and discussion are presented. And at last the conclusion and contribution.

## 2. EXPLORATION PRACTICE

A way to meet with the requirements as optimizing flexibility, efficiency and effectivity, is to get employees more involved and maybe to delegate responsibilities from middle management to subordinates. This is one way how the Dutch Health Care Industry deals with this, by introducing managements fads as Self Managing Work Teams, Lean Management and Intrapreneurship.

To understand some underlying assumptions and, some exploration was done; attending a seminar about Self Managing Work Teams (In Voor Zorg, 2013), an interview with a manager in a Mental Health Organization (Parnassia), and an interview with a manager in a Youth Care organization.

### *Seminar Self Managing Work Teams (In Voor Zorg, 2013)*

The main subject was the role of Human Relations Development (HRD) and Self-Managing Work Teams. Off-topic it was possible to speak to some HRD managers, but also managers of departments. It became obvious that a lot of organizations struggle with the same challenges; e.g. The influence of the board and higher management, how can they be involved in a transition from managed teams to self-managing teams, what is their role, how can they affect this? If the middle managers have to delegate tasks to their subordinates, how can they manage or coach them? By asking them what kind of behavior they expected of the employees participating in a self-managing team, the answers corresponded; that they would be less depended on a manager, that they would come with own solutions, that they would be more proactive, that they would come up with new solutions and implement them, they wanted them to show more PI. But how to create behavior like this? And especially in organizations where almost everybody is “learned” to do what him is told, in the “old hierarchy way”.

### *Interview manager in Mental Health Organization (Parnassia)*

This Organization is at the start of introducing Lean Management and working in Self-Managed Teams. Reasons for this are budget cuts and extensive and complicated processes which were a result of acquisitions in the past. The aim is to be less cumbersome and more flexible. Also here the questions raised on how to get the employees more involved, more actively involved and what to do with their managing style. Their opinion is that Lean Management is a first step to get employees more activated, and in this way giving them the opportunity to show more initiative. Also they had questions what they could do to improve this proactive behavior.

### *Interview manager (coach) in a Youth Care organization (Rivierduinen)*

In the Youth Care sector a radical transition is going on, which will not be further discussed here. Within this organization the consequences of this transition are that various teams of various organizations have to be compiled. These teams have to manage themselves, but are allocated a coach for support or guidance. The coach (previous manager) has to give an indication of the extra time that his employees need to perform extra tasks that are delegated from manager to them.

*Conclusion*

It is a turbulent time in the Healthcare Sector, and new ways of managing or leading the organization are explored or imposed by the board or even by external forces as health insurance companies. Employees have to be more active, involved, creative, coming up with new solutions etcetera, but the way how to change actual behavior of the employees is not that simple. After the exploration in practice, the conclusion was drawn that the common divisor was the PI that the employees have to show, and how the direct supervisors can influence or stimulate this. Especially the direct supervisor, because it appears (subjectively) that the board of these organizations mostly depends on them to facilitate this change.

### 3. EXPLORATION THEORY

After exploration of practice, the main subject of this study was chosen; Personal Initiative. Many questions began to emerge ; What is PI? Which factors influence PI? And which can be influenced by a supervisor? And why is it so important, does it lead to anything? A search in the literature on PI was the next step.

In this chapter in the first paragraph (3.1) an insight on PI is given, including the antecedents and the importance of PI. In the following paragraphs Rewards (3.2) and Trust (3.3) will be discussed.

#### 3.1 Personal Initiative

##### *3.1.1 Related constructs of Personal Initiative*

Organizational change involves the transition from a current state to a desired future state. Three psychological processes that facilitate such transformations are creativity, innovation, and PI (Rank et al. 2004). Scholars, e.g. Thompson (2005), have noted for instance that organizational benefits accrue from employees' "PI". In the case of PI there were two other constructs, namely Proactive Personality and Proactive behavior, that also behold the theme of interactionism and they seem to interact or conflict with each other, for this reason, first an overview of these constructs and the position of PI will be given.

##### *3.1.1.1 Proactiveness*

Two employees, or individuals, may behave very different at their job. Some employees will tackle problems, come up with new solutions or ideas and on the other hand employees who do the things "the way they always have been done" or just work on their daily routine. On a daily basis we would call this "proactive" or the opposite, "passive" behavior. Many managers plead for more proactive managers and that proactive behavior is becoming more important. It is not just another management fad, but more a high-leverage concept and can result in more organizational effectiveness (Bateman & Grant, 1999). What is often seen, that the constructs proactive personality and proactive behavior are being used exchangeable, and that there are different constructs related to them. Crant (2000) defines proactive behavior as "Taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions". He suggests that there are various concepts relating to it, namely: proactive personality, PI, taking charge and role breadth self-efficacy,. Chiraburu & Carpenter (2013) use the definition (referred to Frese et al. (1996)). for Proactive Behaviors; "Such behaviors reflect employees' adjustment to changing environments and efforts to bring about constructive change to the job". Although this definition isn't mentioned in the article of Frese et al. (1996) but seemingly refers more to the definition used by Bateman and Crant (1993) for the construct of proactive personality.

A proactive person is characterized as someone who is relatively constrained by situational forces and who effects change in their environment, Proactive people show initiative, scan for opportunities, take action, and persevere until they reach closure by bringing about change

(Bateman & Crant, 1993), and later on by Crant (2000): “Proactive personality is considered a stable disposition to take PI in a broad range of activities and situations”. In these two views on Proactive Personality they argue that taking Initiative is a behavior that can be shown by a person that has a proactive personality. This view is also underlined by Thompson (2005); “Proactive personality appears to predict the extent to which an employee pursues initiatives beyond his or her immediate tasks. Such initiative taking appears to have a direct positive relationship to job performance”, Bateman & Crant (1999): “To be proactive is to take the initiative in improving business”, and by Frese and Fay (2001): “Showing PI means to be self-starting, proactive, and persistent”.

Therefore will PI be viewed in this research as an behavior that can be indicated by a person or employee with an proactive personality and is related to or characterized by an proactive behavior. Table 1 shows an non-exhaustive overview of definitions related to PI.

	Bateman & Crant (1993)	Frese et al. (1996)	Crant (2000)	Thompson (2005)	Chiraburu & Carpenter (2013)
<b>Proactive Personality</b>	<p><b>Definition:</b> “Characterized as someone who is relatively unconstrained by situational forces and who effects environmental change”.</p> <p><b>Characteristics:</b></p> <ul style="list-style-type: none"> <li>- Scan for opportunities</li> <li>- Show initiative</li> <li>- Take action and</li> <li>- Persevere until they reach closure by bringing about change</li> </ul>		<p><b>Definition:</b> Stable disposition to take PI in a broad range of activities and situations</p>	<p><b>Definition (by Bateman and Crant, 1993)</b> A disposition toward taking action to influence one’s environment.</p>	
<b>Proactive Behavior</b>	<p><b>Definition:</b> The relatively stable tendency to effect environmental change</p>		<p><b>Definition:</b> “Taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions”.</p> <p><b>Constructs related to:</b></p> <ul style="list-style-type: none"> <li>- Proactive personality</li> <li>- PI</li> <li>- Role breadth self-efficacy</li> <li>- Taking charge</li> </ul>		<p><b>Definition Proactive behaviors;</b> “Such behaviors reflect employees’ adjustment to changing environments and efforts to bring about constructive change to the job (By Frese et al., 1996).</p> <p>“We focus on proactive work behavior – in the form of PI..”</p>

<b>Personal Initiative</b>	<p><b>Definition:</b> A behavior syndrome resulting in an individual's taking an active and self-starting approach to work and going beyond what is formally required in a given job.</p> <p><b>Characterized by;</b></p> <ul style="list-style-type: none"> <li>- "Consistent with the organization's mission long term focus</li> <li>- Goal-directed and action oriented</li> <li>- Persistent in the face of barriers and setbacks</li> <li>- Self-starting and proactive"</li> </ul>	<p>Organizational initiative taking involves personally spearheading positive change in the organization at large (i.e., not limited to the scope of one's immediate tasks).</p> <p>Proactive employees might undertake, without cues from supervisors, projects and initiatives aimed at benefitting the organization.</p>	<p>"..benefitting the organization by changing the status quo (i.e., PI)..</p> <p>".. predict PI, a form of proactive behavior".</p> <p>" PI, the proactive behavior examined in this study.."</p>
----------------------------	---	---	--

Table 1: An non-exhaustive list of definitions related to Personal Initiative

### 3.1.2 Defining Personal Initiative

Frese et al. (1996) define PI as a behavior syndrome resulting in an individual's taking an active and self-starting approach to work and going beyond what is formally required in a given job. This was also suggested in the research of Frohman (1998); "Initiators did not simply do their jobs; they went far beyond their job requirements". More specifically, PI is characterized by the following aspects: (1) is consistent with the organization's mission, (2) has a long term focus, (3) is goal-directed and action oriented, (4) is persistent in the face of barriers and setbacks, and (5) is self-starting and proactive. Also Rank et al. (2004) emphasize the self-started, proactive and persistent behaviors and in addition to this, they divide this in qualitative and quantitative initiative; going substantially beyond the prescribed contents of one's job (qualitative initiative), spending additional energy at work (quantitative), and demonstrating perseverance in the face of obstacles (overcoming barriers). Employees demonstrating PI are typically persistent in successfully completing tasks and solving problems, are self-starters, and look for projects and assignments or create new ones in the hopes of accomplishing their goals (Chiaburu & Carpenter, 2013). With this consideration in mind, all organizations that encourage change and desire employees to be active, must be intrigued by this construct.

If PI is defined by self-started, proactive, and persistent behaviors, what does this mean? *Self-started* implies by not accepting the status quo (Frohman, 1998) taking on extra responsibility and solving problems (Hartog & Belschak, 2007) by goals that the person himself or herself develops and are not given or assigned by someone (Fay & Frese, 2001). Employees that are proactive have a long term focus and not wait until one tells them to respond to a demand. Employees with a long term focus are already considering things that could happen (new problems, emerging opportunities and changing demands) and take action (Frese and Fay, 2001). An example is an administrative employee, that has to approve the annual leave planning but still has to do this with analogue templates, what costs a lot of time. So he or she

develops an excel-sheet what will make the process faster and can be used by the other employees as well.

He or she has taken initiative; he self-started an activity, because he went beyond the job's requirements. He acted in a proactive manner, because he anticipated having to take care of annual leave planning in the future and that will not improve by itself. *Persistent* behavior refers to perseverance despite frustration and fatigue (Cloninger et al., 1993) and is usually necessary to reach one's goal.

In this research the following definition will be used: PI is behavior that results in an employee taking, an proactive approach to goal-directed work that benefits the organization, goes beyond what is formally required in a given job and is not imposed or suggested by somebody else. And if barriers or setbacks occur the employee will show persistency in overcoming them

### **3.1.3 Importance of Personal Initiative**

Stimulating PI by employees, means starting a change in organizational behavior. To implement something new (behavior) requires the opportunity (latitude) to step away from routine tracks of work, the traditional and current conventions, and must be prepared to face up the consequences of changes in the environment, caused by the active approach of the employee that develops new strategies and solves problems. A form of the "traditional view" is the view of Taylorism, father of scientific management who promoted an efficient job design. Job design in Taylorism is e.g. structured in a hierarchal manner, norms are based on rationality, strict working rules, uniform working system, little autonomy, specialized craftsmanship and expected purposive behavior by all the employees. This way of work organization has resulted in both management sciences and at workplaces visible insights which still are acted upon. Nevertheless, there are in the present time other insights and behaviors needed to deal with the turbulent global economy, increasingly dynamic organizational contexts and the shifting work motivation of the present-day employee. The need for change has been shown by Fay & Kamps (2006) who argue that employees in high Tayloristic jobs reported less self-confidence, PI and willingness to change and showed more symptoms of depression and a higher aversion of autonomy than employees in low Tayloristic jobs. Thus this traditional view contrast with the new view of the "proactive employee"; an individual highly involved and committed, an independent contributor with initiative and a well-developed sense of responsibility (Campbell, 2000). In addition to the need for PI in the changing role of work environment, PI influences performance on both the individual and the organizational level (Fay & Frese, 2001). In a recent field study, process innovations were related to positive economic performance only in companies high in climate for initiative, a group-level variable capturing shared perceptions of initiative (Rank et al., 2004). This is also argued by Grant et al. (2011) that taking initiatives may lead to better working conditions, better functioning machineries, and more efficient work processes, which should facilitate job performance. Fay & Frese (2001) suggest that PI should also be related to organizational effectiveness. There are two reasons why this should be so. First, on the level of the organization and the team, there are no perfect production or service systems. Therefore, there is some need for PI to uphold and improve production or service. Second, there should be a higher degree of task performance of employees with higher initiative; excellent employees are characterized by a longer time perspective in their work, by a better developed



mental model of their work, and by a more proactive approach to work. The long-term orientation and the proactive approach to work is common to the concept of PI and the behavior and action strategies of so called superworkers.

PI is also relevant in other domains, such as taking more or less initiative in managing their career. Frese et al. (1997) give an example that unemployed individuals with a high degree of PI, find a job faster than individuals with low PI, and are better in shaping their work environment, coping with stress (Bindl & Parker, 2010), predicting innovation (Rank et al., 2004) and the best managers are also characterized by a higher degree of initiative (Frese et al., 1996).

Employees' taking PI is especially significant for research and for the workplaces as they become continuously more dynamic and variable. Such behaviors reflect employees' adjustment to changing environments and efforts to bring about constructive change to the job (Frese et al. 1996). Just as other fads, the words PI and proactive personality can be used generally and can be interpreted in different ways, but if PI is clearly understood and applied, it might be an indispensable practice these days.

### 3.1.4 Antecedents for Personal Initiative

All organizations that encourage change and desire employees to be active, must be intrigued by the construct of PI. Another point of issue than arises, what are the antecedents for PI; why do employees follow ideas, or show PI? The purpose here is to obtain some clarity on the possibility of provoking PI. Various antecedents have been found in literature on PI, table 2 shows a non-exhaustive list. These antecedent will be discussed in more detail in the following paragraphs.

<b>Antecedents for Personal Initiative</b>	
<b>Categories</b>	<b>Antecedents</b>
Organization, Management & Supervisor	Top management openness (Morisson & Phelps, 1999)
	Trust and supervisor support (Hartog & Belschak, 2007)
	Rewards (Frohman, 1998)
	Company-level climate for safety (Baer & Frese, 2001)
Team orientation	Communion striving in combination with status striving (Chiaburu & Carpenter, 2013; Frohman, 1998; Hartog & Belschak, 2007)
	Commitment - to the organization, supervisor and team (Hartog & Belschak, 1997).
Direct Work Context	Work complexity (Frese et al., 1996; Frohman, 1998, Grant et al. 2011)
	Job Autonomy (Frese, 1989; Parker et al., 2006)
	Stressors (Fay & Frese, 2001)
Individual differences	Expert power (Frese et al. 1996; Morisson & Phelps, 1999)
	Personality factors (Bateman & Crant, 1993; Fay & Frese, 2001)
	Self-efficacy (Speier & Frese, 1997; Morisson & Phelps, 1999; Fay & Frese, 2001; Parker et al., 2006)
	Felt-responsibility (Frese et al. 1996; Morisson & Phelps, 1999)
	Control aspirations (Fay & Frese, 2001; Fay & Kamps, 2006)
	Change Orientation (Frohman, 1998; Fay & Frese, 2001)
	Status striving (Chiaburu & Carpenter, 2013)
	Cognitive ability (Fay & Frese, 2001)

Table 2: Antecedents for Personal Initiative

### ***3.1.4.1 Organization, Management & Supervisor***

#### *Top management openness*

In the research of Morisson & Phelps (1999) of “Taking charge at work [...]”, a construct very similar to PI, was found that top management openness was of importance in employee’s decision making and employee-initiated change. Top management openness is the degree to which top management is believed to encourage and support suggestions and change initiatives from below.

#### *Trust and Supervisor support*

Commitment to and trust in the supervisor is positively correlated with self-rated PI (Hartog & Belschak, 2007). Commitment to a more proximal, lower order focus, such as (work-group) was generally stronger than attachment to a more distal, higher order one (organization) (Parker et al., 2006). Similarly, the supervisor is seen as a more proximal focus of commitment than the organization (Hartog & Belschak, 2007). Direct supervisor support (as perceived by the employee) wasn’t supported in the study of Fay and Frese (2001).

Given the element of risk associated with intrapreneurial actions, like showing PI, trust in the supervisor is an important aspect for intrapreneurial behavior (Dess et al. 2003). Supervisors that promote internal communication, stimulate subordinates to share information and develops a culture of trust and support, encourages the subordinate to create or to implement new projects or ideas and the risk that is associated with this (Eesley and Longenecker, 2006). Trust and employee’s perceived level of trust in the direct supervisor will be further explored in chapter 3.

#### *Rewards*

A wide range of mechanisms can help to focus PI and direct clearly and consistently on corporate objectives. These include clear goals, top-down goal setting, and congruent reward systems (Frohman, 1998). Complementary, in a Dutch field study on suggestion systems (Frese et al. 1999), proactive behavior correlated with the number of rewarded suggestions submitted by individuals (Rank, et al. 2004).

Rewarding employees with available Free Time is a critical factor for their both daily routines and intrapreneurial ideas and activities, i.e. time to imagine, observe, experiment and develop (Alpkan et al., 2010).

Rewards and reward Free Time will be further explored in chapter 3.

#### *Company-level climate for safety*

A company-level climate for psychological safety means a climate in which one feels safe to take interpersonal risks, was highly rated to an PI positive climate (Baer & Frese, 2001).

### **3.1.4.2 Team Orientation**

#### *Communion striving in combination with Status Striving*

A fundamental social need is the need for belongingness (Baumeister & Leary, 1995), or communion striving (i.e., getting along), which captures the drive for close relationships and bonds with others (Chiaburu & Carpenter, 2013). Chiaburu & Carpenter (2013) argue that employees who strive only for the need of communion striving, are *less likely* to take initiative. This seems to acknowledge the research of Frohman (1998) who argues that none of the employees who did show PI emphasized teamwork. However, they were sensitive to the need to take into account the goals, needs, and expectations of others, those who were above them as well as their peers and their subordinates.

Chiaburu & Carpenter (2013) also conducted a study on Status Striving (i.e., getting ahead), this refers to orientations toward power and influence, and these employees focus on climbing the workplace hierarchy or attaining informal status to obtain more influence within the organization. They found that PI was highest for employees high in both status and communion striving, which suggests the necessity for a balance between the two orientations.

#### *Commitment - to the organization, supervisor and team*

What is mentioned before is the positive correlation between “commitment to the supervisor”, and PI. Hartog & Belschak (1997) suggest that commitment to the organization, supervisor and team are all positively correlated with self-rated initiative. However, team commitment had a stronger relationship with self-rated initiative than organizational or supervisor commitment. This is in contradiction with the results of Chiaburu & Carpenter (2013) who argue that employees who strive only for the need of communion striving, are *less likely* to take initiative. An explanation for this could be that the conduct of the study of Hartog & Belschak was done in a health care setting contrary to the research of Fay & Frese (2001) which was conducted in companies and students. It could be that employees working in a health care sector have other values or motives towards PI and helping each other. This could relate to a study sample of Fay & Frese (2001) that hospital staff showed more initiative if they perceived individually psychological safety in the team context.

### **3.1.4.3 Direct Work Context**

#### *Work complexity*

Work complexity leads to the development and practice of a high degree of skills and knowledge. A high skill level fosters a long-term perspective and creativity. These contribute to developing ideas about how to change work processes and make them more effective. Knowledge and skills also help to overcome barriers and setbacks, should they occur. This is not a deterministic relationship; initiative is possible in low-skill jobs, but work complexity enhances the development of initiative. Thus, work control and complexity help people to show more PI at work (Frese et al. 1996). This view is also affirmed by Frohman (1998); “The employees who took PI had to learn something new: They grew in knowledge, experience, and skill as a result of bringing about the change. But in each case, what they had learned was task-

specific. Their learning was within the context of the change they were effecting or was directed at acquiring the knowledge necessary to complete their self-initiated activity”.

#### *Job Autonomy*

Employees must be able to make decisions with regard to, and have control over their own work and working conditions, and it showed that such autonomy relates to higher levels of initiative (Frese, 1989). Control means to have an impact on the conditions and on one's activities in correspondence with higher-order goal (Frese, 1989) and low control at work (little autonomy or job discretion) can engender a passive and helpless approach toward work (Parker et al. , 2006)

#### *Stressors*

Stressors imply that something is not adequate about a process, a procedure, or a design. Therefore, stressors contribute to the feeling that one ought to do something about the work situation to improve it; this leads then to a higher degree of PI (Fay & Frese, 2001). Stressors have an close relation to active coping strategies, which implies that one actively deals with problems that are perceived to be aversive. Often, a person will show PI because something is bothering him or her at work. PI helps to cope with stressors effectively, as shown by a positive relation with an active and problem-focused coping approach toward stressors (Fay & Frese, 2001)

#### *Expert power*

The degree to which the employing organization is dependent on the employee for critical knowledge or skills is called expert power by Morisson & Phelps (1999). Because power implies greater discretion and credibility and less resistance from others, individuals with high levels of expert power feel more self-confident to initiate change more successful (Frese et al. 1996; Morrison & Phelps, 1999).

### **3.1.4.4 Individual differences**

#### *Personality factors*

Fay & Frese (2001) suggest that various personality factors are important to the construct of PI, namely need for achievement, action orientation, and psychological conservatism (as the opposite of flexibility).

Bateman and Crant (1993) e.g. presented the construct of proactive personality, of which PI is an aspect. This is also an construct with personality traits which will activate people and should, therefore, contribute to initiative.

#### *Self-efficacy*

Self-efficacy, “raises one's feelings of control and the perceived likelihood of success” (Morisson & Phelps, 1999) and control rejection are conceptually and empirically close to PI.

Both are related to control at work. Self-efficacy—an expectation of mastery—is the opposite of work-related helplessness (Speier & Frese, 1997) and is a generalized expectancy. Since mastery expectations are prerequisites of initiative, self-efficacy is closely related to initiative (Frese et al. 1996). Self-efficacy increases PI at work (Parker et al. 2006; Speier & Frese, 1997) and those who show this behavior tend to attach a higher likelihood of success to taking change and will thus be more likely to attempt this behavior (Morrison & Phelps, 1999). Results also show that employees in Tayloristic jobs have a lower work-related self-efficacy (Fay & Kamps, 2006).

#### *Felt-responsibility*

Felt-responsibility is defined as “an individual’s belief that he or she is personally obligated to bring about constructive change” (Morisson & Phelps, 1999). Frese et al.(1996) proposed that felt responsibility relates to employee initiative. To the extent that employees have a high sense of personal responsibility regarding change, they will attach positive valence to taking charge because it will provide a sense of personal satisfaction and accomplishment (Morisson and Phelps, 1999) Taking responsibility and wanting to take charge are prerequisites of initiative (Frese et al. 1996).

#### *Control aspirations*

Control aspirations; a desire to “be on top of things”. Taking initiative implies that one pursues a self-set, non-assigned goal and this presupposes that the individual accepts the responsibility for it. An employee who furthers organizational change will be held responsible for any potential failure or negative effect involved. Consistent with this view, Fay & Frese (2001) found that PI is related to control aspirations. Fay & Kamps (2006) show that individuals in jobs with a higher degree of Taylorism do not like control and responsibility, show less PI, are less ready to change and interested in work innovation. They argue that the reason for disliking control is that in Tayloristic jobs, workers have little control over what they do; the scope of responsibility is low. Continuous frustration of the control need leads to lowering the desired level of control.

#### *Change Orientation*

Change orientation requires the opportunity (latitude) to step away from the traditional and current conventions (Frohman, 1998) and this is necessary because PI usually changes the work situation in one way or another. If one is afraid of such changes, there should be little initiative. Empirically, there is a positive relation of PI and change orientation (Fay & Frese, 2001). Also counterbalancing the effect of the systems and procedures needed to establish a common focus and predictable behavior for coordinating complex tasks requires deliberate and strong mechanisms that permit initiative taking (Frohman, 1998).

#### *Status striving*

“Status striving employees focus on climbing the workplace hierarchy or attaining informal status to obtain more influence within the organization (i.e., getting ahead)” Chiaburu & Carpenter (2013). Status striving and proactive work behaviors have been suggested to derive from the same underlying motivation as status striving reflects a focus on and drive for

influence and dominance, and proactive work behavior represents employees' control over their work context. Thus employees who are status striving are more likely to take initiative (Chiaburu & Carpenter, 2013).

#### *Cognitive ability*

Fay & Frese (2001) argued that Cognitive ability, -general intelligence- was consistently and positively associated with an increase of PI over time. In literature about proactive work behavior a positive relationship between educational background and the degree of proactive job search has been found and also it was argued that individuals with a higher educational background were also more likely to speak out with suggestions for improvements (Bindl & Parker, 2010).

This was a non- exhaustive list of antecedents for PI, extracted out of PI literature and some literature about "taking charge" and proactive behaviors, because these constructs are closely related. This list could give an insight on what motivators for initiators are but also for influencing these, if necessary.

### **3.2 Rewards**

In this chapter an exploration about Rewards and reward Free Time will be given. Literature about the direct relationship between PI and Rewards is relatively limited. For this reason two other views that are closely related to PI will be explored; Rewards associated with Organizational Commitment and Rewards associated with Intrapreneurship. These two views are chosen because they both are directly related to PI; Organizational commitment because an employee who works in an organization is in a certain way committed to it, thus this is a broad perspective. Intrapreneurship is also very close attached to PI, because PI is seen in Intrapreneurial literature as an aspect of proactive behavior (Crant, 2000), and together with risk-taking and innovativeness they constitute the higher-order construct of Intrapreneurial behavior (see e.g. De Jong et al. 2011; Stam et al. 2012). First an overview of rewards and organizational commitment will be given and then rewards and PI.

#### **3.2.1 Rewards and Organizational Commitment**

Rewards have drawn the interest of research as conditions of job attitudes like organizational commitment (Malhotra et al. 2007) and as a characteristic of a intrapreneurial supporting culture (e.g. Hornsby, 1993; Kuratko et al. 1990; Menzel et al., 2006; Pinchot, 1985; Stam et al. 2012). Allen and Meyer (1990) conceptualized organizational commitment as a multidimensional construct, and proposed a three-component model that incorporates the three general themes found in the literature, i.e. the affective attachment (affective), the perceived costs (continuance), and the obligation (normative) associated with the concept of commitment. Affective commitment is the employee's emotional attachment to, identification with, and involvement in the organization. Employees want to remain, and are willing to exert effort on behalf of the organization because of the positive work experiences and benefits they derive from their relationship with the organization. Continuance commitment is based on Becker's side-bet theory and is defined as commitment based on the costs that employees associate with leaving the organization and Normative Commitment denotes employees'

feelings of obligation to stay with the organization (Malhotra et al., 2007). With regard to PI, the rewards concerning organizational commitment are being discussed because of the components that involve organizational commitment, are likely to have an impact on PI.

Several reward categorizations are suggested in Organizational Commitment literature, more classical are the views of Porter & Lawler, 1968 and Mottaz, 1985. Porter and Lawler (1968), distinguish two types; extrinsic rewards and intrinsic rewards. Extrinsic rewards have to be given by someone else (e.g. pay and promotion), and intrinsic rewards are given by the person to himself when he performs well (e.g. satisfaction). Mottaz (1985) made a classification between task (intrinsic), social (extrinsic) and organizational (extrinsic) rewards.

O'Neal (1998) recommend a four quadrant approach to organizing the rewards into a total rewards framework according to the Total Reward Concept, to satisfy the need of a more various manpower created by e.g. globalization, immigration patterns and acquisitions and to comply with all aspects of the work experience of value to people. The four quadrants are; Pay, Benefits Learning & and Work Environment. Table 3 shows a non-exhaustive list of rewards mentioned in the literature of organizational commitment.

Porter and Lawler (1968)	Mottaz (1985)	Total Rewards Concept By O'Neil (1998)
<b>Intrinsic</b>	<b>Intrinsic task rewards</b> <ul style="list-style-type: none"> <li>• Task autonomy</li> <li>• Task significance</li> <li>• Task involvement</li> </ul>	<b>Pay</b> <ul style="list-style-type: none"> <li>• Base Salary</li> <li>• Variable pay</li> <li>• Stock and equity sharing</li> <li>• Monetary recognitions</li> </ul>
<b>Extrinsic</b> <ul style="list-style-type: none"> <li>• Pay</li> <li>• Promotion</li> </ul>	<b>Extrinsic Social reward</b> <ul style="list-style-type: none"> <li>• Supervisory assistance</li> <li>• Colleague assistance</li> </ul>	<b>Learning &amp; Development</b> <ul style="list-style-type: none"> <li>• Career development</li> <li>• Learning experiences</li> <li>• Performance management</li> <li>• Succession planning</li> <li>• Training</li> </ul>
	<b>Extrinsic organizational Rewards</b> <ul style="list-style-type: none"> <li>• Adequate working conditions</li> <li>• Pay equity</li> <li>• Promotional opportunity</li> <li>• Adequate fringe benefits</li> </ul>	<b>Benefits</b> <ul style="list-style-type: none"> <li>• Health care</li> <li>• Retirement</li> <li>• Savings</li> <li>• Time off</li> </ul>
		<b>Work Environment</b> <ul style="list-style-type: none"> <li>• Organizational climate</li> <li>• Leadership</li> <li>• Performance support</li> <li>• Work/life balance</li> <li>• Organizational reputation</li> <li>• Challenge of the work</li> <li>• Relationships with colleagues</li> </ul>

Table 3: Non-exhaustive list of Rewards mentioned in Organizational Commitment literature

### **3.2.2 Rewards and Intrapreneurship**

The other view on rewards that is of interest for the construct of PI is associated with Intrapreneurship. There is relatively little literature about the direct relationship between Rewards and PI, however PI is in Intrapreneurial literature an aspect of proactive behavior (Crant, 2000), and together with risk-taking and innovativeness they constitute the higher-order construct of Intrapreneurial behavior (e.g. De Jong et al. 2011; Stam et al. 2012).

Stam et al. (2012) classify antecedents of intrapreneurship in categories: dispositional traits, cognitive abilities, demography, broader environmental variables, job design and work context. Antecedents such as job design and work context are within the reach of managers to influence, and rewards is one of the variables that belongs to the construct of work context. Hisrich (1990) mentions “to be rewarded” even in his definition of an intrapreneurial culture: “Develop visions, goals, and action plans; take action and be rewarded; suggest, try, and experiment; create and develop regardless of the area; and take responsibility and ownership”. Kuratko et al. (1993) also concluded that “employees are willing to work on new projects and challenging teams if the rewards are apparent” and that using appropriate rewards can increase the employee’s willingness to undertake entrepreneurial activity that involves risks (Hornsby et al.; 1993). To be appropriately rewarded for all the energy and effort expended in the creation of the new venture, signifies according to Hisrich (1990) that broad performance objectives should be established, and the intrapreneur should receive rewards on their attainment, and of course, an equity or ownership position in the new venture is the best motivational reward for the amount of activity and effort needed for success.

Interesting enough it is not very clear what kind of rewards the most studies are aiming at. They mention giving rewards or a reward system, but most of them do not specify what these kind of rewards may include and at what aspect of a (or) construct in intrapreneurial behavior they are related to. This is also argued by Jansen & van Wees (1994) and Kuratko et al. (1993): “It should be mentioned that the exact rewards for corporate entrepreneuring are not yet agreed upon by most researchers. Some managers believe that allowing the innovator to be in charge of the new venture is the best reward. Others would say that allowing the corporate entrepreneur more discretionary time to work on future projects should be the reward. Still others insist that special capital, called intracapital, should be set aside for the corporate entrepreneur to use whenever investment money is needed for further research ideas..”. Table 4 shows a non-exhaustive list of rewards mentioned in the literature of intrapreneurship.



Hisrich (1990)	Hornsby et al. (1993)	Kuratko et al. (1993)	Frese et al. (1999)	Christensen (2005)	Stam et al. (2012)	Gupta & Srivastava (2013)
Monetary; salary	Rewards, but not clear what kind of rewards	Financial Rewards	Monetary rewards	Financial	Rewards, but not clear what kind of rewards	Financial grants
Personal Satisfaction		The innovator to be in charge of the new venture		Recognition		Non-financial rewards • <i>Time to work on ideas</i> • Recognition
Corporate Rewards • Promotion • Office • Staff • Power		<i>Time to work on future projects</i>		"Freedom"		
Equity or ownership position in the new venture		special capital, called intracapital, should be set aside		Controllable rewards <i>(by Morris &amp; Kutatko, 2002)</i> • Regular pay • Bonuses • Profit share • Equity or shares in company • Expense Accounts • Job security • Promotions • Expanded job responsibilities • Autonomy • Public recognition • Private recognition • <i>Free time to work on pet projects</i> • Money for research • Trips to conferences		
				<i>Flexibility in relation to an assignment and working hours</i>		
				Prestige related to the completion of an assignment		

Table 4: Non-exhaustive list of Rewards mentioned in Intrapreneurship literature

### **3.2.3 Reward “Free Time”**

When the two views, organizational commitment and intrapreneurship, after studying the literature, are being compared it appears that in organizational commitment literature the reward system is already more advanced and (more) divided in subclasses with several aspects. The classic categorization by Porter & Lawler (1968), distinguishing between intrinsic and extrinsic rewards may also be applied at other categorizations in both views. Probably the most predominant convention are the monetary rewards, but a reward that can be seen more explicitly on the view of intrapreneurship is the aspect of time; “The time to work on ideas / Time to work on future projects / Free time to work on pet projects”, less explicitly in organizational commitment; “Learning experiences / Organizational climate / Performance support”. Free time to work on future projects or on pet projects, and learning experience are comments that it is frequently mentioned in healthcare organizations. Pressure to perform more, without the direct guidance of managers, makes people eager, or indirectly obligated to develop novel ideas and to work on implementing projects, but they lack time. All kinds of words that includes more or less the same are given in literature. Thus, a definition of the reward Free time for this study is given: “A form of benefit an employee receives from his direct supervisor as part of an employment relationship to work on own ideas, initiatives or activities that benefit the organization, and this free time is expressed in time during working hours”. This reward can be given in various circumstances, there is no list of situations that provide strict reasons to give a reward to a subordinate. However, the following enumeration provide some insight, based on Mower & Wilemon (1989).

Reward Individual Employees:

“When someone has clearly gone the extra mile”

“To encourage the less assertive”

“To encourage a newcomer”

“When someone’s contribution has been ignored by the team”

“To recognize a truly outstanding contribution”

“To stir things up when groupthink is beginning to set in”.

Availability of free time for employees is a critical factor for their both daily routines and intrapreneurial ideas and activities, i.e. time to imagine, observe, experiment and develop (Alpkan et al., 2010). Fay & Sonnentag (2002) mention a related issue to this; PI suggests a long-term focus, it’s not handling on acute stressors. Also it can be seen as a non-routine activity that demands some reasoning and thinking, what differs from trying to reach (every day) working goals, which has this routine character. The pressure that comes with trying to achieve working goals in daily routine, is a kind of stressor. And when these stressors increase, the resources of an employee are most probably invested in achieving these working goals. Consequently, it can be presupposed that PI is taken in a time when stressors are not pressing. In Corporate Entrepreneur literature, Hornsby et al. (2002) developed the Corporate Entrepreneurship Assessment Instrument (CEAI), which suggests five stable organizational antecedents of middle-level managers’ entrepreneurial behavior. One of these five is time availability; “evaluating workloads to ensure that individuals and groups have the time needed to pursue innovations and that their jobs are structured in ways that support efforts to achieve short- and long-term organizational goals” (Kuratko et al., 2005).

In literature the importance of time availability is emphasized, but it is not obvious how much time has to be given to an employee, which will lead to (more) PI. Therefore, the hypothesis that is related to the reward of Free Time is formulated as follows;

*Hypothesis 1: The relation between the reward Free Time, given to an employee, and PI will likely show an inverted U, when more Free Time is given.*

### **3.3 Trust**

Showing PI implies exposing oneself to some kind of risk. In the definition for PI which is used for this research, includes among other “[...] taking an proactive approach to goal-directed work that benefits the organization and goes beyond what is formally required in a given job and is not imposed or suggested by somebody else [...]”. To do something that is not imposed by your supervisor, and is initiated by yourself, means that the outcome could contradict with what your supervisor had in mind or what he likes to see, and therefore the employee is exposing himself to a kind of risk. Also having a supervisor and thus working in a hierarchical organization, involves interdependence between supervisor and employee. To accomplish personal- and organizational goals, employees have to depend on their supervisor in several ways. By exposing oneself to risk and depending on the supervisor, the need for trust arises.

Yang & Mossholder (2010) argue that trust in the supervisor is a predictor of extra role behavior. Extra role behavior is been seen as a form of Organizational Citizen Behavior, Paine & Organ (2000) define it as: “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization”. Therefore there good be seen similarities between extra role behavior and PI.

This study argues that employee’s perceived level of trust in the direct supervisor will result in more PI showed by the employee and it will act as a moderator between giving free time to the employee and showing PI. Before going to the hypotheses, first an insight in the concept of trust will be given.

#### **3.3.1 Defining trust**

Trust seems to be an elusive concept, it has been cited and theorized in various literatures by several scholars. There are different types of theories in which trust is described, e.g. leader-member exchange theory (e.g. Dirks & Ferrin, 2002; Yang & Mossholder, 2010), communication accommodation theory (Willemyns et al. 2003) and social exchange- and equity theory (Deluga, 1994). It has also an important role in various styles of leadership, e.g. charismatic leadership and transformational leadership (Dirks & Ferrin, 2002). To make it even more comprehensive, the importance of trust has been studied throughout various disciplines, Dirks & Ferrin (2002) mention “job attitudes, teams, communication, justice, psychological contracts, organizational relationships, and conflict management, and across the disciplines of organizational psychology, management, public administration, organizational communication, and education”. In particular in the organization studies trust has become a major player, probably because they already use the multidisciplinary view as their doctrine. Thus it would not come as an surprise that all of these variants lead to “different explanations about the

processes through which trust forms, the processes through which trust affects workplace outcomes, and the nature of the construct itself” (Dirks & Ferrin, 2002). Thus, in this short discussion about the concept of trust it becomes already clear that there are many literatures that can be consulted for the definition of trust. In this research, trust is been treated as a set of interdisciplinary concepts; “using an interdisciplinary approach accords with the growing consensus that trust is not unitary, but is a multiplex of concepts” (McKnight & Chervany, 2001). Thus literature on trust of various disciplines has been consulted, but concentrated on the subject of ‘trust in leaders/managers’ (without distinguishing between leaders and managers since the terms are often used interchangeable in the literature). Focusing on this subject, does not exclude definitions that can be used in multiple situations, thus not exclusive for leadership situations only. Table 5 shows an non-exhaustive list of definitions about trust.

Definition	Author, Original (Year)	Authors referring to or using original (Year)
“[. . .] an <i>expectancy</i> held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon”.	Rotter (1967, p. 651)	Deluga (1994)
“[. . .] the extent to which one is willing to ascribe good intentions to and have confidence in the words and <i>actions of other people</i> , viewing trust as a dimension of interpersonal relationships”.	Cook & Wall (1980, p. 39)	Nooteboom & Six (2003)
“ [ . . . ] when we say we trust someone or that someone is trustworthy, we implicitly mean that the probability that <i>he will perform an action that is beneficial</i> or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him”.	Gambetta (1988, p. 217-18)	Bijlsma & van de Bunt (2003)
Mayer et al. (1995), characterized trust as a willingness to be vulnerable. And defined it as: “The willingness of a party <i>to be vulnerable</i> to the actions of another party based on the <i>expectation that the other will perform a particular action important to the trustor</i> , irrespective of the ability to monitor or control that other party”	Mayer et al. (1995)	Davis et al. (2000)
“[. . .] trust is both the specific <i>expectation</i> that an <i>other’s actions will be beneficial</i> rather than detrimental and the generalized ability to take for granted, to take under trust, a vast array of features of the social order”.	Creed & Miles (1996, p. 17)	Nooteboom & Six (2003); Bijlsma & van de Bunt (2003)
“A psychological state comprising the intention <i>to accept vulnerability</i> based upon <i>positive expectations</i> of the intentions or behavior of another”.	Rousseau et al. (1998, p. 395)	Dirks & Ferrin (2002), Yang & Mossholder (2010)

Table 5: An non-exhaustive list of definitions about trust.

In these definitions of trust there are some essential characteristics represented, these are: (inter)action with another person, expectation, vulnerability, and favorability (not detrimental). Cook & Wall (1980) and Creed & Miles (1996) regard trust among groups and individuals as an indispensable aspect within an organization, and that this will benefit at long term. Rotter (1967) and Gambetta (1988) are more general and focus more on co-operation. Most of the authors support when showing trust, there is a willingness to expose oneself to any kind of risk. Trust is necessary for risk-taking, which also means that a person has to accept vulnerability. The importance of vulnerability is emphasized by Mayer et al. (1995) and Rousseau et al. (1998), whereby the definition of Mayer et al. (1995) seems to be the most cited in literature (Davis et al., 2000). Gambetta (1988) notes that the willingness of putting oneself in vulnerable position, suggests that something of significance maybe lost.

Before describing the definition used in this research, an deeper insight in the concept of trust will be explained in the next paragraph.

### **3.3.2 Framing and Establishing Trust / How does trust operate?**

In the previous paragraph some definitions of trust, with their essential characteristics are given. Like said before, literature on trust of various disciplines has been consulted, and various disciplines means undoubtedly that it's difficult to compare these research efforts because of the multitude of different ways of defining the term trust. To make trust more understandable and allowing researchers to compare their results with each other McKnight & Chervany (2001) defined "a cohesive set of conceptual and measurable constructs that capture the essence of trust definitions across several disciplines", see table 6. To get a better understanding of trust and it's contexts, the research of McKnight & Chervany (2001) is used as a basis, especially of the multiple perspectives. In this research multiple perspective is meaningful because of interaction between the employee and his supervisor in the context of an organization; whereby the psychological context analyzes personality, sociology analyzes the social structures and economists will have a more rational perspective.

McKnight & Chervany (2001) analyzed 65 articles from several domains (psychology, sociology, economics or political science and management or communications) on the definitions of trust. They categorized them by trust referent, which represent the characteristics of the trustee and categorized them by conceptual type, with high level concepts. The five conceptual types that they distinguish are: *Disposition to trust* (dispositional), *Institution Based Trust* (structural), *Trusting Beliefs* (interpersonal), *Trusting Intentions* (interpersonal) and *Trusted Related Behavior* (interpersonal) which will be discussed below.

#### **3.3.2.1 Disposition to trust (Dispositional)**

The earliest research that has been done on trust, is mostly been on Global Trust (e.g. Rotter, 1967, Mayer et al., 1995; McAllister, 1997). This is a more general form of trust that focusses on human nature and people in general, thus not people in specific and is a form of dispositional trust. Disposition to trust has mainly his roots in psychology, and signifies that some people are willing to depend on other people (McKnight & Chervany, 2001). Erikson (1950) describes 8 phases of psychosocial development, and the first phase is "trust vs. distrust", is this stage the young child (newborn) has his first experiences with the social world. Because the child experience both trust as distrust, he has to build a feeling of trust in their dependency on others. This dependency is being influenced through responses and sensitivity from the caregiver. As a result, a perception of predictability and reliance of his caregiver is formed. This feeling of trust is a foundation of development and generalizing trust in the future to others, although it can be adjusted by events later in life.

Nooteboom & Six (2003) make a distinction between the noun "trust" and the verb "to trust". Mostly if researchers use the noun, they concern more about the disposition for participation in trusting behavior and if the verb is being used, it mostly refers to the behavior itself. Nooteboom & Six (2003) point out that an explanation of the various levels of trust between people could be their overall disposition to trust. This general tendency to trust on behavior specifically arises when a setting is unknown to someone (Rotter, 1980), but is influenced by personality and circumstances in that situation (Mayer et al. 1995) and. At work this could

affect the interaction between employees and supervisors, and could affect a fundamental degree of trust between them (Dirks & Ferrin, 2002). The role of propensity to trust and working in teams, is been studied by Costa (2003). She found that “individuals who trust their teams have a high propensity to trust others, strongly perceive other team members as being trustworthy, often engage in cooperative behaviors and do not monitor the work of their colleagues” (Nooteboom & Six, 2003). However, predicting (the level of) trust between people, by using their disposition or propensity towards trust, showed conflicting results in research (Dirks & Ferrin, 2002).

### **3.3.2.2 Institution Based Trust (Structural)**

Institutional based trust is focused on impersonal objects. Lane (1998) defines it as “Institutional trust exists when people rely ‘on formal, socially produced and legitimated structures which guarantee trust’”. This construct comes from the sociology tradition positing that people can rely on others because of structures, situations, or roles that provide assurances that things will go well” (McKnight & Chervany, 2001).

One of Six (2004) her research questions is about the influence of the organizational context for building trust. She divided trust in two dimensions: cognitive and affective trust (after McAllister, 1995). She found that the more organizations encourage and support individual employees in developing interpersonal skills the better the trust is being shaped. She identified five institutional arrangements of the organizational context that are important, these are: Explicit formulation and implementation of *norms and values*, for operating in, and knowing what is appropriate behavior in the organization. Second, the *socialization process* for newcomers. Third is *control*; “The relational signal in a controlling action is decisive in determining whether control leads to distrust or trust”. Fourth is *functional interdependence*, “the way in which people in the organization are functionally dependent on each other”. The fifth, and last is *human resource practices*; the possibility for improving the employees resources with clear and fair formulation and execution of performance contingent rewards.

### **3.3.2.3 Trusting Beliefs (Interpersonal)**

Trusting beliefs are aimed at a person, not at an situation, and it means “the extent to which one believes, with feelings of relative security, that the other person has characteristics beneficial to one. One judges the trustee to be trustworthy, meaning that they are willing and able to act in the trustor’s interest” (McKnight & Chervany, 2001).

Mayer et al. (1995) have done research over twenty sources to study which determinants of trust are leading. They present three determinants, of which they think it “explains a major portion of trustworthiness” (Mayer et al., 1995), these are: Ability, Benevolence and Integrity. Relevancy of each determinant will depend on the presented scenario. This distinction in these three determinants has been supported by various researchers, studying the construct of trust (Davis et al. 2000). McKnight & Chervany (2001) made their own subdivision by their meta study, namely: Competence, Benevolence, Integrity and Predictability, which is almost similar to Mayer et al. (1995).

Mayer et al. (1995) define the word ability as follows: “Ability is that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain”. They mention about the words ability and competence, that they came across

several scholars that discussed similar construct with various synonyms, and that the word competence defines a similar construct as the word ability. McKnight & Chervany (2001) appoint their definition of competence: “One securely believes the other person has the ability or power to do for one what one needs done”. Whereby the definition of McKnight and Chervany (2001) puts more emphasis to the interaction between (two) persons and Mayer et al. (1995) is more broad.

Benevolence is “the extent to which the trustee is believed to want to do good to the trustor, aside from an egocentric profit motive” (Nooteboom & Six, 2003). It’s not about a situation but in particular about an individual. If an employee has the feeling that his supervisor treats him with respect and dignity and that he is fairly to him, he will see his supervisor as benevolent (Bijlsma & van de Bunt, 2003).

Integrity means that the trustor securely believes the trustee makes good faith agreements, tells the truth, and fulfills promises (McKnight & Chervany, 2001). Determinants as consistency, having the fame for being fair and honest, all provide to the belief of the employee that his supervisor is an integer person (Davis et al., 2000).

Predictability is being appointed as a determinant by McKnight & Chervany (2001) but left out by Mayer et al. (1995). They mention that there is obviously a correlation with trust, since there both aspects that reduce uncertainty. Nevertheless it is dubious, because in a lot of research there is an overlap between these two (e.g. Gambetta, 1988; Rotter, 1967).

**3.3.2.4 Trusting Intentions (Interpersonal)**

Trusting Intentions means one is willing to depend, or intends to depend, on the other party with a feeling of relative security, in spite of lack of control over that party, and even though negative consequences are possible” (McKnight & Chervany, 2001).

**3.3.2.5 Trust Related Behavior (Interpersonal)**

This is defined by McKnight & Chervany, 2001 as: “A person voluntarily depends on another person with a feeling of relative security, even though negative consequences are possible. ‘Depends’ is specified as a behavioral term, distinguishing trust-related behavior from trusting intentions, which inhere a willingness to depend”.

			Interpersonal		
	Dispositional	Structural	Perceptual	Intentional	Behavioral
<b>Trust:</b>					
<i>Conceptual Level</i>	Disposition to trust	Institution based Trust	Trusting Beliefs	Trusting Intentions	Trust related Behavior
<i>Operational Level</i>	<ul style="list-style-type: none"> <li>• Faith in Humanity</li> <li>• Trusting Stance</li> </ul>	<ul style="list-style-type: none"> <li>• Structural Assurance</li> <li>• Situational Normality</li> </ul>	Trusting Beliefs- <ul style="list-style-type: none"> <li>• Competence</li> <li>• Benevolence</li> <li>• Integrity</li> <li>• Predictability</li> </ul>	<ul style="list-style-type: none"> <li>• Willingness to Depend</li> <li>• Subjective Probability of Depending</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperation</li> <li>• Information sharing</li> <li>• Informal Agreements</li> <li>• Decreasing Controls</li> <li>• Accepting Influence</li> <li>• Granting Autonomy</li> <li>• Transacting Business</li> </ul>

Table 6: Subdivision of Trust, based on McKnight & Chervany (2001)

The definition of trust in this research is directed at the interpersonal level, because the aim is to give an answer to what the employee's perceived level of trust in the direct supervisor rated by the employee. At interpersonal level it could be defined as a belief, intention or behavior, but because it will be rated by the perception of the employee, and like Mayer et al. (1995) and Dirks & Ferrin (2000) mention that they and various other scholars have noted that defining trust as a behavior is problematic, because of the operationalization of this. Thus the definition is based on the beliefs of trust because they present a "solid foundation for understanding how to build trust. These are specific, perceptual variables on which a manager could focus attention and thereby improve trust" (Davis et al., 2000).

In this research the following definition is used: Trust is the belief of an employee that his direct supervisor is a person of integrity, has the ability to perform his job well and is benevolent regarding to work related wishes and desires of the employee.

### **3.3.3 Consequences of trust**

This next paragraph will give an insight in the importance of trust within organizations and between supervisor and subordinate.

When mentioning this research and the role of trust to others, most of them already appoint to me that it's obvious that trust is important, but that they are curious about why and how it works. Also Gambetta (1988) mentioned in his foreword the acknowledgement, but (until then) seldom examined importance of trust: "In the social sciences the importance of trust is often acknowledged but seldom examined, and scholars tend to mention it in passing, to allude to it as a fundamental ingredient or lubricant, an unavoidable dimension of social interaction, only to move on to deal with less intractable matters". Fortunately there has been a growing interest in the organizational literature of the role of trust within organizations (Mayer et al, 1995).

Working in an organization generally involves people working together, and this is mostly combined with relying and depending on each other to realize personal and organizational ambitions. To avoid self-serving behaviors many organizations use control mechanisms and contracts (Mayer et al., 1995). Opinions about the role of control are divided in literature, some say it is a substitute for trust (e.g. Cummings & Bromiley, 1996), because it will lower transaction costs ("denies the viability of trust that goes beyond calculative self-interest" (Nooteboom & Six, 2003)). The more trust there is being experienced between connected people, the less the costs of monitoring, and the less controlling mechanisms or other checking methods are required. Other scholars argue that a form of control is required to build and maintain trust, because they will both contribute to the level of co-operation needed in a relationship (Bijlsma & van de Bunt, 2003). In their own research, Bijlsma & van de Bunt (2003) also found a positive relation between monitoring and trust. They argue that monitoring had the following results: experienced as care for the organizational members (individual & group), making it possible that managers showed other behavior like feedback on performance, appreciation of good work (consequently), guidance to improve individual performance, managerial support and problem solving.

Six (2004) concludes following her literature research that trust is been regarded by other scholars as a requirement in an environment which is high ambiguous and dubious and with



high complexity. On the one hand trust can give a degree of certainty which may help you survive in this context, and on the other hand trust can be beneficial when taking risks what can be crucial in complex environments. Dirks & Ferrin, 2002 mention that employees will shift their energy for “covering their back”, when they have the perception that their supervisor can’t be trusted. Table 7 shows other consequences of trust in leadership.

Greater Job Performance	Dirks & Ferrin (2002)
Organizational Citizenship Behavior	Dirks & Ferrin (2002); Chen et al. (2008)
Greater Job Satisfaction	Dirks & Ferrin (2002)
Organizational commitment	Dirks & Ferrin (2002); Bijlsma-Frankema (2005)
Intention to stay	Dirks & Ferrin (2002)
Goal Commitment	Dirks & Ferrin (2002); Bijlsma-Frankema (2005)
Belief in information	Dirks & Ferrin (2002); Bijlsma-Frankema (2005)
Satisfaction with leaders	Dirks & Ferrin (2002)
Leader-member exchange	Dirks & Ferrin (2002)
Open Communication and Information exchange	Bijlsma-Frankema & Costa (2005); Six (2004)
Psychological safety	Bijlsma-Frankema & Costa (2005); Six (2004)
Mutual Learning	Bijlsma-Frankema & Costa (2005); Bijlsma- van de Bunt( 2003), Six (2004)
High levels of cooperation and performance	Bijlsma-Frankema & Costa (2005); Bijlsma- van de Bunt( 2003); Six (2004)
Acceptance of influence	Bijlsma- van de Bunt( 2003)
Contribution to creativity and innovation and hereby the ability to change strengthens	Six (2004)

Table 7: Consequences of trust in leadership

That trust between supervisor and subordinate has a lot of consequences that seems obvious now, that’s maybe why there is not a lot of disagreement on this point among scholars. Like Bijlsma-Frankema & Costa (2005) point out: “Trust is generally acknowledged to smooth relations between actors by bringing on a wide variety of positive attitudes and behaviors towards trusted others”. The following hypotheses are proposed:

*Hypothesis 2: The employee’s perceived level of trust in the direct supervisor will have a positive, moderating effect on the relation between Free Time and PI*

*Hypothesis 3: The employee’s perceived level of trust in the direct supervisor will have a direct positive effect on PI*

### 3.4 Conceptual Model

**Object of study** Employees  
**Domain** Employees in Organizations

**Main research question**

*Can Personal Initiative be encouraged by the influence of the reward “Free Time” and the employee’s perceived level of trust in the direct supervisor?*

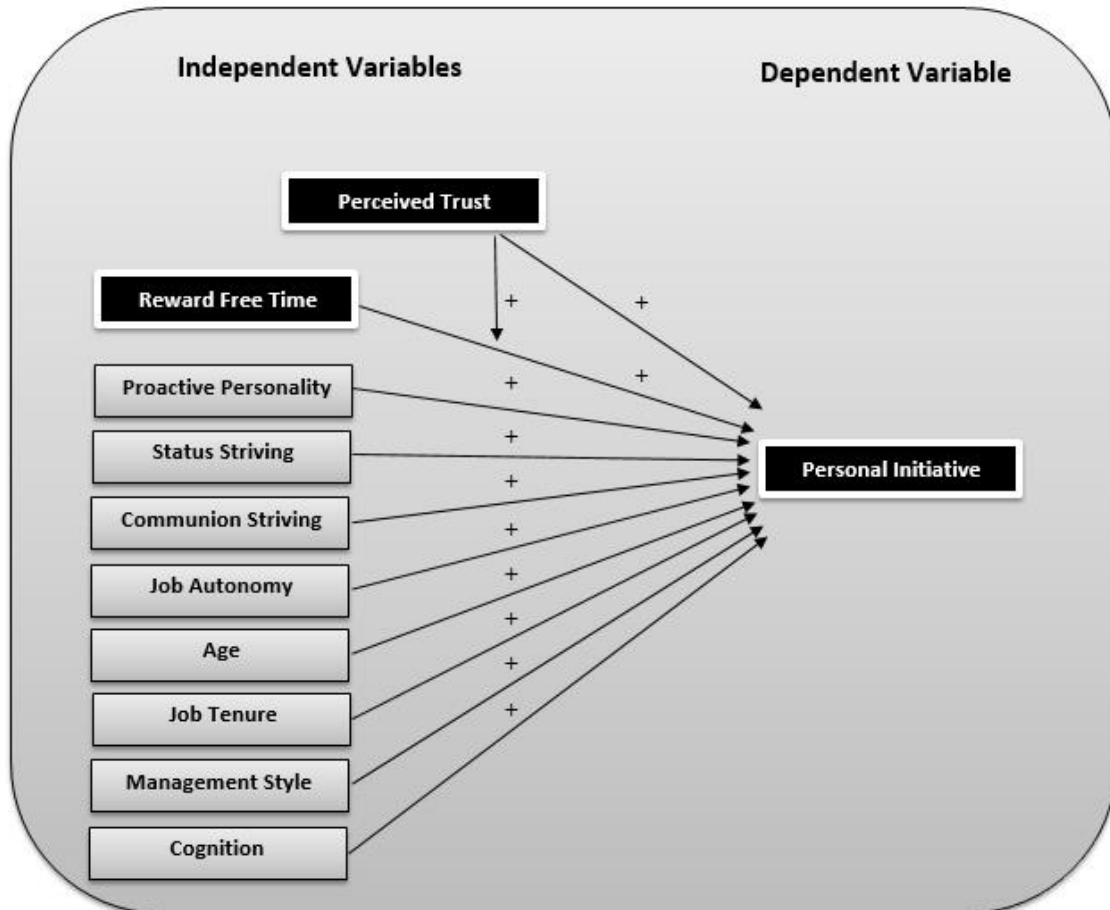


Figure 1: Conceptual Model

**Hypotheses:**

- Hypothesis 1: The relation between PI and the reward Free Time granted to an employee will likely show an inverted U, when more Free Time is given*
- Hypothesis 2: The employee’s perceived level of trust in the direct supervisor will have a positive, moderating effect on the relation between Free Time and PI*
- Hypothesis 3: The employee’s perceived level of trust in the direct supervisor will have a direct positive effect on PI*

## 4. RESEARCH METHOD

### 4.1 Research Strategy

This research is a theory-testing, quantitative research in which the relation between Free Time, perceived Trust by direct supervisor and PI is being examined. Before execution of the empirical part where theory could be tested, an exploration in literature and practice, by collecting and evaluating relevant information, was done. This in order “to find out whether or not a proposition regarding the research topic of interest is available” (Dul & Hak, 2008). Even though exploration in practice was minimal, it was the driving force behind the aim of this research, and that is to get a better understanding of PI (the depended variable) and to contribute to this theory. After the exploration phase hypothesis were developed by building on the existing literature. Hence, these hypothesis will be validated by collection of empirical data.

The propositions that have been presented, express a probabilistic relation, this is defined by Dul & Hak (2008) as: “A probabilistic relation is a relation in which both A and B on average increase or decrease at the same time. It is assumed that A causes B. It can be formulated as: “If A is higher, then it is likely that B is higher””. In theory-testing research, with propositions expressing a probabilistic relation, the preferred research strategy is an experiment, the second best a survey (Dul & Hak, 2008).

An experiment has, by proper execution, a good prospect for generalizing this. To perform an experiment, variables (one or more) in the object of study are being manipulated, to see if this has an effect on the dependent variable. The researcher has to make sure that the outcome is due to his act (the thing he changes), and not to other influences.

I could have done an experiment to investigate the effect of the independent variable Free Time on the dependent variable PI. I would need the consent of an organization to give this “Free Time” to a group of employees, and another group that didn’t get this time. Giving free time to a group of people, will cost the organization at short-term level money (direct or indirect), and it’s not sure if it will prepay itself. Thus there is a lot of good willingness from an organization needed to perform this research. Besides that, I was probably too late with the exact conceptual model and with enough inside in the literature about this to be confident enough to conduct this kind of research. Then, there is the other variable “Perceived Trust” (independent and moderating) that is difficult to examine isolated in an experiment, Glaeser et al. (2000) point out: “Trusting behavior in the experiments is predicted by past trusting behavior outside of the experiments”. Thus, due to financial and time implications, not enough confidence to conduct an experiment and the difficulty of isolating trust in an experiment, doing research by an experiment is not an option.

The second best is the survey strategy, and this is chosen for this research, a large N will be taken through the measurement method of standardized questionnaires and the data will be analyzed in a quantitative manner. The questionnaire with the SPSS codes is included in Appendix III.

#### **4.1.1 Survey**

A survey was chosen for the empirical research. The survey strategy according to Dul & Hak (2008) is “research in which (a) a single population in the real life context is selected, and (b) scores obtained from this population are analyzed in a quantitative manner”. Note here, that a survey is not a synonym for a questionnaire, but due to the size and the spread of the group, and the available time of the researcher, a questionnaire was the best option. When the constructs and their attributes were defined and the questions were made, like described in the next paragraphs, a web based survey program (SurveyMonkey) was used to make a questionnaire to send to the instances. To get a higher respondents rate it is preferred to make the questionnaires hard copy and to deliver and collect them personally. In essence, the choice was to do a census in one (part of an) organization, if this was an option, delivering and collecting of the questionnaires personally, might have been an possibility. In a given moment, it was decided to conduct this research within various departments/wards/B.U.'s within nine organizations. These departments were not bound to one building or near each other, besides that there are several teams that deliver outpatient care, so they are not districted to one workplace. Thus, due to obligations that come with delivering the questionnaires hard copy, like, a lot of time and costs for transport, I chose to use a web based survey program. To prevent a low response, cooperation with the managers was realized, so they could sent the email with the web-based link to their subordinates.

##### *Social Desirability Bias*

The “social desirability effects refers to evidence that some respondents’ answers to questions are related to their perception of the social desirability of those answers. An answer that is perceived to be socially desirable is more likely to be endorsed than on that is not” (Bryman & Bell, 2011). To prevent Social Desirability Bias in this research, three actions were taken; *First*, the questionnaire had an introduction integrated on the first page to give insight to the respondent. In the flyer that was sent to the managers (see Appendix I) the real purpose of this research was mentioned (PI). In the questionnaire and the email that accompanied the link of the questionnaire to the subordinates, this purpose wasn’t mentioned to prevent bias. Instead another, slight similar purpose was mentioned, they were told that they would participate in a research on work motivation. *Second*, the questions of all the variables, even the control variables, weren’t clustered by subject/variable, but they were placed at random, so it would be more difficult to associate one with another. *Third*, the questionnaire was anonymous, because the subject of “trust” can be considered as delicate, and the other questions are partly related to the performance of themselves. Thus the anonymous characteristic was described in the introduction of the survey.

##### *Operationalization of the survey*

After completing the questionnaire in SurveyMonkey, the questionnaire was presented to five people for a pilot, three of them were random friends the other two were also friends but working in these sectors. They were asked to pay attention to the following; context, language, understandability of the questions and lay-out. The purpose of a pilot is to identify and eliminate potential problems and to prevent future errors in this research (Bryman & Bell, 2011). Feedback was given, and is incorporated into the questionnaire, namely; two questions

were rephrased, some linguistic errors were corrected. The next step was sending the web based link to the relevant managers, and they sent it to their subordinates. After two weeks a reminder was sent to these managers again. The survey had a lead time of 5 weeks in total.

## 4.2 Select Instances

The object of study are employees, and this is meant in the full sense of the word; employees all over the world, in any kind of company, any sector, any age, any gender, any profession etcetera. The domain is employees in organizations. Also this is a very broad concept, whereby the most important is that one has an supervisor in the organization where's he's working.

To conduct a survey, a population of the domain has to be selected. The domain in this study is to widespread to draw an representative a-select sample. By this matter, convenient samples are chosen which is the aim to investigate them entirely. This approach in research is quite new and is referred to as "census" of a (small) population - research. It is defined by Bryman & Bell (2011) as "The enumeration of an entire population. Thus, if data are collected in relation to all units in a population, rather than in relation to a sample of units of that population, the data are treated as census data". And if further research, this could be in the form of a replication, is done it might be possible to generalize this for the whole domain.

The aim was to find an organization who wanted to participate in this research, thus a flyer was made to promote this research (see Appendix I). These flyers were send within my network mainly to managers and CEO's that work in the health care sector. The healthcare sector was chosen because my currently and previous job(s) are in this sector, and like mentioned in the beginning, in this sector they are especially concerned about the subject of PI because of the many changes that involve more self-management. The flyers were sent only to managers/CEO's because their cooperation and commitment was needed to engage in this research. If they would decide to cooperate, then they had to send the link of the questionnaire program to their subordinates. After sending the flyers I had personal contact with some of the managers and it appeared that it was difficult to get one entire organization to participate, because of all the changes that are going on, and the pressure that is experienced by the employees.

To maintain the strategy of doing a census, it was essential to delineate a defined/identical group of instances. Thus departments or wards were selected together with the managers of various organizations. There were no specific selection criteria, the only thing that was important to the manager, that the selected department or ward was in the opportunity (regarding to time and stress level) of completing a questionnaire. Besides the selection of instances in the health care sector, one business unit of an IT organization was selected, to examine the possible variations between the health care sector and a for profit organization.

Table 8 shows which organization, sector, departments/wards/business units were selected with corresponding number of employees. Thus, a questionnaire was sent to all the employees (total of 744) of these departments, so the research can still be characterized as a census (Bryman & Bell, 2011).

Organization	Sector	Department/Ward/BU	Number of employees
's Heerenloo	Health Care, for people with disabilities	Therapy & Expertise	75
Profila Zorg	Health Care, for people with disabilities	Residentials for assisted living (with nursery/care)	200
JGT Team (Jeugd-Gezin Team)	Youth Care	JGT Team	60
Iperse de Bruggen	Health Care, for people with disabilities	Therapy & Expertise	200
Parnassia	Health Care, for mental health	Adult, Outpatient Care	14
Het Parkhuis	Health Care, Elderly Care	Residentials for assisted living (with nursery/care)	40
Prezzent	Health Care, for people with disabilities	Residentials for assisted living (with nursery/care)	20
Laurens	Health Care, Elderly Care	Therapy & Expertise	45
CGI	Information Technology (IT)	Test & Quality Management	70
<b>Total</b>			<b>724</b>

Table 8: Overview of the participating instances

### 4.3 Measurement

The measurement of this research was to a great extent inspired by the C-OAR-SE method of Rossiter (2011-a). The C-OAR-SE method is a revolutionary measurement method that aims for a fundamental requirement of the measure, namely content validity. Rossiter (2011-a) argues that a lot of research in psychometrics is being assumed to be valid, because it produces scores that have “good psychometrics properties”, but “Most measures in the social sciences today lack realism because they do not measure what they are supposed to measure” (Rossiter, 2011-b). Thus, C-OAR-SE differs from traditional psychometrics, because it doesn’t aim at high internal consistency and reliability by repeating the test frequently, like psychometrics does. C-OAR-SE is “an acronym for its six procedural steps of Construct definition, Object representation, Attribute classification, Rater-entity identification, Scale (item type and answer format) selection, and Enumeration (scoring)” (Rossiter, 2011-a). It can be used to construct a questionnaire, but also for research that uses the interview method.

#### *Validity*

High content validity of the measure is “essential in C-OAR-SE theory and is the only requirement for a measure” (Rossiter, 2011-a). According to the theory “the content validity consists of two parts: Item-content validity (which means coming as close as possible to semantic identity between the content of the construct, as defined by the researcher, and the content of the question part of the measure) and answer-scale validity (which means freedom from measure-induced distortions of the true score caused by semantic confusion when the rater is responding to the answer part of the measure)”.

To meet these requirements, precise definitions of the constructs are given, the objects, attributes and raters are described, an overview is included in Appendix II.

#### *Reliability*

Measuring the reliability, the internal consistency of multiple items within a scale, can be done by using Cronbach’s alpha ( $\alpha$ ). A high positive value (the higher the better) is associated with

high consistency of the scale, in general a Cronbach's  $\alpha$  lower than 0,50 is considered as unfavorable or a negative consistency of the scale.

In the original C-OAR-SE article, Rossiter (2002) verified the use of Cronbach's alpha, but only with reflective attributes (Rossiter, 2011a). To make the distinction clear between formative and reflective constructs, the article of Jarvis et al. (2003) is applied, see [table ..](#) for an overview.

Formative measured construct	Reflective measured construct
Direction of causality is from items to construct	Indicators are manifestations of the construct
Indicators are defining characteristics of the construct	Indicators are manifestations of the construct
Changes in the indicators should cause changes in the construct	Changes in the indicator should not cause changes in the construct
Changes in the construct do not cause changes in the indicators	Changes in the construct do cause changes in the indicators
Indicators need not have the same or similar content indicators need not share a common theme	Indicators should have the same or similar content/indicators should share a common theme
Dropping an indicator may alter the conceptual domain of the construct	Dropping an indicator should not alter the conceptual domain of the construct

Table 9: Overview of distinctions between formative and reflective measured constructs, based on Jarvis et al., 2003

Thus the Cronbach's alpha is used for measuring the (first order reflective constructs) in Likert Scale, Table 10 shows the results. All the constructs scored a Cronbach's alpha higher than ,50, although measurements between ,50 and ,80 are not considered high, but enough to have a positive consistency. The low numbers can also be a result of the low N of items measured in 1 construct. The more items in a construct, the higher the Cronbach's alpha will turn out. The Cronbach's  $\alpha$  of the construct of the Status Striving is ( $\alpha$  0,573). This is not very high, but considering the results of some other constructs it could be rated as enough, but 1 item (C.SS.Inf.29) differed so much compared to the other items, that it was removed to make the scale more consistent.

Second order Formative Construct	First order Reflective Construct	Cronbach's alpha	N of items
<b>PI</b>	- Proactive	,607	3
	- Goal-directed	,532	2
	- Benefitting the organization	,563	2
	- Going beyond what is formally required in a given job	,694	2
	- Persistent in the face of barriers and setbacks	,558	2
<b>Trust</b>	- Integrity	,781	3
	- Ability to perform his/her job well	,889	3
	- Benevolence	,822	3
<b>Proactive Personality</b>	- Unconstrained by situational forces	,534	2
	- Effect environmental change	,602	3
N.v.t.	<b>Status Striving</b>	,629	2
	<i>Status Striving (before deleting 1 item)</i>	,573	3
N.v.t.	<b>Communion Striving</b>	,609	3
N.v.t.	<b>Job Autonomy</b>	,803	3

Table 10: Results of conducting Cronbach's Alpha

### *Likert Scale*

The variables (dependent, independent and control), ten in total, are measured by various scales. Six of them, namely PI, Trust, Proactive Personality, Status Striving, Communion Striving and Job Autonomy are set up in the form of seven point Likert-scales, from answering possibilities from “Strongly agree” until “Strongly disagree. Higher mean scale values indicate stronger presence of the construct. Seven point instead of five point Likert-scales were used because the respondent could be more precise in answering, especially with the variable “trust” which is a delicate subject. Likert scales are answering scales, ranked by mutually exclusive categories and this form of scale is called ordinal scale (de Vocht, 2013). It is not permitted to calculate (e.g. the mean) with this type of scale (Buijs, 1999). Though, in reality answers to this kind of ordinal scales are mostly measured if they were in a higher-level scale (Buijs, 1999), such as an interval or ratio scale, who have an arbitrary (interval scale) or an absolute (ratio scale) zero point (de Vocht, 2013).

#### **4.3.1 Dependent variable**

The dependent variable in this research is PI. After the explorative part in literature, the construct PI is defined. Due to using the theory of Rossiter (2011) of C-OAR-SE, and his emphasis of the importance on content validity, the construct is defined and subdivided into five attributes.

Definition PI: “Behavior that results in an employee taking, an proactive approach to goal-directed work that benefits the organization, goes beyond what is formally required in a given job and is not imposed or suggested by somebody else. And if barriers or setbacks occur the employee will show persistency in overcoming them”.

And it includes the following attributes:

- Proactive (trying to achieve change, by anticipating on problems and opportunities in a present work condition, not imposed or suggested by somebody else)
- Goal-directed
- Benefitting the organization
- Going beyond what is formally required in a given job
- Persistent in the face of barriers and setbacks

These attributes are all required to form the construct of PI, which implies it is a “formative second-order, and reflective first-order” construct (Jarvis et al. 2003).

In order to develop the questions, some insight was taken into existing questionnaires about PI, e.g. Frese et al. (1997) and Morrison and Phelps (1999). These scales have been used in many other studies and have been proven to be reliable (Rigtering & Weitzel, 2013). Due to the subdivision in various attributes of the construct PI, some questions out of the existing literature were copied, but also new questions that reflect the specific attribute are introduced.

The object to be measured are the employees/subordinates. The most reliable method for measuring PI of the employees without social desirability bias through a questionnaire, is to measure their PI by asking their supervisors (e.g. “On how many new projects did the

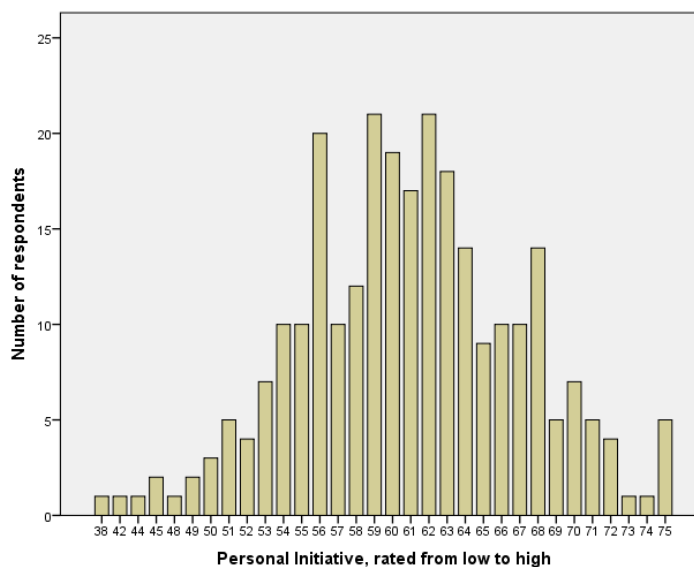


employee work last month?”). Most research on PI and related constructs depends on self-report scales, mostly Likert-type scales (Bledlow & Frese, 2009). Restriction to this kind of research is that it doesn’t necessarily reflect actual behavior, but mostly it captures the importance people allocate to PI (Frese et al, 1997). Besides this, it reflects how people approach work, not connected to particular situations at work (Bledlow & Frese, 2009).

However, due to the many departments, each with their own supervisor(s), it is a lot of administrative work to sort out who belongs to which department and to design various questionnaires and prepare them in SurveyMonkey, and unfortunately there was no time for this. Thus the measuring of PI is done in a common way, namely by self-report of the subordinate.

The scale is tested for normality. Graph 1 shows a normally distributed histogram, with enough scatter and symmetry. This means that it is possible to perform further analysis (e.g. linear regressions).

This is also consistent with the argument of Frese et al. (1996) that individuals always show a degree of PI, because it is part of a personal characteristic.



Graph 1: Distribution Personal Initiative

### 4.3.2 Independent variables

#### *Independent Variable “Reward Free Time”*

The *first* is “Reward Free Time”, a quantitative variable within the ratio scale. Ratio scales have an “absolute zero point” (e.g. age, income), and all arithmetic operations are possible (de Vocht, 2013).

Free Time refers to part of an employment relationship to work on own ideas, initiatives or activities that benefit the organization. The possibility to have Free Time for subordinates is a important factor for their both daily routines and intrapreneurial ideas and activities, “i.e. time to imagine, observe, experiment and develop” (Alpkan et al., 2010).

Reward Free Time is presented as an single item construct, and is been operationalized in the following way (using to the C-OAR-SE method):

Construct : Reward “Free Time” given by direct supervisor, as rated by employee

A. (ANOUK) SCHEPERS

Definition: Reward “Free time is a form of benefit an employee receives from his direct supervisor as part of an employment relationship to work on own ideas, initiatives or activities that benefit the organization, and this free time is expressed in time during working hours”.

Object Employees

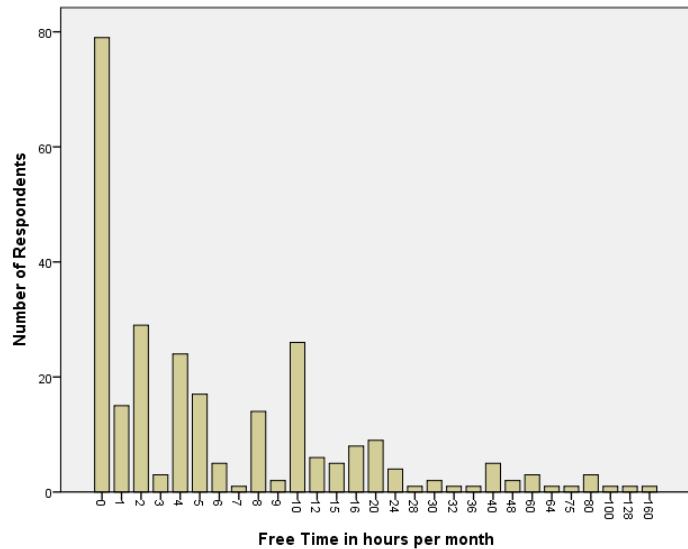
Rater Entity Subordinate (individual)

Attributes: Time

Working on own ideas, initiatives or activities that benefit the organization

The conceptual model proposes that FT affects PI positively, thus first FT is given than PI will show. In the questionnaire, a single question is included to determine the hours that a subordinate gets per month, month of June 2014, for Free Time.

Graph 2 shows the distribution of the variable Free Time in the month June 2014. Some outliers are shown; a lot of subordinates (around 80) don't get Free Time at all, and that 1 subordinate gets 160 hours per month.



Graph 2: Distribution reward Free Time in hours per month

*Independent Variable “Perceived Trust”*

The *second* independent variable is: “Perceived Trust”; employee’s perceived level of trust in the direct supervisor, and is a “reflective second-order and reflective first-order construct” (Jarvis et al. 2003). It has been operationalized, according to C-OAR-SE method on Content-Validity, in the following way:

Construct Perceived trust from direct supervisor, as rated by the employee

Defined as: “The belief of an employee that his direct supervisor is a person of integrity, has the ability to perform his job well and is benevolent regarding to work related wishes and desires of the employee”.

Object Employees

Rater Entity Subordinate (individual)

Attributes: Integrity

Ability to perform his job well

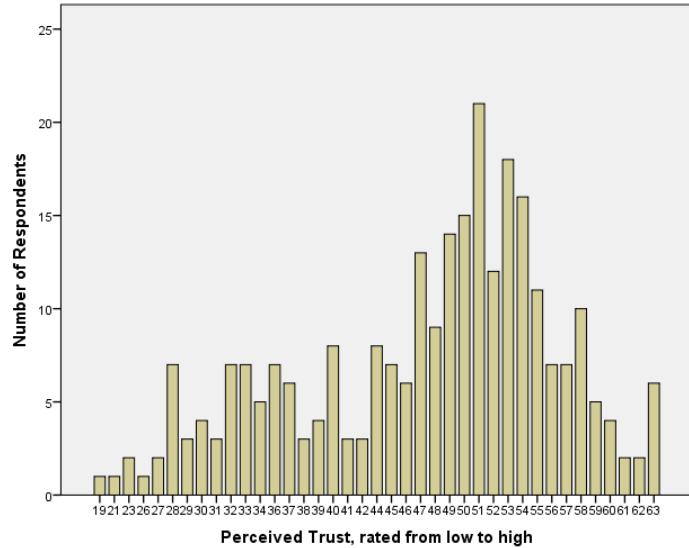
Benevolence

The attributes of trust (integrity, ability to perform job well and benevolence) are based on the beliefs of trust because they present a “solid foundation for understanding how to build trust.

These are specific, perceptual variables on which a manager could focus attention and thereby improve trust” (Davis et al., 2000). These beliefs are also used by other scholars to operationalize trust (Mayer et al. 1995; Davis et al., 2000; McKnight & Chervany, 2001). This independent variable Trust is rated by the perception of the employee, and is set up in the form of a seven point Likert scale, with answering possibilities from “Strongly agree” until “Strongly disagree”.

Some of the questions are based on the questions in the research of Yang & Mossholder (2010), Dirks & Ferrin (2002) and Mayer & Davis (1999), and some of them are designed for this research. One question (T.Int.14) was a reversed question and had to be decoded before analyzing.

The variable Perceived Trust shows a distribution that is negative- or left skewed.



Graph 3: Distribution of

Perceived Trust

### 4.3.3 Other Independent Variables (Control)

In this study ten other variables, (called control variable in analysis) are used in this research. Control variables provide insight if there are in addition to the independent variables, other variables that can influence the results or findings of this research. Table 2 in paragraph 3.4.1 shows the antecedents that have been distinguished out of literature for PI. A selection of the (probably) most influential are selected as control variables.

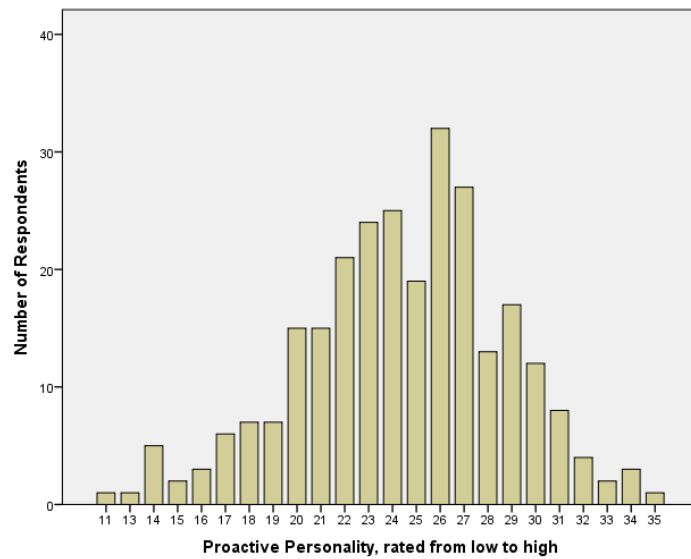
The definitions of the control variables were in contrast to the dependent and independent variables, withdrawn from the literature. The Control variables were all rated by the subordinate.

#### Variable Proactive Personality

Bateman & Crant (1993) argue that people with a proactive personality, have personality traits which will activate people and contribute to initiative.

Construct: Pro-active personality from the employee, and as rated by the employee  
 Defined as: “Characterized as someone who is relatively unconstrained by situational forces and who effects environmental change” (Bateman & Crant, 1993)

The questions were withdrawn from the short version of the Proactive Personality Scale, by Bateman & Crant (1993), but not all the questions, only the question related to the attributes of the definition and questions that were much alike were erased. It is rated by the perception of the employee, and is set up in the form of a seven point Likert scale, with answering possibilities from “Strongly agree” until “Strongly disagree”.



Graph 4 shows a normally distributed histogram, with enough scatter and symmetry.

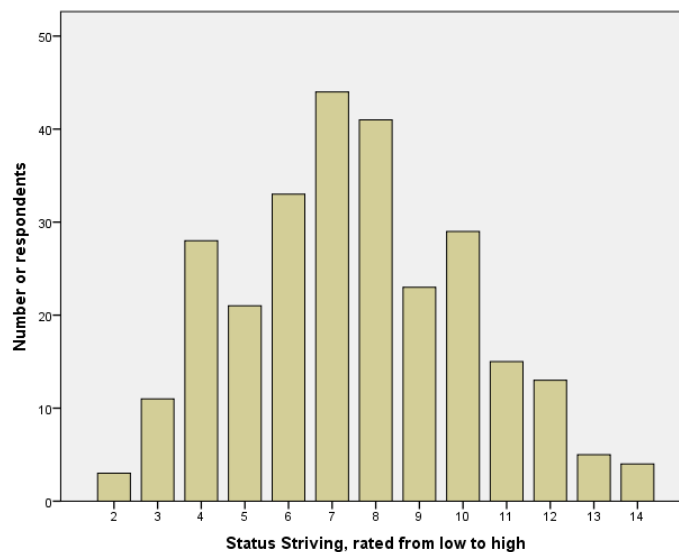
Graph 4: Distribution of Proactive Personality

*Variable Status Striving*

Employees striving for status, are people that have a focus on getting higher in workplace hierarchy pyramid, or getting ahead and have a drive for influence and dominance. Chiaburu & Carpenter (2013) found in their research that status striving people show more initiative.

Construct: Status Striving behavior from the employee, as rated by the employee  
 Defined as: “Status striving employees focus on climbing the workplace hierarchy or attaining informal status to obtain more influence within the organization (i.e., getting ahead)” Chiaburu & Carpenter (2013)

The questions were withdrawn from the research of Chiaburu & Carpenter (2013), but not all the questions, only the question related to the attributes of the definition. It is rated by the perception of the employee, and is set up in the form of a seven point Likert scale, with answering possibilities from “Strongly agree” until “Strongly disagree”.



Graph 5 shows a normally distributed histogram, with enough scatter and symmetry. The Cronbach’s  $\alpha$  of the construct of the Status Striving is  $\alpha$  0,629 (before deleting 1 item:  $\alpha$  0,573).

Graph 5: Distribution of Status Striving

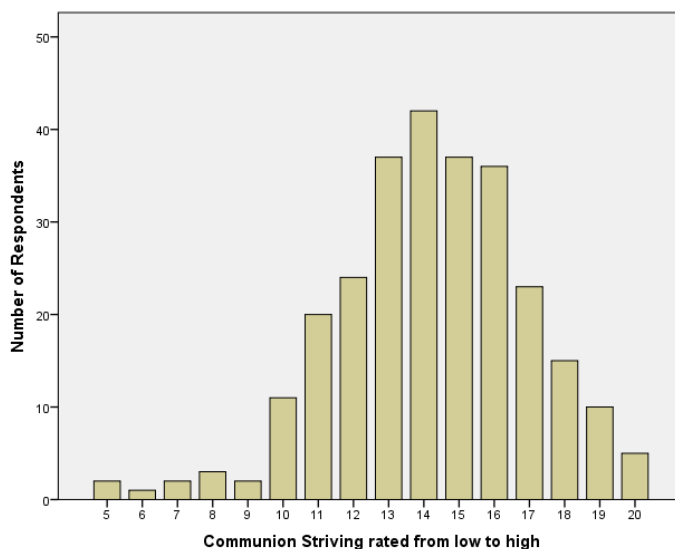
*Variable Communion Striving*

“A fundamental social need is the one for belongingness” (Baumeister & Leary, 1995), or communion striving or getting along. Employees who are in the need for this, show the motivation to invest in close relationships and bonds with others (Chiaburu & Carpenter, 2013). Chiaburu & Carpenter (2013) argue that employees who strive only for the need of communion striving, are *less likely* to take initiative. Hartog & Belschak (1997) suggest that commitment to team is positively correlated with self-rated initiative, and that this correlation was even stronger than the positive correlation between organizational commitment and PI.

Construct: Communion Striving by the employee, as rated by the employee  
 Defined as: Communion striving captures the drive for close relationships and bonds with colleagues (i.e., getting along), Chiaburu & Carpenter (2013)

The questions were withdrawn from the research of Chiaburu & Carpenter (2013), but not all the questions, only the question related to the attributes of the definition and questions that were much alike were erased. It is rated by the perception of the employee, and is set up in the form of a seven point Likert scale, with answering possibilities from “Strongly agree” until “Strongly disagree”.

Graph 6 shows a normally distributed histogram, with enough scatter and symmetry.



Graph 6: Distribution of Communion Striving

*Variable Job Autonomy*

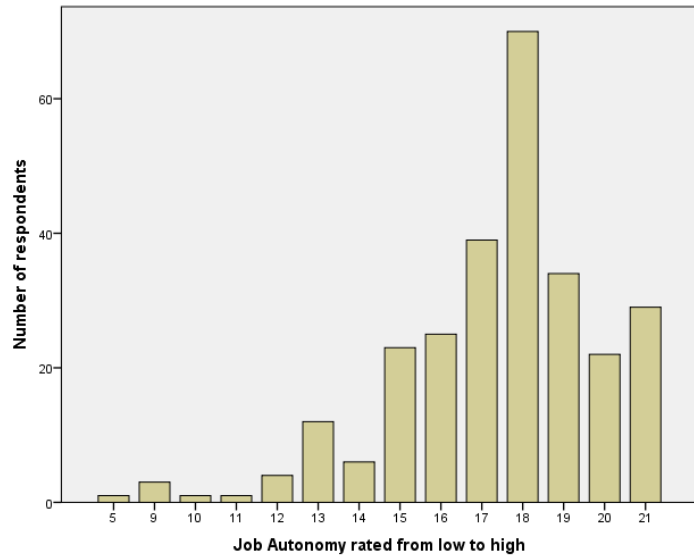
Taking decisions with regard to ones work, having control over their work and working conditions is a part of job autonomy. Frese (1989) have shown that this kind of autonomy correlates with higher levels of initiative and little autonomy can cause a passive and helpless approach toward work (Parker et al. , 2006).

Construct: Job Autonomy of the employee, as rated by the employee  
 Defined as: "Employees must be able to make decisions with regard to, and have control over their own work" (Frese, 1989)

The questions were withdrawn from the research of Frese (1989) and Ahuja et al. (2007) but not all the questions, only the question related to the attributes of the definition and questions that were much alike were erased. It is rated by the perception of the employee, and is set up

in the form of a seven point Likert scale, with answering possibilities from “Strongly agree” until “Strongly disagree”.

Graph 7 shows the variable Job Autonomy with a distribution that is positive- or right skewed. A lot of subordinates in this study feel to a great extent that they have autonomy in their jobs.

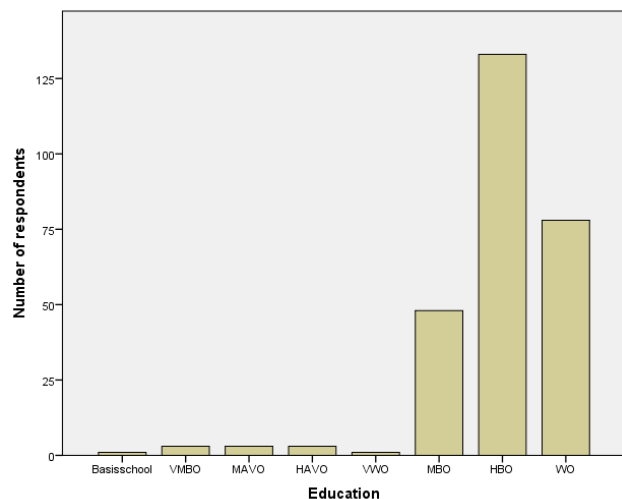


Graph 7: Distribution of Job Autonomy

### Variable Cognition

For the control variable of cognition, level of education was rated. This was subdivided in 8 categories. Mumford & Gustafson (1988) argue that through education employees develop skills and knowledge, and that this will help them to identify and find solutions to problems they encounter in their work and Fay & Frese (2001) argued that “Cognitive ability, -general intelligence- was consistently and positively associated with an increase of PI over time”. The reason for including this variable in this research, was to examine the difference between MBO and HBO/WO employees in healthcare, because the majority of employees working in longterm healthcare are MBO (or related) educated (Nivel, 2012). The emerging management fads like Self Managing Working Teams and Lean Management requires more initiative behavior and if the results will show a difference between these educations and PI, this outcomes could be taken into consideration by implementing these kinds of fads.

One of the requirements of conducting multiple regression is at least an response rate of N = 50 topped with 8 responses for every independent variable (Tabachnick & Fidell, 2007), this would imply a response rate of at least N = 68. Due to the low response of the category of MBO education (N = 48), this variable is left out of further analyses.



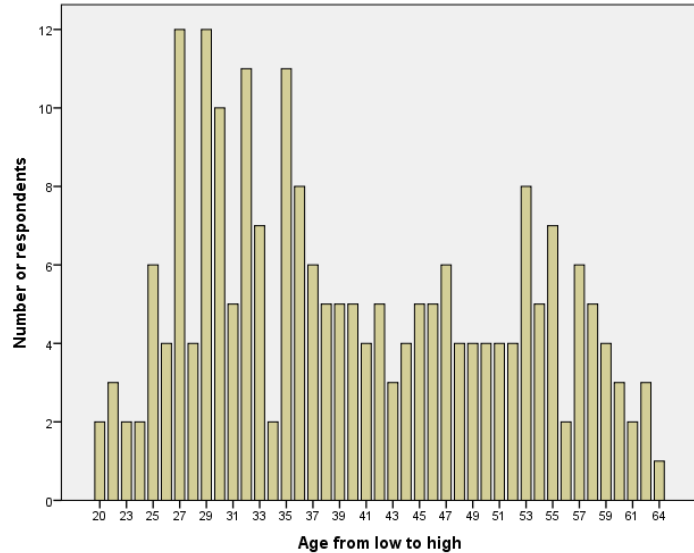
Graph 8: Distribution of education levels

*Variable Age*

Aging is associated with more experience in different areas of life, and mostly increasing in skills and experience. This can have a positive effect on PI. On the contrary, age can also decrease the drive for ambition or the desire to learn new things or to change things.

Age is a quantitative variable within the ratio scale. Ratio scales have an “absolute zero point” (e.g. age, income), and all arithmetic operations are possible (de Vocht, 2013).

Graph 9 shows the spread of age of the respondents. The mean is 40,23 years, median 38, and modus 27 and 29 years old.



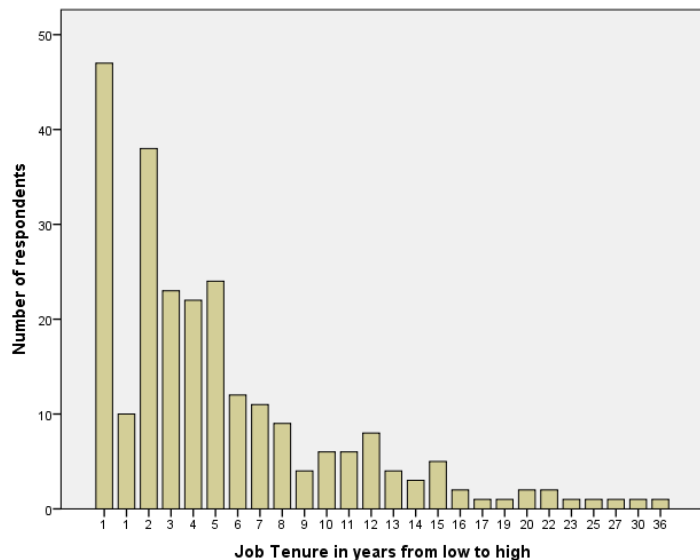
Graph 9: Distribution of Age

*Variable Job Tenure*

Gerhardt et al. (2009) suggest that new entrants in an organization show more initiative or are more proactive. They are more likely to seek new information, build new relations and exchange information with (new) others, and want to engage in multiple new tasks. This results in active behavior and taking more PI. By applying the variable Job Tenure (instead of organization) it also includes employees who switch position within the same organization, and this could show similarities with new entrants in an organization.

Job Tenure is also a quantitative variable within the ratio scale.

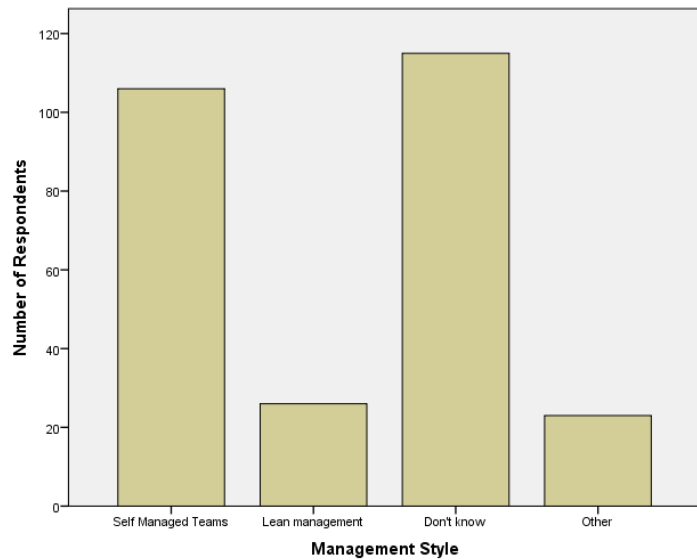
It is also obvious that a lot of people are relatively new in their positions (and/or new in the organization). The mean is 5,42 years and the modus is 0,5 year.



Graph 10: Distribution of Job Tenure in Years

*Variable Management Style*

The majority of the respondents work in healthcare sector. In the moment this sector is subjected to structural budget- and funding cuts. To deal with this, organizations have to reclassify budgets and structure of the organization. This is a reason for the emerge of management fads as self-managed working teams and Lean Management. Higher management initiates taking on more tasks or responsibilities by subordinates from middle management. For this reason you would aspect that employees in Self-Managing Working Teams or Lean Management would show more PI. This Control variable is subdivided in 4 categories, namely: "Self-Managing Working Teams" (Zelfsturende Teams), "Lean Management", "I Don't know" (Geen idee), and "Other" (Anders), where they could fill in the blanc part.

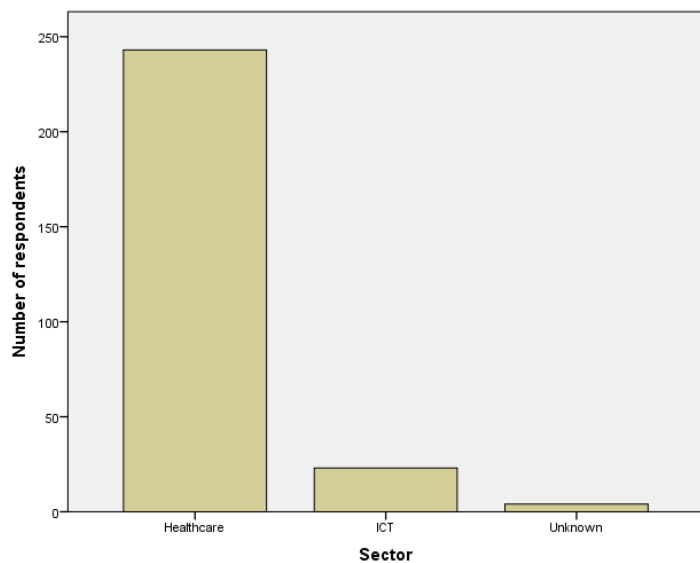


Graph 11 shows the response of the management styles.

*Graph 11: Distribution of Management Styles*

*Variable Sector / Industry*

Control Variable Sector is subdivided in three categories: Healthcare (Zorg), Information Communication Technology (ICT) and unknown (onbekend). One of the requirements of conducting multiple regression is at least an response rate of N = 50 topped with 8 responses for every independent variable (Tabachnick & Fidell, 2007), this would imply a response rate of at least N = 68. Due to the low response of the category ICT (N = 23), this variable is left out of further analyses.



*Graph 12: Distribution Sector*



## 4.4 Data Analysis

### 4.4.1 Data

In this study the research strategy of a census of a framed (and convenient) population is applied. This implies that the obtained results are always significant, because of the measurement of the entire population. The response rate was on the other hand, not 100%, but 43%, and after excluding the questionnaires that weren't completed, 37% remained and was included in the analysis. These results cannot be generalized to this entire population, because the sample is not a-select drawn.

Table 11 shows the participating departments/wards or business units of a total of nine organizations. The questionnaire was sent to all the employees within this department/ward/B.U. The response rate was 43% with 312 returned questionnaires, then 42 questionnaires were excluded from the analysis because they were not completed. The following remained:

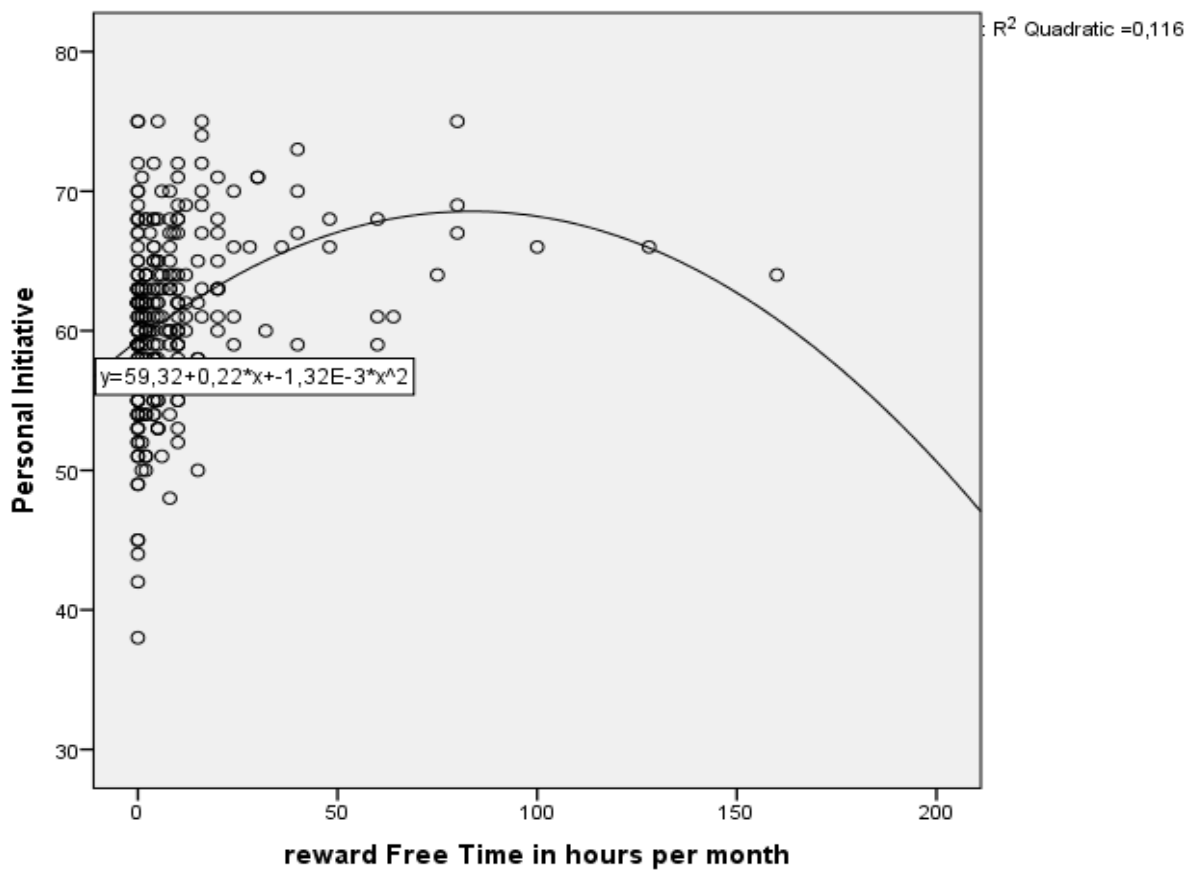
Organization	Sector	Department/Ward/BU	Number of employees	Respondents	Percentage %
's Heerenloo	Health Care, for people with disabilities	Therapy & Expertise	75	23	31
Profila Zorg	Health Care, for people with disabilities	Residential for assisted living (with nursery/care)	200	69	35
JGT Team (Jeugd- en Gezin Team)	Youth Care	JGT Team	60	22	37
Iipse de Bruggen	Health Care, for people with disabilities	Therapy & Expertise	200	68	34
Parnassia	Health Care, for mental health	Adult, Outpatient Care	14	4	29
Het Parkhuis	Health Care, Elderly Care	Residential for assisted living (with nursery/care)	40	17	43
Prezzent	Health Care, for people with disabilities	Residential for assisted living (with nursery/care)	20	7	35
Laurens	Health Care, Elderly Care	Therapy & Expertise	45	10	22
CGI	Information Technology (ICT)	Test & Quality Management	70	23	33
Unknown				27	
<b>Total</b>			<b>724</b>	<b>270</b>	<b>37%</b>

Table 11: Overview of instances and response rate

In the previous chapter the validity and the results of reliability of the scales are already discussed. This chapter concentrates on the following steps of analysis, namely correlation and regression.

#### 4.4.2 Visual analysis

The aim was to conduct a census of a small population, but the percentage of effective questionnaires was 37%, and was not a-select drawn. In graph 14 a scatterplot and table 12 descriptive Statistics provide a first sight in the data. The graph shows a parabola effect, what confirms the first hypothesis; reward Free Time will have an inverted U effect on PI. The descriptive statistics show a high standard deviation for Free Time, this also can be seen in the scatter plot (outliers and wide spread). Another scatter plot was made without the outlier of 160 hours a month of Free Time, even then it resulted in a parabola. Further statistical analysis can provide a deeper understanding, this will be examined in the paragraphs on correlation and multiple regression.

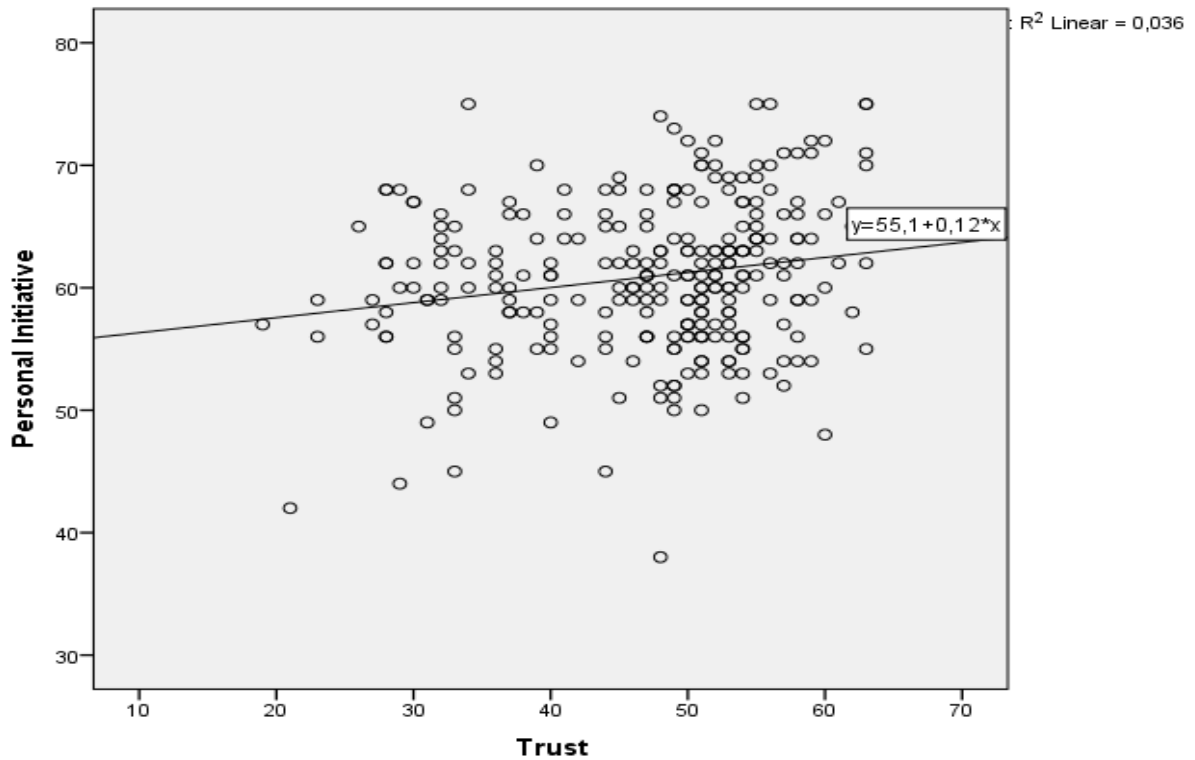


Graph 13: Scatterplot reward Free Time in hours per month and Personal Initiative

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Personal Initiative	270	38	75	60,87	6,195
Reward Free Time	270	0	160	9,78	19,106

Table 12: Overview descriptive statistics Personal Initiative and reward Free Time

The second scatter plot will give an insight between the relation of Trust and PI. In the conceptual model, and hypotheses Trust suggest an positive influence on PI and also a moderating effect between reward Free Time and PI. Graph 14 shows the scatter plot between Trust and PI, table 13 shows the descriptive statistics. The scatter plot shows a positive increase of 0,12 on the x-axis in PI if subordinates perceive their direct supervisor as a trustworthy person. At this point this confirms the third hypothesis is confirmed, but further statistical analysis can provide a deeper understanding of the relation.



Graph 14: Scatterplot Perceived Trust in hours per month and Personal Initiative

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Perceived Trust	270	19	63	46,93	9,624

Table 13: Overview descriptive statistics Perceived Trust

## 5. RESULTS

### 5.1 Correlations

In this study it is assumed that the distance between the possible answers in the Likert Scales is interpreted by the respondents as identical. This makes it possible to measure at the ratio level, a level that is equal to the interval level, but then with an absolute zero point (not arbitrary). Except for the measuring of "Management Style", this a categorical variable with four categories which are transformed into dummies ("Self Managing Teams", "Lean Management", "I don't know" and "other" is used as the referent category), wherefore it is possible to conduct correlations and regression models. If all variables were at interval level, it will be possible to analyze the correlations by using the "Pearson's R", but because of the variable Management Style which is an nominal scale, "Spearman's rho", which is used for nominal, ordinal and higher levels. Correlation is used to show the strength and direction of a relation (correlation) between two variables (de Vocht, 2013).

Table 14 presents the results of the correlations, represented in Spearman's rho ( $r_s$ ) and provides also the descriptive statistics of all variables. The mean, standard deviation and N are positioned below descriptive statistics. The value of  $r_s$  is always in between -1 and +1, and the higher the absolute value of  $r_s$ , the stronger the correlation (de Vocht, 2013), ( $<0,05$  = no coherence /  $0,05 < 0,25$  = weak coherence /  $0,25 < 0,60$  = moderate coherence /  $0,60 < 1$  = strong coherence /  $1$  = suspicious).

The results show that PI has significant correlations at the 0.01 level with (in order of strength): Proactive Personality ( $r_s = ,709$ ), Job Autonomy ( $r_s = ,398$ ), Reward Free Time ( $r_s = ,330$ ), Status Striving ( $r_s = ,316$ ), Age ( $r_s = ,195$ ), Trust ( $r_s = ,177$ ) and Management Style "I don't know" ( $r_s = - ,169$ ). They all show positive correlations except for Management Style "I don't know" which is negative, what indicates that employees who don't know what kind of management style is being applied in their work, show less initiative. This will be further examined in the multiple regression model.

Also between PI and Communion Striving is a significant correlation ( $r_s = ,147$ ), but at the 0.05 level. The strongest correlation by far, is between PI and Proactive Personality ( $r_s = ,709$ ). Bateman & Crant (1993) also argue that people with proactive personality "scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change". In which they imply that people with a proactive personality always show PI. Status Striving has also a significant correlation ( $r_s = ,316$ ), and this confirms to the study of Chiaburu & Carpenter (2013) who discovered that people who want to get ahead show more PI. The control variables have definitely more correlation with the dependent variable PI, than the independent variables. Thus this shows the importance of including control variables.

Variables that do not have a significant correlation with PI, are: Job Tenure ( $r_s = - ,037$ ), and the other two Management styles: Self-Managing Working Teams and Lean Management. Job Tenure has a negative correlation with PI. Regression will be conducted later to examine the causal linear relation between these two variables, and then this will be further studied.

The highest correlation between the independent variables, is between two Management Styles, namely "Self Managing Teams" and "I don't know". The last resembles employees who don't know what kind of management style is being applied. The correlation can be explained by the fact that there is an overlap between these two. This also will be studied in greater detail in multiple regression.

A. (ANOUK) SCHEPERS

nr. Variables	Descriptive Statistics			Spearman's rho Correlations											
	Mean	Std. D.	N	1	2	3	4	5	6	7	8	9	10	11	12
1 Personal Initiative	60,87	6,195	270	1											
2 Reward Free Time	9,78	19,11	270	,330**	1										
3 Perceived Trust	46,93	9,624	270	,177**	,196**	1									
4 Proactive Personality	24,42	4,305	270	,709**	,249**	,278**	1								
5 Status Striving	7,51	2,646	270	,316**	,169**	,005	,372**	1							
6 Communion Striving	14,23	2,737	270	,147*	,158**	-,017	,151*	,308**	1						
7 Job Autonomy	17,42	2,517	270	,398**	,241**	,169**	,224**	,047	,162**	1					
8 Age	40,23	11,33	220	,195**	,028	,049	,102	-,049	-,047	,153*	1				
9 Job Tenure	5,42	5,685	245	-,037	-,060	-,224**	-,178**	-,142*	-,079	,016	,251**	1			
10 Management Style: Self Man. Team	0,39	0,489	270	,093	,071	,086	,067	,051	,079	,203**	,071	-,066	1		
11 Management Style: Lean man.	0,1	0,296	270	,007	,003	,183**	,130*	,053	-,088	-,058	,042	-,085	-,262**	1	
12 Management Style: Don't know	0,43	0,495	270	-,169**	-,107	-,234**	-,178**	-,086	-,018	-,140*	-,098	,142*	-,692**	-,281**	1

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

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

Table 14: Results of Spearman's rho Correlations and Descriptive Statistics

## 5.2 Multicollinearity and Factor Analysis

Multicollinearity is also being explored by using table 14. Multicollinearity is considered as a correlation between independent variables higher is than  $\geq 0,7$ , if that is the case, it should be removed. There is no correlation higher than  $\geq 0,7$ , and at this point no variable is removed. In the multiple regression the multicollinearity is being checked again.

Since there are two relations interestingly high (between the *dependent* variable PI, and the independent variable Proactive Personality, and between two Management Styles, namely “Self Managing Teams” and “I don’t know”), a factor analysis is being conducted. A factor analysis is frequently conducted to reduce data items, but it can also be applied in order to measure unidimensionality, and that’s why a factor analysis is yet being conducted. Table .. shows the factor analysis.

**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
PI	,814			
Reward Free Time	,475			
Perceived Trust			,467	
Proactive Personality	,816			
Status Striving	,646			
Communion Striving	,438		-,492	
Job Autonomy	,456			
Age				,789
Job Tenure				,744
Management Style: Self-Managed Teams		,902		
Management Style: Lean			,818	
Management Style: I don't know		-,864		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 15: Factor Analysis

It shows that PI and Proactive Personality both load high (almost the same) at the first component, that means that they most probably measure the same construct. Even though the correlations between Proactive Personality and the other variables were not that high, the possibility that they measure the same construct is most likely and for this reason, Proactive Personality is being excluded from the multiple regression analysis.

The Management styles (“Self-Managed teams” and “Don’t know”) have high correlations and it appears they also load very high on the same factor. This could mean that in practice there is almost no variance between self-managed working team and employees who don’t know what kind of management style there is applied. It is not very likely that they work in a self-managing team, without knowing that they do, because if self-managing teams are introduced, this is done very explicitly in healthcare. Therefore there are probably other factors that cause the high loading of both variables on this component. Due to the high correlation and the high loading on the same component, the management style “don’t know” is left out of further analysis.

### 5.3 Multiple regression analysis

The hypotheses in this study have a probabilistic condition (Dul & Hak, 2008). It is been supposed that Reward Free Time and Trust in the direct Supervisor are positive related to PI. To test these hypotheses a multiple regression analysis is conducted. The multiple regression is used to examine the causal linear relation between the dependent and multiple independent variables (including control variables). To conduct a multiple regression the following assumptions must be met (de Vocht, 2013); all variables must be measured in interval or ratio scale, because there are dummies made for the management styles, it is possible to include these categorical variable. Moreover, there should not be any multicollinearity between the independent variables, this is discussed later in this paragraph.

The regression is divided in three steps. In the first step the control variables are added (including the dummy variables). By adding the control variables first, the direct influence on the dependent variable PI can be analyzed more accurate. In the second step and third step the independent variables (reward Free Time and Trust by supervisor) are added, to measure the interaction between these variables.

The square of the independent variable reward Free Time and the control variable Age are also inserted as new variables, so that it can be noticed if the variables show a parabola (negative result), what is expected (hypothesis 1) .

Table 16 shows the results of the multiple regression analysis. The standardized regression coefficients are reported (B or  $\beta$ ), they refer to how many standard deviations a dependent variable will change, per standard deviation increase in the predictor variable. Standardization of the coefficient is usually done to answer the question of which of the independent variables have a greater effect on the dependent variable in a multiple regression analysis, when the variables are measured in different units of measurement. Also the adjusted  $R^2$  is displayed, the number of adjusted  $R^2$  shows the percentage of variation on the dependent variable that can be attributed to the independent variable(s).

Multicollinearity was tested by the size of the tolerance level and the Variance Inflation Factor (VIF), acceptable scores are for tolerance  $>.10$  and  $VIF < 10$  (Collis & Hussey, 2009). In the first model all the VIF scores were around 1, and in the second model where reward Free Time<sup>2</sup> was added, the scores of reward Free Time and Free Time<sup>2</sup>, showed a VIF around 5.7, this stayed the same in the last (third) model. All the other variables stayed around 1.



Variables	Independent/Control	PI		
		Model 1 Std. B.	Model 2 Std. B.	Model 3 Std. B.
Status Striving	Control	,296	,288	,288
Communion Striving	Control	-,047*	-,057	-,058
Job Autonomy	Control	,321	,311	,310
Age <sup>2</sup>	Control	,113	,124	,124
Job Tenure	Control	-,115	-,120	-,119
Management Style: Self Man. teams	Control	,082	,076	,073
Management Style: Lean	Control	,075	,064	,062
reward Free Time	Independent	,132	,435	,435
reward Free Time <sup>2</sup>	Independent		-,329	-,329
Perceived Trust	Independent			,005**
Adjusted R <sup>2</sup>		,269	,285	,281

Note: Standardized regression coefficients are reported

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Table 16: Results of the multiple regression analysis

In model 1, the control variables and reward Free Time (but not squared) are demonstrated. The only significant variable is communion striving, but weak and negative ( $\beta - ,047$   $\rho < 0,05$ ), this can be explained as, every unit of increase in Communion Striving on the X-axis, the Y-axis (PI) decreases with 4,7% thereof, and this is less than 5% caused by chance, thus significant. Thus every unit of increase in Communion Striving implies a little less PI. This becomes just a bit stronger in the models two and three, but not significant anymore. The decrease of PI when showing communion striving, is also argued by Chiaburu & Carpenter (2013); aiming for “getting along” with colleagues or communion striving, has a negative relationship with PI, in contrary of “getting ahead” or status striving. Status Striving showed in their study a positive relationship with PI. In this study Status Striving has also a positive relation with PI; almost 30%, but not significant ( $\beta ,296$   $\rho > 0,05$ ). Chiaburu & Carpenter (2013) indicate that when an employee shows both status striving and communion striving, this has the most effect on PI. The interaction of these two increases employee initiative the most.

The control variable that has also a negative influence is Job Tenure ( $\beta - ,115$   $\rho > 0,05$ ). Also in other research which examines the influence on PI and had Job Tenure as a control variable, negative but relative low correlations were found (Parker et al., 2006, Hartog & Belschak, 2007). The control variable that is related to Job Tenure is Age<sup>2</sup>, which reports a low positive outcome. Even though the relation is weak, it could be considered that if becoming older people show more initiative, another explanation could be that later in life, the strengthening of self-esteem becomes more evident (Warr & Fay, 2001).

The control variable with the strongest influence on PI is Job Autonomy ( $\beta ,321$   $\rho > 0,05$ ), and this will have the strongest influence of the control variables in all the models. Frese et al. (1996) emphasize the importance of autonomy in their study, they argue that the opposite, little autonomy can cause a passive and helpless approach regarding to work. In the study of Parker et al. (2006), regarding to antecedents of proactive behavior, they indicate the positive relation between autonomy and proactive behavior, of which PI is been considered a part.

In the second model the independent reward Free Time<sup>2</sup> is added, which shows a negative result ( $\beta = -.329$ ), what implies that there is a relation in the form of a parabola with PI, this relation was also seen in the visual analysis by means of a scatter plot. Reward Free Time (not squared), shows a positive relation of  $\beta = .435$ , which also implies a linear causality. Thus the effect of Free Time on Personal is initially positive, but at a certain point it reverses in a negative effect, what confirms hypothesis 1; that the relation between the reward Free Time, given to an employee, and PI will likely show an inverted U, when more Free Time is given. No research has been done between the direct relation between reward Free Time and PI, but literature on Corporate Entrepreneurship provides a useful insight. Hornsby et al. (1999) reported five antecedents that were important for managers' entrepreneurial behavior, one of these antecedents is Time Availability. And research implies that time availability is an important antecedent for generating entrepreneurial results.

In the third model the independent variable Perceived Trust is added, which shows a little influence (almost none) on PI, but is significant ( $\beta = .005$   $p < 0,01$ ). Even though the influence is little, it support the third hypothesis; Trust perceived by the employee from the direct supervisor will have a direct positive effect on PI.

The adjusted R<sup>2</sup> in model 1-3 is between .269 and .289, which indicates that around 28% of PI showed by an employee is caused by multiple variables taken together. And that there is not a lot of fluctuation in the various models, even after including the independent variables.

*Trust as a Moderator*

The second hypothesis suggests that independent variable "Perceived Trust" has a moderating effect between independent variable "reward Free Time" and the dependent variable "PI". Thus if Trust intervenes between Free Time and PI, the subordinate will show even more PI than when only Free Time is given.

To examine this moderating influence in a regression analysis, first the independent variables are "centralized" (Universiteit Twente, 2014), and then a regression analysis is performed. Table 17 shows the results.

Variables	PI	
	Std. B.	Sig.
reward Free Time (Central)	,247	,000
Perceived Trust (Central)	,161	,008
FT.Trust	,017	,793
Adjusted R <sup>2</sup>	,091	

Note: Standardized regression coefficients are reported  
 \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Table 17: Results Regression Analysis for the effect of the moderating variable Perceived Trust

Reward Free Time has a positive influence ( $\beta$  ,247  $\rho < 0,001$ ) on PI, thus if more Free Time is given, PI increases. Trust also has a positive influence, but smaller ( $\beta$  ,161  $< 0,01$ ). The moderating effect is, the higher the level of employee's perceived level of trust in the direct supervisor, the lower the relation between reward Free Time and PI ( $\beta$  ,017  $> 0,05$ ), which implies that if subordinates receive more Free Time, it doesn't really matter how high the level of perceived Trust is, but subordinates who perceive little Free Time, the influence of the level of perceived trust is more important.

## 6. DISCUSSION

What factors contribute to the increase of PI? This question will serve as the starting point for discussion. In the exploration of theory several factors which have an influence on PI are being discussed. Of these factors, two factors; reward Free Time and Perceived Trust were further explored and applied in the hypotheses. Besides these two main factors, other factors with main influence according to literature, were applied as other independent variables (control variables). Table 18 presents the hypotheses and the corresponding findings, and it shows that each hypothesis has been accepted.

<b>Hypotheses</b>		<b>Accepted / Rejected</b>
H1:	The relation between PI and the reward Free Time granted to an employee will likely show an inverted U, when more Free Time is given	Accepted
H2:	The employee's perceived level of trust in the direct supervisor will have a positive, moderating effect on the relation between Free Time and PI	Accepted
H3:	The employee's perceived level of trust in the direct supervisor will have a direct positive effect on PI	Accepted

*Table 18: Hypotheses and findings*

The empirical results show that "reward Free Time" and "Perceived Trust" in the direct supervisor, encourage PI by the employee.

Studies about the relation between reward Free Time, the optimum amount of reward Free Time and PI were not found. Though literature gave indications about the importance of Free Time. Other concepts, which have more or less the same essence are: availability of time, spare time, free time and slack time. And these concepts were found in literature about corporate entrepreneurship, innovation and management, but also very limited. Some companies give their employees Free Time to motivate them to pursue goals of innovation and productivity. Gupta & Singhal (1993) label Free time as a part of the reward Freedom for Creativity and describes that the company 3M encourages its employees to use Free Time to pursue innovative ideas. A percentage of their work time is spent to work on new ideas. Free Time causes relaxation of controls, allows innovative projects to be pursued, fosters a culture of experimentation and frees managerial attention (Nohria & Gulati, 1997). Fay & Sonnentag (2002) mention a related issue to the importance of relaxation of controls and managerial attention; PI suggests a long-term focus, it's not handling on acute stressors. Also it can be seen as a non-routine activity that demands some reasoning and thinking, what differs from trying to reach (every day) working goals, which has this routine character. The pressure that comes with trying to achieve working goals in daily routine, is a kind of stressor. And when these stressors increase, the resources of an employee are most probably invested in achieving these working goals. Consequently, it can be presupposed that PI is taken in a time when stressors are not pressing. Availability of Free Time for employees is a critical factor for their both daily routines and intrapreneurial ideas and activities, i.e. time to imagine, observe,

experiment and develop (Alpkan et al., 2010). It is not the quantitative element of time in Free Time that causes the PI.

Besides these two independent variables, also other independent variables that were not included in the hypotheses, have a notable influence on PI, such as “Status Striving” and “Job Autonomy”. The Reward Free Time consist of job autonomy (they show a correlation of ,241). Reward Free Time is defined as: “A form of benefit an employee receives from his direct supervisor as part of an employment relationship to work on own ideas, initiatives or activities that benefit the organization, and this free time is expressed in time during working hours. Reward Free Time is aimed at the quantitative element of *time* given to an employee. In this time personality- (such as status striving) and environment antecedents (such as job autonomy) can act as causes for showing PI by an employee. Thus it could be speculated that the reward Free Time creates circumstances (such as job autonomy) to facilitate personality- and environmental antecedents which affect (cognitive-) motivational states, which in turn lead to showing PI. This is in line with the study of Parker et al. (2006), who found that proactive work behavior is stimulated by personality and perceived work environment through proactive cognitive-motivational states.

Thus reward Free Time consist out of Job Autonomy, but this is not always reversible; job autonomy is not always Free Time. Autonomy is defined by Hackman & Oldman (1976) as: “The extent to which the worker has freedom within the job to decide how it should be done”. Giving freedom and responsibilities are elements that stimulate PI. The employee is to a certain extent responsible to make his own decisions regarding his work, and therefore it is more likely he undertakes projects that reflects his interests. Employees who perform their work autonomously, feel more responsible to it (Ohly & Sonnentag, 2006). And this will lead to more problem solving behavior and developing more efficiency work methods, which will initiate more ideas and initiatives. Frese et al. (1996) also emphasize the importance of autonomy, they argue that the opposite, little autonomy can cause a passive and helpless approach regarding to work.

What is the optimum amount of reward Free Time for the increase of PI? Graph 13 (visual analysis) shows the turning point at about 80 hours per month. Until 80 hours a month, PI continues to increase. No research has been done about the optimum amount and reasons for declining after the turning point. The following are speculative reasons; Assuming that Free Time consist out of Job Autonomy, it is seen that too much autonomy can lead to unstructured, unmonitored and undirected supervision. In many jobs close supervision seem to have a negative impact on an employee’s work satisfaction, because it reduces autonomy. The opposite is also seen; employees with jobs that are nonroutine and unstructured were happier when they were provided structure, their performance is being watched and directed relatively closely (Churchill et al., 1976). A study about preferences for autonomy among nurses identified that increasing autonomy on every aspect of work is not successful; a higher level of autonomy in patient care decisions was preferred (probably this is the content of interest), while other aspects less autonomy was preferred, as unit operation decisions (Blegen et al., 1993). Regarding to reward Free Time, it could be considered that working in “Free Time” on own ideas and projects and thus undertaking projects that reflects his interests, don’t need (a lot of) supervision, and with this PI increases, but at a certain point employees

may need structure, direction as it comes to decisions on operational, tactical or other levels. Various studies argue that both personality and subcultural aspects moderate the way employees respond to increased complexity and autonomy in their work (Churchill et al., 1976).

Trust had a positive influence, but the relation with PI is very weak. Various assumptions concerning explanations can be made; It could be assumed that older people (the average age of the respondents is 40) are more aware of their capabilities and know how to use them, the strengthening of self-esteem becomes more evident (Warr & Fay, 2001) and thereby they become less dependent on the approval of their supervisor when taking a risk. It could also be that employees who show PI, are in general less influenced by situational or external factors of what kind so ever. The definition of PI in this study, and used to develop the questions, is described as follows: "Behavior that results in an employee taking, an proactive approach to goal-directed work that benefits the organization, goes beyond what is formally required in a given job and *is not imposed or suggested by somebody else. And if barriers or setbacks occur the employee will show persistency in overcoming them*". The independent variable of Proactive Personality was taken out for further analyses, (because loaded both very high on the same underlying construct), but could also show a connecting factor. The definition (and related questions) applied is: "Characterized as *someone who is relatively unconstrained by situational forces* and who effects environmental change" (Bateman & Crant, 1993). It could be speculated that employees do not need to trust their supervisors (to a certain degree) to show PI, because they are *relatively unconstrained by situational forces*, and *if barriers or setbacks occur the employee will show persistency in overcoming them*. Explanation for this could probably be found in personal needs or motivation aspects, but should be further investigated.

If Trust act like a moderator between reward Free Time and PI, his role becomes a bit more crucial. The more reward Free Time subordinates receive, the less important the level of perceived Trust is for showing PI, but if reward Free Time decreases or is little, the influence of the level of perceived trust has an additional role to show PI.

If more Free Time is given, employees are even more unconstrained, and can spend their time working on own ideas or projects, and not being judged by their supervisors on the precise spending of that time, but more on the results. If just a little Free Time is given, employees have to spend more time on their direct work, with probably more organizational frames and control, and with this the need of verifying by and dependency on the supervisor, and thus more trust in the supervisor is necessary. If more freedom is given, employees are trusted themselves to design their own measures and verify their own results . Further research is required for more insights.

Communion Striving had a negative influence on PI. The need for belongingness, close relationships with others (colleagues) or getting along are fundamental social needs (Baumeister & Leary, 1995). People who are driven by communion striving give more attention to develop and preserving relationships with colleagues. The explanation of the negative relation between communion striving and PI, could be that showing PI may endanger their relationships with colleagues, especially when their colleagues object to efforts to PI (Grant et

al. 2009). Also it could feel as threatening to the supervisor, as the subordinate's attempt may raise questions about the capability of the supervisor (Grant et al. 2009).

Another independent variable (control) that has a negative influence is Job Tenure. Also in other research which examines the influence on PI and had Job Tenure as a control variable, negative but relative low correlations were found (Parker et al., 2006, Hartog & Belschak, 2007). Thus the longer employees work in the same position, the less PI they will show. It could be that new entrants do show more PI like Gerhardt et al. (2009) suggest; new entrants in an organization show more initiative or are more proactive. They are more likely to seek new information, build new relations and exchange information with (new) others, and want to engage in multiple new tasks. This results in active behavior and taking more PI. The control variable that is related to Job Tenure is Age<sup>2</sup>, which reports a low positive outcome. Even though the relation is weak, it could be considered that if becoming older people show more initiative, a explanation could be that during the years people gather more information and knowledge which good have the same effects as a higher educational background; it is argued that individuals with a higher educational background are more likely to speak out with suggestions for improvements (Bindl & Parker, 2010).

## 6.1 Limitations and Future Research

Quantitative research has been executed to test theory on PI at work. The aim was to conduct a census of a small population, thus the questionnaires were sent out to nine wards or business units of organizations, to 724 employees. The respond rate was 37%, not the 100% where aimed for. The results cannot be generalized to the population, to generalize results further research is necessary. The respondents who participated in this research (N= 271) were mostly working at healthcare organizations. In future research it would be interesting to conduct this research in other sectors.

The research has been conducted, by sending questionnaires in the form of self-report Likert scales, to a large range of subordinates in various organizations. Employees were asked to complete the questionnaire including their vision on the degree of showing PI. Some researchers argue that self-report questionnaires measure self-concepts that do not necessarily reflect actual behavior (Bledlow & Frese, 2009). It is proposed that self-report measures of PI reflects the importance people assign to PI but not the actual behavior itself. And most of them are generalized statements and not linked to specific situations at work (Frese et al. 1997). Above, respondents may have various notions about what they appoint as high or low initiative and thus relate to other anchor points on the Likert scale (Bledlow & Frese, 2009). This can be (partly) overcome by asking the question about the degree of showing PI, to the supervisor of the employee.

After 2 weeks the questionnaires were emailed, a reminder was sent. A responding rate of 37% was measured. It could be that the main responding's came from employees who (always) show PI, and that employees who normally do not show (a lot of) PI, did not respond now either. This can be overcome by delivering and collecting the questionnaires personally.

In the exploration of theory several antecedents for PI were found. These were not all included as (other) independent variables in the measurement, only the antecedents which are

expected to have an important influence on PI, according to literature, were included. Thus it still could be that other antecedents have more influence on PI than the ones that were measured in this study. Future research could include all the antecedents or aim at clusters, like all the antecedents concerning Job Design, Work Motivation or Individual differences, and/or what antecedents are mediators, to get even a deeper understanding of PI.

Concerning to reward Free Time, in the discussion it is speculated that Free Time always consist out of Job Autonomy. Reward Free Time is measured in a quantitative manner, it would be interesting to investigate what Free Time in organizations consist of, what do employees exactly do in this time, and do they have autonomy or is it still structured and controlled by their supervisor. And if Free Time consist for a great part out job autonomy (if it is not completely), is there a maximum for the effect for Job Autonomy as well? And prefer employees autonomy over all their work or over some aspects of their work? Future research, maybe in the form of qualitative and quantitative research may provide answers to these questions.

In the question about reward Free Time, it was difficult to emphasize on the part of "Reward". Rewards are not only direct ways to show appreciation for what an employee is doing, such as: "an employee was in the previous month the most productive of all employees, thus he gets rewarded". Reward in this study is defined as: "A form of benefit an employee receives from his direct supervisor as part of an employment relationship to work on own ideas, initiatives or activities that benefit the organization, and this free time is expressed in time during working hours". This is a wide definition, and most of the reasons to get Free Time can be included in this definition. This also makes a bit fussy. In future research it could be interesting to sort out the reasons why reward Free Time is given, or what other rewards can be given to stimulate PI. Also a more restricted definition of reward can be used.

There was no or not a lot of literature about the relation between given rewards and PI, or just Free Time, or the amount of Free Time, or the relation between Free Time and PI, or the relation between trust and PI. To get a full view and deeper understanding of these constructs, literature from various domains as: management, psychology, organizational studies, sociology and entrepreneurial studies. Using information from various domains means a broad perspective, for future research it can maybe give a deeper understanding to delimit the domains.



## 7. CONCLUSION AND CONTRIBUTION

This research will contribute to the theory of PI by answering the following question:

*Can PI be encouraged by the influence of the reward “Free Time” and the employee’s perceived level of trust in the direct supervisor?*

In previous research the relation between (the amount of) reward Free Time had not been investigated, and neither was the relation between employee’s perceived level of trust in the direct supervisor and PI. In this research, the answer to the main research question is positively answered.

The relation between Reward Free Time shows an inverted U effect on PI. The turning point lies at about 80 hours per month, thus until 80 hours a month, PI continues to increase. Besides reward Free Time, other independent variables as Job Autonomy and Status Striving had a considerable effect. It is also considered that reward Free Time consist out of Job Autonomy, because they both aim at freedom within the job to decide how it should be done. Giving freedom and responsibilities are elements that stimulate PI.

Also the construct of trust, the employee’s perceived level of trust in the direct supervisor, had a small positive relation with PI, and also showed up as a positive moderator between reward Free Time and PI. Employees do not need to trust their supervisors (to a certain degree) to show PI, because they act relatively unconstrained by situational forces and if barriers or setbacks occur, the employee will show persistency in overcoming them. The perceived level of trust only has more influence when the reward Free Time is limited and employees have to spend more time on their direct work, with more organizational frames and control, and together with this the need of verifying by and dependency on the supervisor. If more freedom is given, employees are trusted themselves to design their own measures and verify their own results.

Taken together, the key for a supervisor to stimulate PI is to reward subordinates with an amount of Free Time (until 80 hours a month) in which they can work autonomously on their own ideas or projects that will benefit the organization. If Free Time can’t be given, more autonomy in the current work can be given to stimulate PI, and if this also is not possible, the supervisor has to make sure the subordinates trust him even though trust has far less influence on stimulating PI. To gain trust a supervisor has to focus attention on his ability, benevolence and integrity because they provide a solid foundation building trust. Besides this, the supervisor can attract new employees that are motivated by “Status Striving”, because they also show more PI than employees who are not. Employees who show PI are better in shaping their work environment, coping with stress (Bindl & Parker, 2010), are more innovative (Rank et al., 2004) and the best managers are also characterized by a higher degree of initiative (Frese et al., 1996).

## REFERENCES

- Ahuja, M. K., Chudoba, K. M., Kacmar, C. J., McKnight, D. H., & George, J. F. (2007). IT road warriors: Balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions. *Mis Quarterly*, 1-17.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of occupational psychology*, 63(1), 1-18.
- Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G., & Kilic, K. (2010). Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance. *Management Decision*, 48(5), 732-755.
- Baer, M., & Frese, M. (2001). Climate for initiative and psychological safety, process innovation, and firm performance. Dept. of Psychol., Univ. of Giessen: Submitted for publication.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of organizational behavior*, 14(2), 103-118.
- Bateman, T. S., & Crant, J. M. (1999). Proactive behavior: Meaning, impact, recommendations. *Business Horizons*, 42(3), 63-70.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Bijlsma, K. M., & Van De Bunt, G. G. (2003). Antecedents of trust in managers: a "bottom up" approach. *Personnel Review*, 32(5), 638-664.
- Bijlsma-Frankema, K., & Costa, A. C. (2005). Understanding the trust-control nexus. *International Sociology*, 20(3), 259-282.
- Bindl, U., & Parker, S. K. (2010). Proactive work behavior: Forward-thinking and change-oriented action in organizations (Vol. 2, pp. 567-598). American Psychological Association.
- Bledow, R., & Frese, M. (2009). A situational judgment test of PI and its relationship to performance. *Personnel Psychology*, 62(2), 229-258.
- Blegen, M. A., Goode, C., Johnson, M., Maas, M., Chen, L., & Moorhead, S. (1993). Preferences for Decision-Making Autonomy. *Image: The Journal of Nursing Scholarship*, 25(4), 339-344.
- Bryman, A & Bell, E. (2011). *Business Research Methods* 3<sup>rd</sup> edition, Oxford University Press, New York
- Buijs, A. (1999). *Statistiek om mee te werken*. Educative Partners Nederland BV. Houten
- Campbell, D. J. (2000). The proactive employee: Managing workplace initiative. *The Academy of Management Executive*, 14(3), 52-66.
- Chen, C. H. V., Wang, S. J., Chang, W. C., & Hu, C. S. (2008). The effect of leader-member exchange, trust, supervisor support on organizational citizenship behavior in nurses. *Journal of Nursing Research*, 16(4), 321-328.
- Chiaburu, D. S., & Carpenter, N. C. (2013). Employees' motivation for PI: The joint influence of status and communion striving. *Journal of Personnel Psychology*, 12(2), 97.
- Christensen, K. S. (2005). Enabling intrapreneurship: the case of a knowledge-intensive industrial company. *European Journal of Innovation Management*, 8(3), 305-322.

- Cloninger, C. R., Svrakic, D. M., & Przybeck, T. R. (1993). A psychobiological model of temperament and character. *Archives of general psychiatry*, 50(12), 975.
- Collis, J. & Hussey, R. (2009). *Business Research. A Practical guide for undergraduate & postgraduate students*. New York, Palgrave Macmillan.
- Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of occupational psychology*, 53(1), 39-52.
- Costa, A. C. (2003). Work team trust and effectiveness. *Personnel Review*, 32(5), 605-622.
- Couch, L. L., & Jones, W. H. (1997). Measuring levels of trust. *Journal of research in personality*, 31(3), 319-336.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of management*, 26(3), 435-462.
- Creed, W.E.D. and Miles, R.E. (1996), "Trust in organizations: a conceptual framework", in Bijlsma, K. M., & Van De Bunt, G. G. (2003). Antecedents of trust in managers: a "bottom up" approach. *Personnel Review*, 32(5), 638-664 (p. 642).
- Churchill Jr, G. A., Ford, N. M., & Walker Jr, O. C. (1976). Organizational climate and job satisfaction in the salesforce. *Journal of Marketing Research*, 323-332.
- Cummings, L.L. and Bromiley, P. (1996), "The Organizational Trust Inventory (OTI): development and validation", in Bijlsma, K. M., & Van De Bunt, G. G. (2003). Antecedents of trust in managers: a "bottom up" approach. *Personnel Review*, 32(5), 638-664
- Davis, J. H., Schoorman, F. D., Mayer, R. C., & Tan, H. H. (2000). The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal*, 21(5), 563-576.
- De Jong, J. P. J., Parker, S. K., Wennekers, S., & Wu, C. (2011). *Corporate entrepreneurship at the individual level: Measurement and determinants*. EIM Research Reports. Zoetermeer: EIM.
- Deluga, R. J. (1994). Supervisor trust building, leader-member exchange and organizational citizenship behaviour. *Journal of Occupational and Organizational Psychology*, 67(4), 315-326.
- Dess, G. G., Ireland, R. D., Zahra, S. A., Floyd, S. W., Janney, J. J., & Lane, P. J. (2003). Emerging issues in corporate entrepreneurship. *Journal of management*, 29(3), 351-378.
- De Vocht, A. (2013). *Basishandboek SPSS 21, IBM SPSS Statistics*. Bijleveld Press, Utrecht
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. *Journal of applied psychology*, 87(4), 611.
- Dul, J., & Hak, T. (2008). *Case Study Methodology in Business Research*. Abingdon: Routledge
- Eesley, D. T., & Longenecker, C. O. (2006). Gateways to intrapreneurship. *Industrial management- Chicago then Atlanta-*, 48(1), 18.
- Erikson, E.H. (1950). *Childhood and society*. New York: Norton, in: ROEDIGER, H., CAPALDI, E., PARIS, S., POLIVY, J., HERMAN, C., & Brysbaert, M. *Psychologie: Een Inleiding*. Academia Press, Gent, 1998, XXXII+ 916 p.
- Fay, D., & Frese, M. (2001). The concept of PI: An overview of validity studies. *Human Performance*, 14(1), 97-124.
- Fay, D., & Kamps, A. (2006). Work characteristics and the emergence of a sustainable workforce: do job design principles matter?. *Gedrag en Organisatie*.
- Fay, D., & Sonnentag, S. (2002). Rethinking the effects of stressors: A longitudinal study on PI. *Journal of Occupational Health Psychology*, 7(3), 221.

- Frese, M. 1989. Theoretical models of control and health. In S. L. Sauter, J. J. Hurrell, Jr., & C. L. Cooper (Eds.), *Job control and worker health*: 107-108. Chichester, U. K.: Wiley.
- Frese, M., & Fay, D. (2001). 4. PI: An active performance concept for work in the 21st century. *Research in organizational behavior*, 23, 133-187.
- Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. (1997). The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology*, 70(2), 139-161.
- Frese, M., Garst, H., & Fay, D. (2007). Making things happen: Reciprocal relationships between work characteristics and personal initiative in a four-wave longitudinal structural equation model. *Journal of Applied Psychology*, 92(4), 1084.
- Frese, M., Kring, W., Soose, A., & Zempel, J. (1996). PI at work: Differences between East and West Germany. *Academy of Management Journal*, 39(1), 37-63.
- Frese, M., Teng, E., & Wijnen, C. J. (1999). Helping to improve suggestion systems: Predictors of making suggestions in companies. *Journal of Organizational Behavior*, 20(7), 1139-1155.
- Frohman, A. L. (1998). Igniting organizational change from below: The power of personal initiative. *Organizational Dynamics*, 25(3), 39-53.
- Gambetta, D. (1988). Trust: Making and breaking cooperative relations.
- Gerhardt, M., Ashenbaum, B., & Newman, W. R. (2009). Understanding the Impact of Proactive Personality on Job Performance The Roles of Tenure and Self-Management. *Journal of Leadership & Organizational Studies*, 16(1), 61-72.
- Glaeser, E. L., Laibson, D. I., Scheinkman, J. A., & Soutter, C. L. (2000). Measuring trust. *Quarterly Journal of Economics*, 811-846.
- Goodale, J. C., Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2011). Operations management and corporate entrepreneurship: The moderating effect of operations control on the antecedents of corporate entrepreneurial activity in relation to innovation performance. *Journal of Operations Management*, 29(1), 116-127.
- Grant, A. M., Nurmohamed, S., Ashford, S. J., & Dekas, K. (2011). The performance implications of ambivalent initiative: The interplay of autonomous and controlled motivations. *Organizational Behavior and Human Decision Processes*, 116(2), 241-251.
- Grant, A. M., Parker, S., & Collins, C. (2009). Getting credit for proactive behavior: Supervisor reactions depend on what you value and how you feel. *Personnel Psychology*, 62(1), 31-55.
- Gupta, A. K., & Singhal, A. (1993). Managing human resources for innovation and creativity. *Research-Technology Management*, 36(3), 41.
- Gupta, A., & Srivastava, N. (2013). An Exploratory Study Of Factors Affecting Intrapreneurship. *International Journal of Innovative Research and Development*, 2(8).
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational behavior and human performance*, 16(2), 250-279.
- Hartog, D. N., & Belschak, F. D. (2007). PI, commitment and affect at work. *Journal of Occupational and Organizational Psychology*, 80(4), 601-622.
- Hisrich, R. D. (1990). Entrepreneurship/intrapreneurship. *American Psychologist*, 45(2), 209.

Hornsby, J.S., Kuratko, D.F., Montagno, R.V., 1999. Perception of internal factors for corporate entrepreneurship: A comparison of Canadian and U.S. managers. *Entrepreneurship Theory and Practice* 24 (2), 9–24. In: Goodale, J. C., Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2011).

Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of business Venturing*, 17(3), 253-273.

Hornsby, J. S., Naffziger, D. W., Kuratko, D. F., & Montagno, R. V. (1993). An interactive model of the corporate entrepreneurship process. *Entrepreneurship Theory and Practice*, 17, 29-29.

In voor Zorg (2013), Seminar “Zelfsturend werken en zelfsturend leren horen bij elkaar”, 18 november 2013 te Utrecht

Jansen, P. G., & Van Wees, L. L. G. M. (1994). Conditions for internal entrepreneurship. *Journal of Management Development*, 13(9), 34-51.

Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of consumer research*, 30(2), 199-218.

Kuratko, D. F., Hornsby, J. S., Naffziger, D. W., & Montagno, R. V. (1993). Implementing entrepreneurial thinking in established organizations. *SAM Advanced Management Journal*, 58, 28-28.

Kuratko, D. F., Montagno, R. V., & Hornsby, J. S. (1990). Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment. *Strategic Management Journal*, 11, 49-58.

Kuratko, D. F., Ireland, R. D., Covin, J. G., & Hornsby, J. S. (2005). A Model of Middle-Level Managers' Entrepreneurial Behavior. *Entrepreneurship Theory and Practice*, 29(6), 699-716.

Lane, C., 1998, 'Introduction: theories and issues in the study of trust', in Nooteboom, B., & Six, F. (Eds.). (2003). *The trust process in organizations: Empirical studies of the determinants and the process of trust development*. Edward Elgar Publishing

Malhotra, N., Budhwar, P., & Prowse, P. (2007). Linking rewards to commitment: an empirical investigation of four UK call centres. *The International Journal of Human Resource Management*, 18(12), 2095-2128.

Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of applied psychology*, 84(1), 123.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709–734.

McAllister, D.J., 1995, 'Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations', *Academy of Management Journal*, 38/1:24-59

McAllister, D.J. (1997), 'The second face of trust: reflections on the dark side of interpersonal trust in organizations', *Research on Negotiation in Organizations*, 6, 87–111.

McGregor, D. (1960). *The human side of enterprise*. New York, 21.

McKnight, D. H., & Chervany, N. L. (2001). Trust and distrust definitions: One bite at a time. In *Trust in Cyber-societies* (pp. 27-54). Springer Berlin Heidelberg.

Menzel, H. C., Krauss, R., & Ulijn, J. M. Weggeman (2006). "Developing characteristics of an intrapreneurship-supportive culture". *The Dynamics between Entrepreneurship, Environment and Education*, Cheltenham (UK): Edward Elgar.

- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of management Journal*, 42(4), 403-419.
- Mottaz, C. J. (1985). The relative importance of intrinsic and extrinsic rewards as determinants of work satisfaction. *The Sociological Quarterly*, 26(3), 365-385.
- Mower, J. C., & Wilemon, D. (1989). Rewarding technical teamwork. *Research-Technology Management*, 32(5), 24-29.
- Mumford, M. D., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological bulletin*, 103(1), 27.
- Nivel, (2012). *De dagelijkse bezetting en kwaliteit van zorg in instellingen voor langdurige zorg*. Utrecht
- Nohria, N., & Gulati, R. (1997). What is the optimum amount of organizational slack?: A study of the relationship between slack and innovation in multinational firms. *European Management Journal*, 15(6), 603-611.
- Nooteboom, B., & Six, F. (Eds.). (2003). *The trust process in organizations: Empirical studies of the determinants and the process of trust development*. Edward Elgar Publishing.
- Ohly, S., Sonnentag, S., & Pluntke, F. (2006). Routinization, work characteristics and their relationships with creative and proactive behaviors. *Journal of organizational behavior*, 27(3), 257-279.
- O'Neal, S. (1998). The phenomenon of total rewards. *ACA Journal*, 7, 6-18.
- Paine, J. B., & Organ, D. W. (2000). The cultural matrix of organizational citizenship behavior: Some preliminary conceptual and empirical observations. *Human resource management review*, 10(1), 45-59.
- Parker, S.K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91(3), 636-652
- Pinchot III, G. (1985). *Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship. Nog lezen; Boek; bibliotheek of 2e hands aanschaf
- Porter, L. W., & Lawler, E. E. (1968). Managerial attitudes and performance.
- Rank, J., Pace, V. L., & Frese, M. (2004). Three avenues for future research on creativity, innovation, and initiative. *Applied psychology*, 53(4), 518-528.
- Rigtering, J.P.C., & Weitzel, U. (2013). Work context and employee behavior as antecedents for intrapreneurship. *International Entrepreneurship and Management Journal*, 1-24.
- Rossiter, J. R. (2002) "The C-OAR-SE procedure for scale development in marketing," *International Journal of Research in Marketing*, 19(4), 305-335 in Rossiter, J. R. (2011- B). Marketing measurement revolution: the C-OAR-SE method and why it must replace psychometrics. *European Journal of Marketing*, 45(11/12), 1561-1588.
- Rossiter, J. R. (2011a). *Measurement for the social sciences*. Springer.
- Rossiter, J. R. (2011b). Marketing measurement revolution: the C-OAR-SE method and why it must replace psychometrics. *European Journal of Marketing*, 45(11/12), 1561-1588.
- Rotter, J.B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35,651-665, in Deluga, R. J. (1994). Supervisor trust building, leader-member exchange and organizational citizenship behaviour. *Journal of Occupational and Organizational Psychology*, 67(4), 315-326
- Rotter, J.B. (1980), 'Interpersonal trust, trustworthiness, and gullibility', *American Psychologist*, 35, 1-7.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393–404.

Six, F. E. (2004). Trust and trouble; Building interpersonal trust within organizations (No. ERIM PhD Series; EPS-2004-040-ORG). Erasmus Research Institute of Management (ERIM).

Speier, C., & Frese, M. (1997). Generalized self-efficacy as a mediator and moderator between control and complexity at work and PI: A longitudinal field study in East Germany. *Human Performance*, 10(2), 171-192.

Stam, E., Bosma, N., Van Witteloostuijn, A., De Jong, J., Bogaert, S., Edwards, N., et al. (2012). Ambitious entrepreneurship: A review of the academic literature and directions for public policy (pp. 1–162). Den Haag: Advisory Council for Science and Technology Policy.

Tabachnick and Fidell, 2007. In Stevens, G. (2014)

Thompson, J. A. (2005). Proactive personality and job performance: a social capital perspective. *Journal of Applied Psychology*, 90(5), 1011.

Universiteit Twente, (2014). Methodologiewinkel, handleidingen, Moderator Analyse. <http://www.utwente.nl/gw/onderzoek/m-winkel/moderator%20handleiding.pdf>

Warr, P., & Fay, D. (2001). Age and PI at work. *European Journal of Work and Organizational Psychology*, 10(3), 343-353.

Willemyns, M., Gallois, C., & Callan, V. (2003). Trust me, I'm your boss: Trust and power in supervisor–supervisee communication. *International Journal of Human Resource Management*, 14(1), 117-127.

Yang, J., & Mossholder, K. W. (2010). Examining the effects of trust in leaders: A bases-and-foci approach. *The Leadership Quarterly*, 21(1), 50-63.

## APPENDIX I: FLYER

# Is Initiatief te Managen?

*Wat kan een leidinggevende doen om Persoonlijk Initiatief te bevorderen?*

Dit afstudeeronderzoek wordt uitgevoerd door Anouk Schepers, ten behoeve van de opleiding:

Parttime Master of Science  
Bedrijfskunde Rotterdam School of Management  
Erasmus Universiteit Rotterdam



## Belonen + vertrouwen geven = Initiatiefrijke medewerker?

### Beter inspelen op veranderingen door Initiatiefrijke medewerkers

Organisaties worden steeds dynamischer en moeten zich steeds sneller aanpassen aan hun omgeving en de klantbehoefte. Veel organisaties willen naar *minder hiërarchie*, minder managers "oude stijl", zodat ze zich flexibeler kunnen opstellen. Ook het gaan werken met *zelfsturende of -organiserende teams* en de implementatie van *Lean* zijn voorbeelden waarbij meer activiteit van de werknemer wordt gevraagd.

### Waarom Persoonlijk Initiatief van de medewerker?

- ▶ het verbetert performance van de organisatie en het individu
- ▶ draagt bij aan een beter werkklimaat
- ▶ zorgt voor minder stress
- ▶ het bevordert innovatie
- ▶ draagt bij aan efficiëntere processen.

Om beter inzicht te krijgen in het concept **Persoonlijk Initiatief**, wordt er onderzoek gedaan om leidinggevend handvatten aan te reiken voor en inzicht te geven in hoe het persoonlijk initiatief van medewerkers kan worden bevorderd.

Het onderzoek beschrijft de factoren die van invloed zijn op persoonlijk initiatief van individuele medewerkers en wordt ondersteund met specifiek empirisch onderzoek naar de invloed van beloningen en het gepercipieerde vertrouwen van de directe leidinggevende op persoonlijk initiatief. Het onderzoek geeft antwoord op de vragen of het geven van vrije tijd (in werktijd) en zo ja hoeveel vrije tijd, een positief effect heeft op persoonlijk initiatief. Daarbij wordt ook gekeken in hoeverre het ontvangen van vertrouwen (gepercipieerd) van de direct leidinggevende dit effect versterkt.

### U kunt nog deelnemen!

Wat wordt van u gevraagd voor deelname?

- ▶ Korte informatie aan medewerkers ter voorbereiding op onderzoek
- ▶ Contactpersonen die benaderd kunnen worden voor email adressen of afspraken om hardcopy enquêtes (gestandaardiseerd) te brengen en halen
- ▶ 5-10 minuten per medewerker om enquête in te vullen
- ▶ Uit te voeren in juni, medio juli

Wat krijgt u hiervoor terug?

- ▶ Kopie onderzoeksrapport (PDF), met hierin:
  - beschrijving motivatoren voor Persoonlijk Initiatief
  - rol van beloningen
  - wat is de rol van vertrouwen en hoe wordt dit geuit?
- ▶ Uitgebreide presentatie met resultaten (desgewenst)

### DEELNEMEN AAN DIT ONDERZOEK?

Voor deelname of meer informatie, kunt u terecht bij:  
Anouk Schepers  
[anoukschepers@yahoo.com](mailto:anoukschepers@yahoo.com)  
06-18875296

 ERASMUS UNIVERSITEIT ROTTERDAM



## APPENDIX II: C-OAR-SE METHOD

### C-OAR-SE Method for constructing the questionnaire

<b>Construct</b>	<b><u>Personal Initiative, self-reported and as rated by employee</u></b>
<b>Defined as</b>	Behavior that results in an employee taking, an proactive approach to goal-directed work that benefits the organization, goes beyond what is formally required in a given job and is not imposed or suggested by somebody else. And if barriers or setbacks occur the employee will show persistency in overcoming them.
<b>Object</b>	Employees
<b>Rater Entity</b>	Subordinate (individual)
<b>Attributes:</b>	<ul style="list-style-type: none"><li>- Proactive (trying to achieve change, by anticipating on problems and opportunities in a present work condition, not imposed or suggested by somebody else)</li><li>- Goal-directed</li><li>- Benefitting the organization</li><li>- Going beyond what is formally required in a given job</li><li>- Persistent in the face of barriers and setbacks</li></ul>

#### **Questions:**

##### Attribute: Proactive

- Als er zich in mijn werk problemen voordoen, dan probeer ik de situatie te veranderen door zelf met een oplossing te komen.
- Als ik kansen zie om mijn werk te verbeteren, dan ga ik daarmee aan de slag.
- Ik los problemen op in mijn werk naar eigen inzicht en zet hiermee een verandering in gang

##### Attribute: Goal-directed

- Als ik kansen zie om mijn doelen op mijn werk na te streven dan ga ik daar mee aan de slag
- Tijdens mijn werk heb ik graag een doel voor ogen.

##### Attribute: Benefitting the organization

- Werkzaamheden die ik uitvoer moeten ten goede komen aan de organisatie
- Als ik mijn werk zo kan aanpassen dat het beter is voor de organisatie, dan doe ik dat

##### Attribute: Going beyond what is formally required in a given job

- Doorgaans doe ik meer dan mijn functie behelst
- Ik voer werkzaamheden uit die buiten mijn taakomschrijving vallen

##### Attribute: Persistent in the face of barriers and setbacks

- Ik sta achter mijn ideeën, zelfs als er verzet is van anderen
- Als ik in een idee geloof, dan is er geen hindernis die mij tegenhoudt

<b>Construct</b>	<b><u>Reward “Free Time” given by direct supervisor, as rated by employee</u></b>
<b>Defined as</b>	Reward Free time is a form of benefit an employee receives from his direct supervisor as part of an employment relationship to work on own ideas, initiatives or activities that benefit the organization, and this free time is expressed in time during working hours.
<b>Object</b>	Employees
<b>Rater Entity</b>	Subordinate (individual)
<b>Attributes:</b>	<ul style="list-style-type: none"><li>- Time</li><li>- Working on own ideas, initiatives or activities that benefit the organization</li></ul>

**Questions:**

Bij de volgende vraag moet je de maand juni (vorige maand) 2014 als uitgangspunt nemen

- Hoeveel tijd heb je de in de maand juni (2014) gekregen binnen je werktijd om aan eigen ideeën/initiatieven/activiteiten te werken die ten goede komen aan de organisatie?  
... uur in maand juni 2014 (geef een getal tussen de “0 en 99”, “0” uur kan dus ook!)

<b>Construct</b>	<b><u>The employee’s perceived level of trust in the direct supervisor, as rated by the employee</u></b>
<b>Defined as:</b>	The belief of an employee that his direct supervisor is a person of integrity, has the ability to perform his job well and is benevolent regarding to work related wishes and desires of the employee.
<b>Object</b>	Employees
<b>Rater Entity</b>	Subordinate (individual)
<b>Attributes:</b>	<ul style="list-style-type: none"><li>- Integrity</li><li>- Ability to perform his job well</li><li>- Benevolence</li></ul>

**Questions:**

Bij de volgende vraag moet je de maand juni (vorige maand) 2014 als uitgangspunt nemen

Attribute Integrity

- Ik twijfel nooit of mijn leidinggevende zijn afspraken nakomt
- Mijn leidinggevende is niet altijd eerlijk en waarheidsgetrouw
- Als ik mijn problemen deel met mijn leidinggevende, dan weet ik dat hij met zorg hiermee om zal gaan

Attribute Ability to perform his job well

- Mijn leidinggevende staat erom bekend dat hij succesvol is in de taken die uitvoert
- Mijn leidinggevende bezit over de competenties om zijn team goed te laten presteren

- Ik heb vertrouwen in de vaardigheden van mijn leidinggevende

Attribute Benevolence

- Mijn leidinggevende heeft oog voor mijn persoonlijke behoeften en wensen aangaande mijn werk
- Ik ben er zeker van dat ik moeilijkheden die ik op het werk tegenkom kan bespreken met mijn leidinggevende
- Mijn leidinggevende is bereidwillig om mij ergens mee te helpen op mijn werk

### Control Variables

**Construct**                      **Pro-active personality from the employee, and as rated by the employee**

**Defined as:**                      “Characterized as someone who is relatively unconstrained by situational forces and who effects environmental change” (Bateman & Crant, 1993)

**Object**                              Employees

**Rater Entity**                      Subordinate (individual)

**Attributes:**

- Unconstrained by situational forces
- Effects environmental change

**Questions:**

Attribute Unconstrained by situational forces

- Wat de kansen ook zijn, als ik er in geloof, dan gaat het gebeuren
- Als ik iets wil, dan laat ik mij daarin niet hinderen door externe factoren

Attribute Effects environmental change

- Waar ik ook ben geweest, bleek ik een sterkte kracht die voor bruikbare verandering zorgt
- Ik voel me gedreven een verschil uit te maken in mijn gemeenschap en misschien zelfs in de wereld
- Niets is zo spannend dan mijn ideeën tot werkelijkheid zien worden

**Construct**                      **Status Striving behavior from the employee, as rated by the employee**

**Defined as:**                      “Status striving employees focus on climbing the workplace hierarchy or attaining informal status to obtain more influence within the organization (i.e., getting ahead)” Chiaburu & Carpenter (2013)

**Object**                              Employees

**Rater Entity**                      Subordinate (individual)

**Attributes:**

- Climbing the workplace hierarchy /obtain more influence

**Questions:**

Attribute Climbing the workplace hierarchy

- Ik probeer altijd op een hoger niveau te presteren zodat dit mijn kansen vergroot om een hogere functie te gaan bekleden
- Ik word gedreven door een verlangen beter te presteren dan mijn collega's
- *In mijn huidige functie probeer ik een informele status te verkrijgen waarmee ik invloed kan uitoefenen (Na "slechte" cronbach's alpha, verwijderd uit schaal)*

**Construct**

**Communion Striving by the employee, as rated by the employee**

**Defined as:**

Communion striving captures the drive for close relationships and bonds with colleagues (i.e., getting along), Chiaburu & Carpenter (2013)

**Object**

Employees

**Rater Entity**

Subordinate (individual)

**Attributes:**

Close relationship and bonds with colleagues

**Questions:**

- Ik vind het belangrijk om een persoonlijke band met mijn collega's te creëren.
- Ik hou mij bezig met het vinden van manieren zodat collega's mij leuk vinden
- Ik ben gefocust op hoe ik goed kan opschieten met mijn collega's

**Construct**

**Job Autonomy of the employee, as rated by the employee**

**Defined as:**

"Employees must be able to make decisions with regard to, and have control over their own work" (Frese, 1989)

**Object**

Employees

**Rater Entity**

Subordinate (individual)

**Attributes:**

- Making decisions / having control

**Questions:**

Attribute "making decisions over their work"

- Ik ervaar in mijn werk een grote mate van vrijheid om zelf te beslissen hoe ik mijn werk uitvoer
- Ik kan zelf beslissen hoe ik in mijn werk dingen aanpak
- Ik ervaar een aanzienlijke mate van zelfsturing in mijn werk

**Construct**

**Cognition**

**Object**

Employees

**Rater Entity**

Subordinate (individual)

**Questions:**

- Wat is uw hoogst genoten opleiding?  
Voortgezet Onderwijs/ MBO / HBO / WO/ anders nl. ...

**Construct**

**Age**

**Object**

Employees

**Rater Entity**

Subordinate (individual)

**Questions:**

- Wat is uw leeftijd?

**Construct**

**Job Tenure**

**Questions:**

- Hoe lang bent u werkzaam binnen uw huidige functie?  
... jaar

**Other**

- Met welke managementstijl wordt er gewerkt in jouw werk?  
Zelfsturende teams / Lean Management / geen van deze / geen idee
- *Wat is de naam van de organisatie voor wie u werkzaam bent?*  
...

**APPENDIX III: SELF-COMPLETION QUESTIONNAIRE**

Vragenlijst t.b.v. enquête onderzoek Bedrijfskunde, door Anouk Schepers

**Personal Initiative***Attribute: Proactive*

Code SPSS	Vraag nr.	Vraag
PI.PA.1	1	Als er zich in mijn werk problemen voordoen, dan probeer ik de situatie te veranderen door zelf met een oplossing te komen
PI.PA.2	2	Als ik kansen zie om mijn werk te verbeteren, dan ga ik daarmee aan de slag.
PI.PA.3	3	Ik los problemen op in mijn werk naar eigen inzicht en zet hiermee een verandering in gang

*Attribute: Goal-directed*

Code SPSS	Vraag nr.	Vraag
PI.GD.4	4	Als ik kansen zie om mijn doelen op mijn werk na te streven dan ga ik daar mee aan de slag
PI.GD.5	5	Tijdens mijn werk heb ik graag een doel voor ogen

*Attribute: Benefitting the organization*

Code SPSS	Vraag nr.	Vraag
PI.BO.6	6	Werkzaamheden die ik uitvoer moeten ten goede komen aan de organisatie
PI.BO.7	7	Als ik mijn werk zo kan aanpassen dat het beter is voor de organisatie, dan doe ik dat

*Attribute: Going beyond what is formally required in a given job*

Code SPSS	Vraag nr.	Vraag
PI.GBJ.8	8	Doorgaans doe ik meer dan mijn functie behelst
PI.GBJ.9	9	Ik voer werkzaamheden uit die buiten mijn taakomschrijving vallen

*Attribute: Persistent in the face of barriers and setbacks*

Code SPSS	Vraag nr.	Vraag
PI.PB.10	10	Ik sta achter mijn ideeën, zelfs als er verzet is van anderen
PI.PB.11	11	Als ik in een idee geloof, dan is er geen hindernis die mij tegenhoudt

**Reward Free Time**

Code SPSS	Vraag nr.	Vraag
FT.12	12	Hoeveel tijd, binnen uw werktijd, heeft u de in de maand juni (2014) gekregen om aan eigen ideeën/initiatieven/activiteiten te werken die ten goede komen van uw werk en/of de organisatie? ... uur in maand juni 2014 (geef een getal tussen de "0 en 99", "0" uur kan dus ook!)

**Trust***Attribute Integrity*

Code SPSS	Vraag nr.	Vraag
T.Int.13	13	Ik twijfel niet of mijn leidinggevende zijn/haar afspraken nakomt
T.Int.14	14	<b><i>Mijn leidinggevende is niet altijd eerlijk en waarheidsgetrouw (REVERSED!)</i></b>
T.Int.15	15	Als ik mijn problemen deel met mijn leidinggevende, dan weet ik dat hij met zorg hiermee om zal gaan

*Attribute Ability to perform his job well*

Code SPSS	Vraag nr.	Vraag
T.Ab.16	16	Mijn leidinggevende staat erom bekend dat hij succesvol is in de taken die uitvoert
T.Ab.17	17	Mijn leidinggevende bezit over de competenties om zijn team goed te laten presteren
T.Ab.18	18	Ik heb vertrouwen in de vaardigheden van mijn leidinggevende

*Attribute Benevolence*

Code SPSS	Vraag nr.	Vraag
T.Ben.19	19	Mijn leidinggevende heeft oog voor mijn persoonlijke behoeften en wensen aangaande mijn werk
T.Ben.20	20	Ik ben er zeker van dat ik moeilijkheden die ik op het werk tegenkom kan bespreken met mijn leidinggevende
T.Ben.21	21	Mijn leidinggevende is bereidwillig om mij ergens mee te helpen op mijn werk

**Controle Proactive Personality***Attribute Unconstrained by situational forces*

Code SPSS	Vraag nr.	Vraag
C.PA.Un.22	22	Wat de kansen ook zijn, als ik er in geloof, dan gaat het gebeuren
C.PA.Un.23	23	Als ik iets wil, dan laat ik mij daarin niet hinderen door externe factoren

*Attribute Effects environmental change*

Code SPSS	Vraag nr.	Vraag
C.PA.Chan.24	24	Waar ik ook ben geweest, bleek ik een sterke kracht die voor bruikbare verandering zorgt
C.PA.Chan.25	25	Ik voel me gedreven een verschil uit te maken in mijn gemeenschap en misschien zelfs in de wereld
C.PA.Chan.26	26	Niets is zo spannend dan mijn ideeën tot werkelijkheid zien worden

**Controle Status Striving***Attribute Climbing the workplace hierarchy / obtain more influence*

Code SPSS	Vraag nr.	Vraag
C.SS.Cl.27	27	Ik probeer altijd op een hoger niveau te presteren zodat dit mijn kansen

		vergroot om een hogere functie te gaan bekleden
C.SS.Cl.28	28	Ik word gedreven door een verlangen beter te presteren dan mijn collega's
<b>C.SS.Inf.29</b>	<b>29</b>	<b>In mijn huidige functie probeer ik een informele status te verkrijgen waarmee ik invloed kan uitoefenen (Na cronbach's alpha, verwijderd uit schaal)</b>

### **Controle Communion Striving**

*Attributes: Close relationship and bonds with colleagues*

Code SPSS	Vraag nr.	Vraag
C.CS.30	30	Ik vind het belangrijk om een persoonlijke band met mijn collega's te creëren
C.CS.31	31	Ik hou mij bezig met het vinden van manieren zodat collega's mij leuk vinden
C.CS.32	32	Ik ben gefocust op hoe ik goed kan opschieten met mijn collega's

### **Controle Job Autonomy**

*Attribute "making decisions / having control"*

Code SPSS	Vraag nr.	Vraag
C.JA.dec.33	33	Ik ervaar in mijn werk een grote mate van vrijheid om zelf te beslissen hoe ik mijn werk uitvoer
C.JA.dec.34	34	Ik kan zelf beslissen hoe ik in mijn werk dingen aanpak
C.JA.Con.35	35	Ik ervaar een aanzienlijke mate van zelfsturing in mijn werk

### **Controle Cognitie**

Code SPSS	Vraag nr.	Vraag
C.Cog.36	36	- Wat is uw hoogst genoten opleiding? Basisschool = 1 VMBO = 2 MAVO = 3 HAVO = 4 VWO = 5 MBO = 6 HBO = 7 WO = 8

### **Controle Leeftijd**

Code SPSS	Vraag nr.	Vraag
C.age.37	37	Wat is uw leeftijd?

### **Controle Tijd werkzaam in functie**

Code SPSS	Vraag nr.	Vraag
C.TWiF.39	39	Hoe lang bent u werkzaam binnen uw huidige functie? ... jaar



**Controle Managementstijl**

Code SPSS	Vraag nr.	Vraag
C.Man.40	40	Met welke managementstijl wordt er gewerkt in jouw werk? Zelfsturende teams = 1 Lean Management = 2 Geen idee = 3 Anders = 4

**Controle Sector**

Code SPSS	Vraag nr.	Vraag
C.Org.41	41	Wat is de naam van de organisatie voor wie u werkzaam bent? 's Heerenloo = 1 Profila Zorg = 2 JGT = 3 Ipse de Bruggen = 4 Parnassia = 5 Het Parkhuis = 6 Prezzent = 7 Laurens = 8 CGI = 9 Onbekend = 10

Code SPSS	Vraag nr.	Vraag
C.Sec.42	42	Sector: Zorg = 1 ICT = 2 Onbekend = 3

*Likert Schaal:*

<i>Sterk mee eens</i>	= 7
<i>Mee eens</i>	= 6
<i>Beetje mee eens</i>	= 5
<i>Noch mee eens / Noch mee oneens</i>	= 4
<i>Beetje mee oneens</i>	= 3
<i>Mee oneens</i>	= 2
<i>Sterk mee oneens</i>	= 1