Defensive routines and their origins
Contribution to the understanding of defensive routines within the context of
Landora Färgindustri

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Abstract

Title: Defensive routines and their origins

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Keywords: Defensive routines, Process theory of Perpetual Motivation Position (PMP), stress, individual balance, knowledge management, identity, educational environment, external demand environment, social environment, physiological environment, self-expectancy environment, transparency environment, self-esteem environment, leadership, situational context, individual norm, departmental norm, organizational norm, deviation from the norm.

Purpose: Contribution to the understanding of defensive routines within the context of Landora Färgindustri.

Research question: What are the explanatory factors behind defensive routines facing an individual within the context of their situational environment at Landora.

Methodology: Mixed methods with triangulation, deduction, qualitative and quantitative methods are used.

Conceptual Framework: The conceptual framework lies somewhere between motivation theorists, with their focus on needs, and post-modernist theorists, with their focus on identity construction or the self using PMP model (Michelsen, 2007) in combination with stress, and defense routine assessments in conjunction with supplementing models and theories.

Empirical Foundation: The empirical material was generated by means of the MMC Psychometric Assessments platform (PMP, DPA, SA, MA) conducted on-site via a computer terminal and internet connection log-on to a secure database. In addition to the automated platform interviews were held with each person concerning their answers, beliefs and understanding of the questions in relation to their situational environment.
Summary Findings: The correlation between defensive routines, PMP and the departments within Landora are significant. Production with the highest defensive routines shows the lowest PMP values, Sales with the lowest defensive routines also shows the highest PMP values, and naturally Administration between the two.

Stress, as an independent variable, shows an obvious link to tensions within the PMP environment which in turn cause defensive routines to emerge. Naturally, other issues in regard leadership, communication, stimulation, and competency development all factors that can affect participation. However, our position remains the same, low PMP values will cause Defensive routines to inhibit an individual’s negotiation to participate while at the same time increasing stress.

The empirical data shows that there is a direct connection between an individual’s defensive routines and a low PMP value. Furthermore, individual with increased defensive routines also showed higher the average stress within their departments and the organizational as a whole. Naturally, the qualitative data obtained during the interviews substantiated the claim that defensive routines caused by low PMP values inhibited the individual’s negotiation of participation. While most of this thesis has its focus on studying the effects of high defensive routines, in relation to PMP and stress, it is important to note that low defensive routines show high PMP values and low stress.

Further advanced studies calculating the historical perspective in addition to variances within an individual’s norm as well as seasonal changes in individual, department and organizational patterns within ranges is extremely interesting.
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1. Introduction to the area of interest

This thesis is part of an ongoing consultancy project at Landora Färgindustri AB (Landora). Landora lost its largest client /one third of its business) a few months ago. Naturally, since then, company spirit has been at an all time low. This impacted Landora both economically and psychologically causing some insecurity in the workers along with additional financial pressures on the leadership. During the initial interviews, it was evident, that employees exhibited a feeling of resentment towards the person/s responsible for losing this client. The consultancy project is therefore looking into ways to improve employee participation and to work with those employees where tensions have lead to a rise in defensive routines. This thesis will also look into a number of causes affecting individual and organizational participation. It is well known that defensive routines inhibit learning (Argyris, 1999: 31). One’s ability to learn both tacit and explicit knowledge (Argyris, 1999: 56-61) relating to the situational environment is naturally important; however, the capacity to learn about one’s self in regard one’s negotiation of participation, one’s self-identity, defensive routines and the causes that inhibit understanding are central here. One’s ability to be open to change initiatives within the context of one’s situational environment is also an important factor. As this thesis will show, sometimes one’s openness or willingness to participate in a situational demand is guarded or defended by one’s defensive routines.

If one is to achieve sustainable change, understanding the mechanisms that drive an individual’s negotiation of participation is vital (Michelsen, 2009). The Landora case provides us with excellent data in understanding why some people do not engage in change; nevertheless, just understanding one’s defensive routines in not sufficient as one needs to understand the catalysts or causes behind each defensive routine. Identifying and understanding the causes for these defensive routines is another focus of this thesis.

A literature study has found few references about defensive routines. This can be due to the fact that little is understood about the subject since it’s a combination of many disciplines such as psychology, leadership, management and others. Even less has been written about the motives or tensions causing rise to the various mechanisms and actions used such as resistance or compliance. In order to make some contribution to this field, our research is aimed at defensive routines and the situational causes there.
1.1 Defensive routines as an inhibitor

A problem one most commonly confronts when consulting is manager’s ability to read and interpret defense mechanisms (Michelsen, 2009). As the evidence will show here, resistance is not limited to protection of one’s self-identity but far more complex in nature. As Senge puts it,

“Perhaps the single greatest liability of management teams is that they confront these complex, dynamic realities with a language designed for simple, static problems. Management consultant Charles Kiefer says it this way: ‘Reality is composed of multiple-simultaneous, interdependent cause-effect-cause relationships. From this reality, normal verbal language extracts simple, linear cause-effort chains. This accounts for a great deal of why managers are so drawn to low leverage interventions.’… Because we see the world in simple obvious terms, we come to believe in simple, obvious solutions. This leads to the frenzied search for simple, fixes, that preoccupies the time of many managers” (Senge, 1990: 266).

Senge suggests that members need to learn how to work with rather than against their defensive routines (1990: 257). Recognizing one’s defensive routines is the first step in proactively working towards a solution to reduce the causes for the defense in the first place. As the evidence will show, the causes of most defensive routines are related to tensions in an individual’s PMP. Improving Landora’s capability to see beyond the cultural or organizational resistance and to work proactively at addressing causative issues rather than just symptoms is the challenge.

According to Senge (1990: 250) defensive routines are habits used to protect us from embarrassment and the possibility of a threat arising from exposing our thinking. These defensive routines form a sort of protection against our deepest assumptions.

“The source of defensive routines, according to Argyris, is not belief in our views or desire to preserve social relations, as we might tell ourselves, but fear of exposing the thinking that lies behind our views. “Defensive reasoning,” says Argyris “…protects us from learning about the validity of
our reasoning.” For most of us, exposing our reasoning is threatening because we are afraid that people will find errors in it. The perceived threat from exposing our thinking…” (Senge, 1990: 250)

Defensive routines are common and diverse and they usually go unnoticed in the workplace. Sometimes people say, “That’s a very good idea,” when they really don’t think so but they are trying to avoid conflict or an embarrassing situation. Consensus management could also be considered a type of defense routine for those managers that are unable to make a sensitive decision but rather prefer to hide behind a committee or a “we have decided platform.” Lack of stimulation within one’s environment can lead to complacency which in turn creates defensive routines in an effort to protect one’s perceived status quo or comfort zone (Michelsen, 2009: 175). Personality types are also a form of defensiveness. Type A or Type B personalities, being introvert and shy or extrovert and dominating can also be a mechanism to deal with reality within the context of a changing or uncomfortable situation (Michelsen, 2009: 82-85).

1.2 Research Aims & Purpose

In this thesis we will explore and investigate the nature of defensive routines in broad terms and propose a model and method for doing so. Our aim with this study is to gain insight into the explanatory factors behind each employee’s defensive routines. Since there is very little written about this subject, we feel that our thesis contributes to the literature by providing more understanding into the underlying causes. Our research question of finding the explanatory factors behind defensive routines focused on the individual within the context of his/her situational environment at Landora.

The psychometric tests and the model used in our research to study the causes of the defense routines have been provided by the Swedish based consultancy firm Modern Management Consulting, a JAC International AB company. The aim is to give the reader an insight into how defensive routines can affect employee’s attitude and behavior but also to explain how tension in one’s personal environment can affect one’s defensive posture.
Our proposed model is called Process theory of Perpetual Motivation Position (PMP) and was first presented in Michelsen book *Cross-Training: Theory, Design & Implementation* in 2007. We will elucidate both the model and the theory behind it further in chapter 2.2.

### 1.3 Importance

It is obvious that efficiency is directly related to understanding and knowledge of one’s situational environment. Naturally, this knowledge also equates to workflow and process too. It is understood that the process of negotiating to participate in an activity or task within or out off one’s situational environment is complex in nature. Furthermore, individuals with low PMP scores are more likely to show more defensive routines and higher stress levels as opposed to those with higher PMP scores. This information is rather significant as it can serve both the individual and leader by providing more situation-based information affecting the individual in areas from competency development to realignment of workflow, processes, and even adjustment of demands. Participation can therefore be connected to fluctuating PMP levels.

### 1.4 Conclusions and limitations

The correlation between defensive routines, PMP and the departments within Landora are significant. Production with the highest defensive routines shows the lowest PMP values, Sales with the lowest defensive routines also shows the highest PMP values, and naturally Administration between the two.

The empirical data shows that there is a direct connection between an individual’s defensive routines and a low PMP value. Furthermore, individual with increased defensive routines also showed higher the average stress within their departments and the organizational as a whole. Naturally, the qualitative data obtained during the interviews substantiated the claim that defensive routines caused by low PMP values inhibited the individual’s negotiation of participation.

Further advanced studies calculating the historical perspective in addition to variances within an individual’s norm as well as seasonal changes in individual, department and organizational patterns within ranges is extremely interesting.
1.5 Disposition of the study.

The study was conducted at Landora’s facilities in Landskrona, Sweden from February until April 2010. All participants were informed about the assessments prior to our arrival. All assessment testing was done on-line, at their location, with the least amount of intrusion as possible. After a brief discussion about what we were doing, participants took the assessment tests. We returned a month later to counsel each participant in regard to their scores and results. This disposition of the study within thesis is divided into eight main sections or chapters.

1. Chapter One: the introduction
2. Chapter Two: the theoretical approach to defensive routines, their underlying causes, and the interrelated dependencies therein.
3. Chapter Three: the methodology to be used in the interpretation of the empirical data collected.
4. Chapter Four: background information on the case at Landora.
5. Chapter Five: the presentation of the empirical data.
6. Chapter Six: the interpretation of the data using the methodological and theoretical approaches outlined.
7. Chapter Seven: conclusion and findings
8. Appendix: Defense routine and PMP questions used at Landora. Also, field notes from the two personnel that deviated the most from the norm.
2. Defensive Routines and Causality

This chapter will look at a number of aspects related to the causality of defensive routines. Starting with theoretical connections, motivational models and even some psychology the chapter looks at various forces at play or environments that confront an individual’s situational context. This situation-based approach assists in understanding the forms that affect negotiation of participation, resistance and defensive routines.

2.1 Defensive Routines

Defensive routines are ubiquitous in our society. Argyris (1993) states that a defensive routine is any action or strategy, that prevents individuals, groups or organizations from experiencing threat or embarrassment. Carl Jung is well known for his efforts in understanding of self-regulation and balance in relation to one’s emotions and behavior stemming from his theory of the unconscious. At the same time, one could argue that defense routines form from frames around one’s personal subjective consciousness, personal unconsciousness, and collective unconsciousness. These formations or routines can prevent actors from identifying and even reducing the effects caused by the perception of these conscious and unconscious contexts within their situational environment. These constructs take the form of defensive routines which can be both over-protective and anti-learning in nature.

Schein believes that defensive routines rise from a fear of loss of personal identity and causes learning anxiety and that as long as this anxiety remains, one is motivated to resist the validity of the disconfirming data or one will reinvent various excuses as to why one cannot really engage in the process (2004: 330-331). According to Schein, Coghlan (1996) suggests that “these responses come in the following stages:

1. **Denial.** You will convince yourself that the disconfirming data are not valid, are temporary, don’t really count, reflect someone just crying ‘wolf,’ and so on.

2. **Scapegoating, passing the buck, dodging.** You will convince yourself that the cause is in some other department that the data do not apply to you, and that others need to change first before you do.
3. Maneuvering, bargaining. You will want special compensation for the effort to make the change; you will want to be convinced that it is in your own interest and will be of long-range benefit to you.” (Schein, 2004: 331)

According to Baron and Byrne (1991) another form of resistance is

“when we feel that another person is trying to exert undue pressure on us, we often react by doing the very opposite of what the other wants us to do or adopting the very opposite attitude (negative attitude change). This response to perceived threats to our personal freedom is called reactance and represents a strong source of motivation to resist persuasion. Indeed, so strong is the desire to assert one’s autonomy that sometimes individuals shift away from the view being advocated, even if it is the one they might normally accept” (Gross, 1992: 529).

According to Argyris

“Defensive routines are caused by a circular, self-reinforcing process in which individuals’ Model I theories-in-use produce individual strategies of by-pass and cover-up, which result in organizational by-pass and cover-up, which reinforce the individuals’ theories-in-use. The explanation of organizational defensive routines is therefore individual and organizational. However, unlike Model I behaviors, Model II behaviors are crafted into action strategies that openly illustrate how the actors reached their evaluations or attributions and how they crafted them to encourage inquiry and testing by others. As a consequence, defensive routines that are anti-learning are minimized and double-loop learning is facilitated” (1993:53).

Without sufficient contextual information, norms and patterns one cannot arrive at a starting point. Argyris confirms this when he states in a later book (1999:70) that

“knowledge of these mechanisms will produce valid generalizations about constraints to double-loop organizational change…but double-loop changes cannot occur without unfreezing the models or organizational structures and processes now in good currency. These models, in turn, cannot be unfrozen without a model of a significantly different organizational state of affairs; otherwise, toward what is the organization to change? If these models are
genuinely new, then they do not now exist. If they do not now exist, then their invention and their use is an act of proscription, a normative stance.”

An important aspect to consider is the term *deviation-from-the-norm*. Gross defines this as, “If the statistical criterion is insufficient, it is because it is essentially neutral, i.e. the statistical average is neither good nor bad, desirable nor undesirable (*abnormal* is defined as *deviation-from-the-average*). Deviation-from-the-*norm*, however, implies not behaving or feeling as one should: ‘norm’ has an ‘oughtness’ about it whereby behavior is expected from individuals occupying particular roles and if those expectations are not met or are positively ‘transgressed’, a judgment of ‘bad’ or ‘sick’ may be passed” (1992: 930).

Prof. Jerome C. Wakefield (Lecture, 2009,12,10) at the department of Psychiatry at New York University has showed in his research that over-misdiagnosis of patients with depression is directly linked to inadequate understanding of the ‘*norm*’ within the ‘*situational environment*’ and that context is needed to better understand individual tensions within the individual’s situational environment.

Chris Argyris argues that ‘defensive actions inhibit problem solving and decision making, since they violate formal policies and managerial stewardship, and since they involve embarrassment or threat…’(1993: 19). He also states that in order to covert defensive routines individuals can provide inconsistent data (1993: 20). When Schein describes human nature he talks about “*The Being-in-Becoming* where he refers to the idea that the individual must achieve harmony with nature by fully developing his or her capabilities and, thereby, achieving a perfect union with the environment” (Schein, 2004: 176).

### 2.2 Theoretical Connections

Since this thesis frames defensive routines and tries to understand the causes thereto. We needed to consider a spectrum of classical models and theories which could best help us visualize and explain situational context. As the demands facing the individual fluctuate, within the context of the situation, so too, must the theoretical model if it is to understand perceptions and tensions within the environment. Given that defensive routines are need–
based instruments, created by the individual or collective, to protect himself/herself/themselves (agency) from a perceived threat or embarrassment we need to understand what motivates this action.

Therefore, a theoretical model which incorporates motivation, identity and self-awareness is needed. If one is to monitor the situational environment affecting an individual one needs to have an instrument that can adjust itself through competing not static variables.

The Process Theory of Perpetual Motivation Positioning (PMP) is a theory with its core beliefs somewhere between various motivation theorists, with their focus on needs, and post-modernist theorists, with their focus on identity construction or the self. PMP puts context into the leadership of the situational environment by looking at seven fluctuating variables facing the individual (Michelsen, 2007 & 2009). The theory shows how a low PMP environment will affect individual participation, motivation, subjectification (Alvesson, 2004) and other identity constructions. Naturally, the changing situational environment confronting the individual is a major factor. As the organism metaphor in Morgan’s book *Images of an Organization* (1997: 386) implies, additional reflection into relevant parameters are necessary. This reflection should consider the interconnectedness of the PMP variables to the situational environment, motivation and identity theories in order to maximize understanding.

The theory of Perpetual Motivation Positioning (PMP) argues that an individual’s self-identity is, in relation to the level of the seven PMP variables, a vital starting point for any actionable process. These variables in turn are actionable, interconnected constructs that affect an individual’s negotiation to effectively participate within various contexts.

PMP action is therefore a function of the cognitive appraisal of oneself. According to Lazarus (1982) some degree of cognition processing is an essential prerequisite for an effective reaction for a stimulus to occur. Thus, three key action factors are always taken into consideration when understanding the PMP construct:

1. How the individual sees himself/herself in regard to his/her seven PMP variables,
2. How others see them within their situational environments, and
3. Where they want to see themselves.
Neisser’s (1988) aspect of a single, complex self system makes a useful distinction between five types of self knowledge which help to explain the origins of mental sense of self. The five aspects help us to understand why the subjective self is a good and necessary starting point:

*Directly perceived*—

1) The ecological self, which is directly perceived with respect to the physical environment.

2) The interpersonal self, depending upon emotional and other species-typical forms of communication.

*Self-recognition*—

3) The extended self, based on memory and anticipation and implying a representation of one’s self.

4) The private self, reflecting conscious personal knowledge dependent on representation.

5) The self concept, a socio-cultural experience defined as a theory of self.

A major argument for the PMP theory is the subjective individual perception of one’s self within a specific situational environment. Since the individual is central, interpretation of this perception is a key factor to their personal negotiation of self and participation negotiation. Consequently, the interrelatedness of the seven PMP environments to one another becomes instrumental in understanding applicable action and leadership strategies. Self-Norms or Self-Irregularities as to where one is, where one wants to be or to be seen, what one represents, and how one constructs individual effort in sustaining or maintaining current status, efficacy, and participation is for that reason important and dependent upon one’s subjective self-awareness.

The empirical data will show that low PMPs causes conflicting tensions between environments, frustration or elevated stress that often lead to the development of defense mechanisms. According to Gross (1992: 152-153), stress is caused when frustration and conflict provoke emotional changes. These emotional changes are formed through unconscious, conscious, perceived subjective and objective situational conditions or tensions facing the individual, whether need-based or socially constructed. Defensive routines are thus natural responses to any real or perceived tensions. If congruent, these routines can be used to maintain espoused beliefs and values with underlying assumptions (Schein, 2004: 30). If on
the other hand these are incongruent in nature they can be represented through emotional reactions in the form of non-participatory behavior or resistance.

Cognitive consistency states that human beings are seen as internally active information processors who sort through and modify a large number of cognitive elements in order to achieve some kind of cognitive coherence. Lazarus (1982) argues that cognitive appraisal (of meaning or significance) underlines and is an integral feature of all emotional states. Richard Gross confirms this: “It is really a part of human nature, a basic human need, and so such theories may be seen not just as theories of attitude change but also as theories of human motivation—people need cognitive consistency” (Gross, 1992:532).

“Three of the best known consistency theories are: (i) Heider’s balance theory (1958), according to which people seek harmony among their various attitudes and beliefs and tend to evaluate in similar ways things that are related to each other; (ii) Osgood and Tannenbaums’ congruity theory (1955), which maintains that when two attitudes or beliefs are inconsistent with each other, it is the one that is less firmly held which will be the one that changes; and (iii) Festinger’s cognitive dissonance theory (1957), is that when an individual simultaneously holds two cognitions which are psychologically inconsistent, he/she experiences dissonance, which means a negative drive state—a state of ‘psychological discomfort or tension’ which motivates the individual to reduce it by achieving consonance.” (Gross, 1992: 514)

Cognitions are the things (his/her behaviors and their surroundings) that a person knows about herself/himself (Festinger, 1957). As discussed earlier, conflict (tension) arises around two possible and opposing outcomes to resolve the problems inherent in that stage or environment (Gross, 1992: 628). Participation can, for that reason, be a deduction of one’s perception of one’s identity and even one’s PMP makeup. Understanding one’s subjective self is thus a combination of factors which includes identity construction. Construction is a construct motivated by a need. Whether this need originates from the subconscious, perceived, real or the situational environment, it is individually based and can change based upon situational conditions and their context. An individual’s knowledge or understanding of oneself within any given context in their situational environment is central to the PMP theory.
Chris Argyris (1993: 55) argues that individual and collective (organizational) defensive routines limit learning adaptation. The PMP theory will show how tension due to low PMP levels inhibits participation and understanding (learning). According to Richard D. Gross, “conflicts develop when a person experiences two or more competing or contradictory motives or goals:

a) Approach–approach conflicts involve having to choose between equally attractive alternatives, e.g. two equally delicious-sounding dishes on the same menu.

b) Avoidance–avoidance conflicts involve having to choose between two equally unattractive alternatives, e.g. going to the dentist or putting up with awful toothache.

c) Approach–avoidance conflicts involve the same person or situation having both very desirable and undesirable qualities, e.g. you want to go to university but you would like to be working and earning some money” (1992:154).

The process theory of Perpetual Motivation Theory (Michelsen, 2007 & 2009) is a product of seven interconnected environments combining a number of motivational and identity theories such as: Need-based, Affective-Arousal, The Expectancy Approach, Goal-Setting Theory, Self-Determination, ERG Theory, Social Identity Theory (SIT), identity work and others. While realizing the importance of some of the ground-breaking need-based motivation theorists and, but at the same time, understanding the limitations of their static environments, PMP also takes into consideration the post-modernist identity construction approach. Unfortunately, many of the classical models are static in nature. For instance, Maslow’s hierarchy of Needs which requires one to achieve one level before proceeding to the next does not allow for change in the situational context. Vroom’s Expectancy Theory for instance focuses on a correlation between efforts and performance which helps self-esteem but ignores the social, educational, transparency (openness) and other aspects. David McClelland’s need based theory focuses on the need for power or affiliation but ignores other needs such as one’s physiological, external demand and self-expectancy environments (McClelland et al., 1961, 1962 & 1963). Alderfer’s ERG Theory which looks at three simultaneous needs (Existence Needs, Relatedness Needs and Growth Needs (Alderfer et al., 1969 & 1972)) is a tremendous step forward as it tries to adapt to the situational environment; however, with its main focus on growth it misses the individual’s educational, external demand and transparency environments. Hertzberg’s Two Factor Theory moves closer to Michelsen’s PMP model by
looking at what leads to satisfaction and psychological growth by considering Typical Hygiene Factors (working conditions, leadership, status, pay, job requirements, company and company policy, and personal relations) with Typical Motivation Factors (growth, advancement, achievement, recognition, responsibility, and stimulation). Observably, the individual’s subjective identity and understanding one’s knowledge (educational environment) are key attributes since these factors all change over time.

It could be argued that identity construction is actually a need-based motivation and as it deals more with identity construction, which is a need-based construction, rather than identity awareness or just knowing it is therefore need-based. David Nadler’s (1977) ‘The Expectancy Approach’ or ‘Expectancy Valence Approach’ suggests that all employees and all situations are not alike, that fluid situations require fluid solutions and that there is no single best way to motivate employees. There are four assumptions in his hypothesis of behavior in organizations:

1. the individual and organizations behavior is determined by a combination of factors;
2. the needs, desires and goals of the individual are different;
3. individual behavior in an organization is a conscious decision; and
4. the individual’s expectations for a given outcome will determine the behavior of the individual (Michelsen, 2007).

Since PMP is situationally based and interpreted by the individual within his/her own context, in order to be a consistent instrument or variable it has to be flexible and broad enough to meet the changing environment. This is because:

1) life is in continual motion, the river metaphor (Heraclutis, 500 B.C.),
2) there are many uncontrollable variables (perceived or actual) facing the individual at any given time, the organism metaphor (Morgan, 1997: 386-391),
3) human nature is abstract and conditioned to react to reality or to perception as a reality, the psychic prison metaphor (Morgan, 1997: 405-412),
4) human behavior is contextual and conditional upon variables (perceived or actual), the psychic prison metaphor (Morgan, 1997: 405-412),
5) lack-of or abundance-of awareness or ignorance of oneself or ones environment, the psychic prison metaphor (Morgan, 1997: 405-412).

Consequently, for a theory to work it must support or at least mirror the context and/or the conditions in which it is to be utilized. Thus, Michelsen (2007) argues that as the variables of motivation are not static and are in a constant state of fluctuation (perpetual), and a theoretical model must also be flexible and in motion if it is to have an efficient chance of success.

Whether motivation is instinct, learned or controlled, the coaching leader is responsible for finding the motivational formula for each of his employees and naturally himself/herself too, as one cannot lead effectively without understanding oneself. Michelsen suggested that, at any given time, the variables (demands, expectations, knowledge, self-esteem etc.) facing the individual are in a state of flux and therefore instable. The effects on Agency (Fig. 2.) reaction are as a consequence resistance or compliance. As the evidence will show, when PMP variables are in tension Agency negotiation reframes conditions to justify natural resistance. Naturally for Agency compliance a theoretical framework like PMP has to be in continuous movement to meet fluctuating and situational conditions. As a consequence the coaching leader has to be perpetually adjusting the impact a variable might have on one or all of the seven environments in order to maximize potential (participation and efficacy) and adjust situational context.

![Fig. 2. PMP Agency Effects](image-url)
2.3 The Seven PMP Environments

The seven motivating keys for Perpetual Motivation Positioning are: Self-Expectancy, Physiological, External Demand, Social, Education, Transparency and Self-Esteem.

The PMP assessment questionnaire is a series of 50 questions that are situational-based and connected to scientifically established methods (psychological, business leadership models and the DSM IV). The PMP assessment is supported by three independent questionnaires comprising of 20 questions each (stress, defense posturing and motivation).

2.3.1 Educational Environment

Educational Environment is one’s knowledge or understanding of control functions within one’s situational environment. This includes knowledge, skills, ability and the competency (KSAC) to fulfill personal objectives and external demands, perceived or real. Since life is in continual movement so too must one’s educational environment. It should be conducive to learning and development (tacit or explicit), including participatory skills such as communication, storytelling and decision making.

Davenport and Prusack (2000) contend that

“knowledge is a fluid mix of framed expertise, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates from and is
applied in the minds of knowers. In organizations it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices and norms.” (Davenport & Prusack, 2000).

In the PMP context, knowers are individuals, each and every employee within an organization, defined as the bearer of knowledge (KSAC) within the context of one’s self and a specific situational environment. The Educational Environment needs to foster understanding, knowledge adaptability and experience as it helps the individual to cope in various situations and provide him/her with the intellectual tools necessary to work effectively or to find a solution if there is none at hand.

2.3.2 External Demand Environment
The External Demand Environment includes all perceived and real demands set by external entities such as legislation, working associates, boss, company, unions, family and friends. These demands can also include other aspects such as expected participation level, responsibility, authority and leadership pressures from others.

According to Richard Gross “Our expectations of people’s personalities or capabilities may influence the way we essentially treat them, which in turn can influence their behavior in such a way that our expectation is confirmed. This is known as the self-fulfilling prophesy; and is an illustration of how stereotypes can (although unwittingly) influence our behavior, and not just our own perception or memory” (1992: 487). This then becomes a demand too. Negative attitude change caused by undue pressures from others can also fit into this environment. Furthermore Gross states, “that high self-esteem subjects are less likely to be influenced or affected by the demands of persuasion than those with lower self-esteem” (1992: 530). For that reason the perception of being subjected to persuasion is also an external demand.

According to Michelsen (2007) the perception of empowerment or control over one’s decisions, workflow, process and/or the ability to use tools such as prioritization and flexibility also affect one’s sensitivity to any perceived or real external demands. Perception of these external demands are as a consequence dependent upon the consistency in rules too—what is and what is not accepted, i.e. if the rules are inconsistent and keep changing without due participation, this will cause tension and conflict within this environment.
2.3.3 Social Environment

The social environment has two prevalent focuses in social identity. The first is organizational identity with various attributes linked to belongingness in not only form but being part of a team, group and family. The second is self-identity in relation to one’s personal identity linking the educational, self-expectancy and self-esteem environments. This environment also recognizes organizational culture and one’s willingness to conform thereto as an integral part of belongingness.

This environment is also about knowing that someone is concerned about your well-being, has your back, and is willing to stand up for you. It encompasses a number of social psychological theories such as the Social Identity Theory (Tajfel and Turner, 1979) along with psychological and sociological aspects of group behavior. Realizing the effects of The Status Syndrome, a book by Michael Marmot (2004), this environment also looks at social empathy and colleagues with a common respect for one another (not just in the knowledge context). The need to belong could also entail adoption or development of characteristics or behavior that a label says they should have in order to fit in. Naturally this could create inner conflict or tension if this is not what is really wanted, a correlation to the self-fulfilling prophecy. We should keep in mind that social status or corporate climbing is considered by many to be a motivating factor; however, not everyone. Michelsen (2009) believes that this attitude can lead to snobbery or egocentricity and can be, in some situations, more negative than positive. Social status climbing can emerge through deficiencies in one’s self-definition. Participating and fulfilling individual social responsibilities within the team/group/family are also important factors as a deficiency here will cause guilt and tension (Gross, 1992).

“If the espoused beliefs and values are reasonably congruent with the underlying assumptions, then the articulation of those values into a philosophy of operating can be helpful in bringing the group together, serving as a source of identity and core mission” (Schein, 2004: 30).

2.3.4 Physiological Environment

The physiological environment is similar to that of Maslow’s (1970) first and second tiers. It includes all basic biological human needs such as sleep, security, thirst, hunger, health and safety including safety from poverty, safety at the workplace, employment, pay, protection of
resources, protection of the family and morality. It also includes balancing biological demands (sleep, eat, play, fitness, weight, lifestyle and hygiene) with work related demands. Protection of resources refers to poor environmental conditions such as lack of clean air and disease-free water as well as other causes of ill-health.

Fredrick Herzberg (Herzberg et al., 1959) believed that motivation is enhanced by maximizing the motivators or Satisfiers at work and minimizing the Dissatisfiers or maintenance factors. In a study, his results showed that the Satisfiers were the motivating factors related to job performance and substance and they include such aspects as recognition, responsibility, advancement, and personal growth. Dissatisfiers or “hygiene” factors on the other hand do not motivate employees if present, but instead de-motivate them if they are absent. These were connected to the policies or administrative rules within the company’s framework, their salary, and working conditions, supervision and overall effectiveness.

According to Schein

“All human systems attempt to maintain equilibrium and to maximize their autonomy vis-à-vis their environment. Coping, growth and survival all involve maintaining the integrity of the system in the face of a changing environment that is constantly causing varying degrees of disequilibrium. The function of cognitive structures such as concepts, beliefs, attitudes, values and assumptions is to organize the mass of environmental stimuli, to make sense of them and to thereby provide a sense of predictability and meaning to the individual. The set of shared assumptions that develop over time in groups and organizations serves this stabilizing and meaning-providing function” (Schein, 2004: 320).

The physiological environment looks at how factors surrounding the individual affect participation, motivation, stress and defensive routines. Physiological Environment is another primary motivator that is related to all other motivators. The physiological environment needs to provide an ergonomically stable operating environment. If this is absent it is almost certain to cause tension and stress. If unabated for long periods, this stress can cause illnesses and injuries. A primary focus for leaders is to ensure that individuals are provided a safe (physical and psychological) working environment with adequate rotation from positions inflicting musculoskeletal and psychological injuries caused by repetitive and/or monotone tasks.
2.3.5 Self-Expectancy Environment

Self-Expectancy is the individual’s own expectations as perceived by him or herself and which may be realistic or unrealistic in nature. This environment relies upon the individual’s perception of his/her KSAC to function according to their own expectations any task/goal for any given situation. They are normative (perceptive) or subjective for each task/goal/situation both in the workplace and in private life. This can include an expected satisfaction/reward for achieving individual behavior. Not knowing oneself and poor planning as a result of an incorrect perception of one’s KSAC will cause anxiety leading to tension, conflict and can give rise to defense mechanisms (Schein, 2004: 330-331.)

The self-expectancy environment believes that balance within such an environment is essential in that the motivation needed to negotiate participation within a given situation (within and outside of one’s comfort zone) rests within this environment. John Atkinson believes that employees have a reservoir of energy that they can draw from in times of need (Atkinson et al., 1983). This hidden energy is released depending upon: 1) the strength of the basic motive/need concerned, 2) the individual employee’s anticipation of success, and 3) the actual enticement value of the goal. David McClelland (McClelland et al., 1961, 1962 & 1963) believes that people have three basic needs: 1) the need for achievement, 2) the need for power, and 3) the need for affiliation. Layton Alderfer agreed with Maslow in many ways; nevertheless, in his ERG theory (Alderfer et al., 1969 & 1972) he had just three levels of needs: 1) Existence needs, 2) Relatedness needs, and 3) Growth needs. More important was that he believed that when the higher needs were frustrated the lower needs would return, whereas, Maslow claimed that once a need was satisfied that need disappeared altogether.

Goal-Setting Theory (Locke and Latham, 2002) is a cognitive theory and suggests that there is a connection between goal-setting, self-regulation and job satisfaction. Fundamentally, Edwin Locke’s and Gary Latham’s theory stems from goal specificity (clearly defined goal) which has to be achievable (moderate in difficulty, not too easy as the reward in accomplishing the goal would be lessened), and within reach (accessibility and time feasibility from start to finish). Therefore associations between work satisfaction and goal-setting are directly related to the expectancy theory. Abraham Maslow discusses in his Hierarchy of Needs what individuals want and need. Unsatisfied needs will influence a person’s behavior. These needs are listed in importance with the lower level needs being satisfied before one can move up to the next level. The levels, from lowest to highest, are: physiological, safety & security, social, self-esteem and finally self-actualization.
Naturally, one could argue that with a little attention, the individual will be able to find the motivation even though he/she is not willing. The studies conducted in, amongst others, Western Electric’s Hawthorne plant near Chicago, between 1924-1933, by Elton Mayo (1880-1949) were ground-breaking in thought. Mayo was known for his ‘Human Relations Model’ and the ‘Hawthorne Effect’ and other studies. The ‘Hawthorne Effect’ suggested that workers who received special attention, in various forms, will perform better just because they received that attention (Mayo et al., 1953).

2.3.6 Transparent Environment
Transparent Environment is about openness and trust. If the educational, social, self-expectancy, external demand, self-esteem and physiological environments are lacking, or out of balance, then your transparent environment will be affected in some way or form. The extant infection will depend upon the transparent environment’s dependency. This is a natural defense routine (Michelsen 2007). Learning of tacit and explicit knowledge will also be affected (Argyris, 1993:19).

In cohesion with the self-expectancy environment, this environment also includes the willingness and/or ability to take chances, take calculated risks and to conduct fearless speech (Foucault, 2001). This includes ability to be who you are and to acknowledge what you stand for; moreover, having the stability to accept others for who they are and what they stand for. The perception of trust enhances this environment.

2.3.7 Self-Esteem Environment
Self-Esteem is an individual’s belief and self-appraisal of his/her own worth, the extent to which one likes and accepts or approves of oneself, and the perception of what others think. Respect from others and being able to respect one’s self-image. Identity and work as a source of identity is also another important aspect of an individual’s self-concept (Kelvin, 1981). “Erikson claims that a state of acute identity confusion usually manifests itself at a time when a person is faced with a combination of experiences which demand simultaneous commitment, including occupational choice (Gross, 1992: 633).” Gross describes self-esteem or self-regard as an evaluation of our self-image which is essentially descriptive, whereby self-esteem refers to the extent to which we like to accept or approve of ourselves, how worthwhile a person we think we are (1992:609). “Our self-esteem will also be partly
determined by how much our self-image differs from our ideal-self, the third component of the self-concept” (Gross, 1992: 609). If one’s self-image differs from one’s self-definition in relation to acceptance or denial of one’s self-awareness and how one identifies with distinctions between one’s self and not self (‘I’, ‘you’, ‘me’, ‘it’ and so on), this will cause tension and conflict. This tension will affect coherence between the external demand, self-expectancy and transparency environments. Deductively, this unbalance affects one’s negotiation of and participation in a team environment.

2.3.8 Interdependencies and Interconnectedness of PMP Environments
Two critical aspect to consider when using PMP is: its unique approach to perpetually adjust itself against the context of individual’s situational environment, and secondly, the complex interconnectedness and dependency each variable has to one another. This unique flowing system is not static but rather in continual flux. As conditions change within the environment so too will the pressures, tensions or relief on each of the PMP variables. Since these variables are contextually situated to the individual and whereas the individual’s subjective perception of self within the situation is continually changing so too must the interrelatedness between variables.

What makes the PMP model useful is its interrelatedness between the seven PMP variables: Education, External Demand, Social, Physiological, Self-Expectancy, Transparency and the Self-Esteem environments. What makes it unique is its combination and the adaptability to the situational context facing the individual. The flexibility in the interconnectedness of the variables which can be tracked down to the individual through the department and organization; thereby, framing individual responses to specific individual norms over time. These norms which become a context to the situational environment subsequently mature to become benchmarks for the individual, job type, department, company and industry placing it at front end of psychometric testing today.

Currently the following psychometric assessments are used as a batch in an effort to support a balanced PMP. The platform encompasses the PMP, Stress (SA), Motivation (MA), and Defense Posturing (DPA) assessment and they are currently the only broad-based tracking systems that can provide focus down to the individual’s situational environment, that is, all
employees within an organization. This puts context into the situational environment because it can provide individual norms and variations as well as deviations from the individual all the way up through the organization. As indicated herein, motivational theorists provide excellent arguments for need-based strategies and post-modern theorists offer approaches to identity construction. However, we believe that identity construction is a need-based construction and that the two theoretical schools are complementary and should be used in unison. By unfreezing the old motivation theories and joining them to the theoretical understanding of self and identity construction in relation to the situational environment one has a much more effective tool. Michelsen’s reasoning behind this is that since the situational environment is under continual change pressures from both the changing individual to external sources that a theoretical system needs to perpetually adapt to the changing environment (2009:185).

As the empirical data will show, an individual’s PMP can be motivating or de-motivating for the individual and that low levels will affect individual participation. PMP tensions will cause internal conflict and tension leading to defensive routines and attitude change within the individual. Naturally, proactive leaders/counselors should assist the individual in achieving better balance in their PMPs by making an action plan together to address any PMP irregularities. Action plans can include support in a number of ways from educational as far as to even adjusting tasks, workflow, process or conditions. PMP balance is the key as a balanced PMP allows for maximum sustainable output. Obviously, the leader/counselor can only prepare the way by creating new processes, workflows and strategies. A natural limitation to the success is the individual’s recognition and understanding of their PMP balance, how an environment can produce tensions and how one can move forward.

**Educational Environment Interrelatedness to other PMP environments**

This environment is dependent upon the physiological and self-esteem environments and must meet the needs of both the external demand and self-expectancy environments. Lack of coherence here will cause tension and conflict. Gross (1992: 617) couples knowledge to developmental changes in the self-concept and the recognition of self and identity. Naturally the pressures on this environment change throughout one’s career. Adequate knowledge for a given task, professional or vocation is fundamental to teamwork, innovation and creativity. Equally, as the empirical data will show, deficiency within this environment directly affects defensive routines and other PMP variables.
This environment is one of the primary motivators as it provides the individual with an ability to meet the external demand environment and is conducive to transparency, participation and belongingness. The perception or reality of too little education affects:

1. the self-esteem environment through loss of identity and including enhanced tension with the self-expectancy and the demand environments,
2. the transparent environment as it affects openness and fosters defensive routines in an attempt to covert the inability of one’s education in meeting self-expectancies and external demands, which in turn can affect one’s willingness to socially interact, and
3. the physiological environment as safety can be circumvented or improper reprioritizing occur in the effort to balance an educational deficit.

If tensions go unabated this can cause psychological stress and affect trust. Too much education or being over-qualified can also cause a conflict if the external demands do not stimulate or utilize and challenge the educational and self-expectancy needs. This also has a tendency to provoke identity work, reduced motivation, isolationism and façade building (Michelsen, 2009).

Self-Determination Theory (Deci et al., 1985) suggests that intrinsic motivation drives individual behavior and that this behavior has a propensity to grow and develop as a result of active encouragement from the existing environment. According to Deci et al, the primary factors of motivation are relatedness, autonomy, feedback and competence.

The External Demand Environment Interrelatedness to other PMP environments
This environment is dependent upon the educational environment and should also meet the needs of the self-expectancy environment. Lack of coherence here will cause tension and conflict. As with the educational environment, the external demand environment can affect the self-concept and the recognition of self and identity if one questions one’s own knowledge (Gross, 1992: 617). Too many demands will cause the individual to question his/her ability and competence. Too few demands will cause complacency through a lack of stimulation and in the self-expectancy environment.
If the per external demands are achievable and in coherence with the self-expectancy environment, this can have a positive influence on participation and motivation. However, if tension exists, this can affect:

1. the physiological environment through frustration, workplace safety, injuries, complacency and stress, work-life balance and loss of motivation (work for pay),
2. the social environment through loss of trust and participation, and
3. transparency (loss of control, openness and trust) and self-esteem (self-identity – knowledge) changes.

Achievable demands create a situation where the individual is in control of his/her external demand environment. Naturally, this can also be a de-motivator if the individual is not in control of external demands and/or they are too many. Similarly, if the demands are not adequate enough to meet individual self-expectancy levels complacency can take rise.

**The Social Environment Interrelatedness to other PMP environments**

The Social Environment is dependent upon the self-esteem, transparent, self-expectancy and educational environments. It is a good motivator if the individual feels a genuine part of a team, family or culture. If any of the dependent variables show inconsistencies, incoherence can occur within the external demand environment and its impact on *Emancipator Identity Control* (Alvesson & Willmott, 2002) and as a result a natural reduction in participation will occur (Gross, 1992: 548; Schein, 2004: 29). The social environment can be affected by the following dependency environments:

1. the self-esteem environment, through irregularities in one’s self-image and self-identity where they can distort a sense of belonging and commitment (Schein, 2004: 29; Gross, 1992: 609),
2. the transparent environment, by producing defensive routines in an effort to covert ones image or status from embarrassment and even social disengagement in worst cases (Gross, 1992: 728, 548 & 487),
3. the self-expectancy environment, a lack of willingness to motivate self-regulation through social identity which, as a consequence becomes incoherent with one’s personal values or place thereby affecting trust (Gross, 1992: 628 & 630), and
4. the educational environment, as too little knowledge can cause insecurity in one’s ability and identity, thus giving rise to defense mechanisms in order to protect one from shame or doubt (Gross, 1992: 628 & 229). Furthermore, tension with the five kinds of knowledge (Butterworth, 1999: 204), one’s self concept and the perception of one’s educational ability in regard to others can also create a tension in one’s identity (I, me and you) by distorting one’s place within a team subsequently disengaging (Gross, 1992: 629).

The social environment has a practical regulatory impact on individual and organizational values and meaning.

The Physiological Environment Interrelatedness to other PMP environments

The physiological environment is dependent on the educational and external demand environments, and affects the self-expectancy and self-esteem environments. Irregularities within this environment can cause anxiety (Schein, 2004: 322). Naturally such anxiety leads to the establishment of defensive routines. The physiological environment is affected by the educational environment when there is either a lack of knowledge in performing a task or process, or if the workload is unrealistically over-demanding. These irregularities can lead to anxiety and safety related issues. On the other hand, monotone and un-stimulating task can lead to the rise of complacency as a result. The physiological environment affects:

1. the self-expectancy environment, by creating various demands on an individual’s self-concept (Butterworth, 1999: 204) or one’s ability to meet the burdens of the environmental conditions, and
2. the self-esteem environment by constantly raising self-image and self-identity issues related to environmental forces controlling one’s place, personal values and identity in regard to various forms and frames (Schein, 2004: 330).

Naturally, stability and consistency are paramount within this environment since it has a direct affect on the negotiation of participation.

The Self-Expectancy Environment Interrelatedness to other PMP environments

The self-expectancy environment has three dependencies: two major, the external demand and the educational environments and one minor, the self-esteem environment. These are
reciprocal environments that can affect one another with equal tension. To some extent the social and the transparent environments depend on how well one’s self-concept fits into the situational environments. Gross (1992: 616) suggests that social roles and participation are reliant upon one’s self-image and that any developmental changes in the self-concept starts with identification or awareness in this instance. The self-expectancy environment affects:

1. the external demand environment in a number of critical ways. Firstly the individuals’ beliefs in his/her capacity to fulfill the external demand will naturally govern, thus affecting the extent of motivation that one needs to accomplish said demand/task/process in, as much as one believes, an efficient manner. Secondly, the individual’s own expected reward or achievement for his/her participation, related to the demand/task/goal, also affects the degree of participation, and

2. the educational environment by creating barriers or defensive routines based upon one’s perceived beliefs thereby disturbing the learning process (Argyris, 1999: 190).

According to Bandura, (1989) perceived self-efficacy is the belief in one’s capabilities to exercise control over events and to accomplish goals (Argyris, 1999: 190). Conflict arises when the individual’s normative (perceptive) or subjective vision, goals for each task/goal/situation cannot be satisfied. This can also include an expected satisfaction/reward for achieving individual behavior. Poor planning knowledge of the objective is usually the culprit resulting in increased stress and defense mechanisms. A feeling of lack of control will lead to reduction in the transparent and social environments leading to isolationist activities (defensive routines) as one struggles to hide any achievement failure or to protect oneself from embarrassment.

The Transparent Interrelatedness to other PMP environments

Transparent Environment is about openness and trust and naturally if there is any hidden conflict between any of the motivators, this will usually affect the social environment and even self-esteem. This conflict leads to a reduction in the transparent and social environments leading to isolationist activities as one struggles to hide the truth. Any associated guilt can produce an overly eager workaholic or the emergence of the complacency virus (Michelsen, 2007) as the individual tries to compensate and covert. Naturally, if gone unabated this will develop into defense mechanisms producing further stress and conflict. The transparent environment is dependent upon all other PMP variables.
The Self-Esteem Environment Interrelatedness to other PMP environments

Any tension within this environment will affect coherence between the external demand, self-expectancy and transparency environments. Deductively, this unbalance affects one’s negotiation to fully participate in a team environment.

Self-Esteem is a tremendous motivator and naturally therein also a real de-motivator (Michelsen, 2007). Sometimes individuals with high self-esteem can be perceived to be arrogant and cold and this can produce a reduced transparency environment with others, even though their confidence is related to a sense of control within or out of their comfort zone as well as to their knowledge, or their willingness to take a calculated risk. However, there is a thin line between how confidence and arrogance are perceived and interpreted by others. The four dimension rule illustrates this well (Michelsen, 2007). Arrogance naturally inhibits teamwork, decreases transparency, affects trust and even confines social environment. Whereas, a positive “go-get” confident attitude will inspire team participation, improve self-expectancy and transparency. All of the six remaining PMPs are affected by the self-esteem environment.

An individual’s self-concept, belief, self-appraisal, and self-identity in regard to his/her own self-worth and the perception of what others think of them is a critical factor.

2.4 Balancing PMP

A person’s balance and performance is, by product, the sum of his/her universal PMP environment. Low PMPs cause tension and stress and if left unabated this stress will subsequently produce physical symptoms and behavioral changes (Michelsen, 2009). McGregor, in his research into the ‘Human Resources Model’ (McGregor et al., 1960 & 1967) believed that managers grouped their employees into two groups of assumptions. In ‘The Traditional Method’, Theory X, he advocates that work is distasteful to employees and that employees can only be motivated by force, money or praise. On the other hand, he suggests in Theory Y that employees are intrinsically motivated to work and to do a good job. Theory X employees would have tensions and disparity in the PMP environments.
“Three of the best known consistency theories are: (i) Heider’s balance theory (1958), according to which people seek harmony among their various attitudes and beliefs and tend to evaluate in similar ways things that are related to each other; (ii) Osgood and Tannenbaums’ congruity theory (1955), which maintains that when two attitudes or beliefs are inconsistent with each other, it is the one that is less firmly held which will be the one that changes; and (iii) Festinger’s cognitive dissonance theory (1957), is that when an individual simultaneously holds two cognitions which are psychologically inconsistent, he/she experiences dissonance, which means a negative drive state—a state of ‘psychological discomfort or tension’ which motivates the individual to reduce it by achieving consonance.” (Gross, 1992: 514)

If PMP is in equilibrium, motivation is therefore a product of it—and if motivation and performance is related to knowledge and knowledge is the key to identity through subjectification (Foucault, 2001) and flexibility as a prerequisite to transparency and open communication, we have shown a correlation between PMP, the organism metaphor and the psychic prison.'

2.5 Conclusion

The interconnectedness of the PMP variables provide good insight into these potential inconsistencies by highlighting tensions associated to the root causes of defense posturing, stress and motivation. In his Concept of Causality, Argyris states that “the function of reasoning in everyday life is to provide a basis for opinion, belief, attitude, feeling or action” (Argyris, 1993: 256). Deductively, one can therefore assume that Perpetual Motivation Positioning assists the leader/counselor to highlight and bring forth various tensions facing the individual within his/her situational environment in an effort to create awareness of one’s own position as well as adequate understanding and image of how to sustain or change.
3. Methodology

In this chapter we will explain the method we have applied conducting our interviews and questionnaire, and how we have collected our data. Furthermore, we will explain the reason why we chose to do so and the constraints we have had during the application of these methods. We went into the research with the objective find the explanatory factors behind defensive routines facing an individual within the context of their situational environment at Landora.

3.1 Introduction

When performing a social science research there are two types of data available: qualitative and quantitative. The difference of those two lies in the nature of the data the researcher uses. When following the former style, the researcher gathers data that cannot be statistically interpreted, e.g. expressions, choice of word, body language, symbols and so on (Clarke & Dawson, 1999; Neuman, 2003). Furthermore, the qualitative researcher tries to look at interpretations or the creation of meaning in a explicit situation, since doing qualitative research is in a way just as complex and chaotic as everyday life, meaning that researchers have to find details in the precise particulars of such matters as peoples’ understandings and interactions (Silverman, 2010). Furthermore, qualitative methods facilitate study of issues in depth and detail by approaching fieldwork without being restrained by fixed categories of analysis (Patton, 2002).

Quantitative research in the other hand gathers more hard data, using standardized questionnaires or other data that can be analyzed and presented numerically (Clarke & Dawson, 1999; Neuman, 2003; Silverman, 2010). The quality of the qualitative data depends on the researcher and his or her interpreting skill, understanding and competence, because he or she is the main instrument used. No matter what data collection method the researcher uses, it all comes down to his interpretation of the data; what understanding the researcher makes out of it. Therefore all creditability of the qualitative research lies with the researcher himself (Patton, 2002). Qualitative research has also been criticized for being too impressionistic and subjective, meaning that too much relies on the researcher’s opinion of what is important and what is not (Bryman & Bell, 2007).

Partly since we are aware of these weaknesses, we decided on the third option doing a mixed methods research. That research methodology has gained popularity since there is more
insight to be gained from the combination of both qualitative and quantitative approaches. Furthermore it is sometimes felt that using only one method is inadequate when dealing with so complex problems as researchers in social science does (Creswell, 2009). We did our research by first doing a standardized questionnaire (quantitative) and then conducted open ended, semi structured interviews (qualitative). We then processed the data received from those questionnaires and interviews using deduction, triangulation, positivism and realism.

In the case of Landora, we did not contact them, but they heard about the PMP test and contacted us in order to use that within their company, because they wanted to create better feeling, team-work and understanding within the company. Therefore a follow up tests and interviews will be done later in order to keep track on how the employees feel and how the spirit within the company will improve. More information about Landora is in next chapter.

3.2 Deduction

It is widespread within qualitative research to assume that data may guide the researcher to understand explicit phenomena and develop theory (Alvesson, 2003). Deductive theory represents the most common view of the relationship between theory and research. In deduction the theory and the hypothesis deduced from it comes first and then the process of collecting data. The researcher must therefore both capably deduce a hypothesis and then in addition translate it into operational terms. This means that the researcher needs to specify clearly how data can be gathered in relation to the concepts that made up the hypothesis (Bryman & Bell, 2007).

We posits following:

Hypothesis 1: Employees with high Defense posture will have low PMP.

Hypothesis 2: Employees with high Defense posture will have high stress.

Even though deductive research appears very linear there are many instances where the researcher’s view of the theory or literature changes as a result of the analysis of the gathered data. That could be the case if the data does not fit with the original hypothesis or if new theoretical ideas are published before the researcher has generated his findings. Furthermore, it is also possible to depart from purely using deductive approach by drawing conclusions
from the finding and connect that to the literature that stimulated the research (Bryman & Bell, 2007).

3.3 Theoretical foundations

Positivism has sometimes been defined as “the view that all true knowledge is scientific” (O’Leary, 2004, 9; Bullock & Trombley (eds.), 1999, 669), but Bryman and Bell state that it is an epistemological position that encourages the application of the methods of the natural sciences to the study of social reality and beyond. Bryman and Bell also state that “positivists are guided by the following principles:

1. Only phenomena and hence knowledge confirmed by the senses can genuinely be warranted as knowledge (the principle of phenomenalism).
2. The purpose of theory is to generate hypotheses that can be tested and will thereby allow explanations of laws to be assessed (the principle of deductivism).
3. Knowledge is arrived at through the gathering of facts that provide the basis for laws (the principle of inductivism).
4. Science must (and presumably can) be conducted in a way that is value free (that is, objective).
5. There is a clear distinction between scientific statements and normative statements and a belief that the former are the true domain of the scientist. This last principle is implied by the first because the truth or otherwise of normative statements cannot be confirmed by the senses” (Bryman & Bell, 2007-16).

The principle of positivism is exceptionally difficult to pinpoint since it is used in a number of ways. Positivism requires elements of a deductive approach since a sharp distinction is drawn between theory and research, meaning that the role of research is to test theories (Bryman & Bell, 2007).

The central part of realism is that, what our senses show us as reality is the truth; what you see is what you get (Saunders, Lewis & Thornhill, 2009).

Realism and positivism shares two beliefs. One is a belief that both the natural and the social science can and should apply the equivalent approach to the gathering of data and to
explanation. The second one is a commitment to the view that there is a reality that is separate from our description of it. There are two main forms of realism; empirical and critical. The former one, that is perhaps most common, declares that, through the use of appropriate methods, reality can be understood. The latter one implies “that whereas positivist takes the view that the scientist’s conceptualization of reality actually directly reflects that reality, realists argue that the scientist’s conceptualization is simply a way of knowing that reality” (Bryman & Bell, 2007-18). In our empirical chapter there will be more about how this is connected to our research.

3.4 Data Collection

Data collection sources are categorized into primary and secondary data, where the former is something that the researcher plays the main role in both initiating the collection process as well as gathering the data (Clarke & Dawson, 1999). The primary data of this research was collected through test and interviews with Landora’s employees. Secondary data is something that others have gathered and that we use to reflect upon the primary data. The MMC assessment platform was used to collect the quantitative individual subjective data (www.mmc.st) which encompasses a number of psychometric tests, and currently, is the only system that can measure and track all individuals within an organization.

3.4.1 Interviews / Primary data

The tests (questionnaires) took place 23rd of February, 25th of February and 5th of March 2010 at the company’s office. All 21 employees did participate, including the CEO. The interviews were conducted 12th, 13th, 15th, 16th and 27th of April at the company’s office. Not all test takers were interviewed, since one employee had quit, and another refused to be interviewed. The interviews generally lasted around 60 minutes and the test took around 20-50 minutes. When doing the tests the employee sat sideways in front of our desk, with another desk with computer in front of him/her. One researcher is sitting behind the desk – doing the entire introduction and showing the employee how to take the test. The other researcher is sitting sideways, with a desk that is sideways as well and writing down everything that happens during the test. That is counting how people react to the questions, if they have questions and then what questions, their body language and so on. While the employees are taking the test we sit in the same room ready to answer any question they might have. At the beginning we asked if they wanted us to leave the room while they took the test, but none preferred us
leaving. Most of the test takers did ask some questions before they took the test, but very few did have some questions during the test. When doing the interviews we had the same layout in the office, one of us doing the interview while the other took care of making field notes.

Questionnaires are one of the most frequently used methods of data collection and a major tool for collecting primary data (Clarke & Dawson, 1999). Our questionnaire is an online slide bar questionnaire with no numbers or marks of any kind. There is nothing that states that one side is good and another bad, just a question about something and then there is a slide bar that can be moved in both ways. There are no marks, number or any signs on the slide-bar, it can be dragged, moved or stopped anywhere on the line where the test-taker subjectively perceives to be the best spot, no one to five positions. When question has been answered and the test taker has moved on, he/she cannot go back to previous question and can therefore not go back and change his/her answer later on. The only thing on the screen when people are taking the test is the question, the slide bar and a button that says “next”. Therefore there is nothing that can affect people’s answers.

![Defense Posture Assessment](Fig.3. Question 6 in the Defense Posture Assessment.)

When people have finished each test, computer measures on a metric scale where on the slide bar the dot ended after each question. The computer then transfers those measures into numbers and generates a report for each test, each person has taken.
Interviewing is another research method that is frequently used. One of the interviews qualities is that it’s ceding quotations about people’s feelings, experience, opinion and knowledge. Our interviews were conductive from a qualitative perspective so that we were able to get wide overview of people feelings and opinion (Neuman, 2003; Patton, 2002). We did not look into people’s test result before the semi structured interviews. By not looking into the data before hand, we did not have any previous opinion to put into the interviews.

Since we decided only to focus on the defense posture we did collect a lot of data that is not used in our research regarding stress and motivation of the employee. After consulting with the CEO we agreed that name of the company would stand as it is, but all names of the employee's would be changed in order to prevent any comments to be traced back to them.

3.4.2 Empirical/Secondary data
The secondary data was collected from materials, such as books, articles, course literature and other publications that were linked to our topic in order to reflect on the primary data. Also, we used the company’s website and printed brochures to gain more information about the company.

3.5 Validity, Reliability and Objectivity
One of the factors that can influence legitimacy is the role of language since language barriers can increase the risk of misunderstanding and misinterpretations (Neuman, 2003). Since both the test and the interviewed were conducted in Swedish we do not think that can be a factor here. However, language is also a transparent medium for communication of experience, insights and facts. Meaning that interview material must be carefully interpreted, considering the wide set of potential meanings, behind interviewee's choice of words (Alvesson, 2003).

The quality of the qualitative data depends on the researcher and his or her methodological skill, understanding and competence, because he or she is the main instrument used. No matter what data collection method the researcher uses, it all comes down to his or her interpretation of the data; what understanding he or she makes out of it. Therefore all creditability of the qualitative research lies with the researcher himself (Patton, 2002). Qualitative research has been criticized for being too impressionistic and subjective, meaning
that too much relies on the researcher’s opinion of what is important and what is not (Bryman & Bell, 2007). What lies behind the research can also affect the outcome (Patton, 2002) but in our case our only agenda is to see if there is a pattern. Also we did not contact the company (and thereby choose it by some means) in the contrary they contacted us.

Since the researcher is the primary instrument for the data compilation he can adapt his external input to prove high internal validity. But we need to bear in mind that there is a possibility that the interviewee may have left out some important information that he or she thought unnecessary but could have influenced our interpretation and perception. In order to keep credibility at maximum levels we use triangulation; meaning that we compare our interpretation and understanding with each other. That way it is not just one’s understanding but compared interpretation from both of us.

Furthermore, since this research is based on questionnaire and interviews one must bear in mind that it is based on our interpretations on the interviewee's perception of truth. We did not observe them any further in their daily routine to verify their understanding on them self and their work. Since all the questions relate to each person’s understanding of themselves, it is also possible that the person’s disposition on that day they did the questionnaire and interview, can affect our findings.

Reliability is fundamentally concerned with issues of the consistency of a measure of concepts. The three prominent factors that can highly influence the reliability of a research are stability, internal reliability and inter-observer consistency (Bryman & Bell, 2007). Validity is one of the strengths of qualitative researcher and is based on formative whether the findings are accurate from all standpoints. The researcher normally incorporates validity strategies into their proposal in order to check the accuracy of their findings. One of the primary strategies is triangulation (Creswell, 2009) and that is the validity strategy we used in our research.

Triangulation is undertaken when more than one method or source of data is used in the study of a social phenomenon, so that findings may be cross-checked ( Alvesson & Sköldberg, 2000; Bryman & Bell, 2007). It also refers to the use of qualitative research to substantiate quantitative research findings or vice versa, making it ideal approach for mixed methods research (Hammersley, 1996). Therefore is triangulation the perfect match to use in our research. The intention when doing a triangulation is to use different methods to better determine particular phenomena, but results sometimes point in different directions since
different kind of data can yield different interpretations (Alvesson & Sköldberg, 2000; Rudestam & Newton, 2007).

We started by letting every employee within the firm take a standardized computerized questionnaire. After having the result from that we conducted open ended, semi structured interview with each employee, based on the outcome of the questionnaire. That way we could cross check every answer from the questionnaire with the employee themselves and also ask more question around each topic in order to have the outcome as clear as possible. Since there where two researchers, we could also cross check our interpretation with each other as well as with the employee.

When looking at the empirical data one researcher focused on the quantitative data, looking at the outcome from the questionnaires, while the other focused on the outcome from the qualitative data looking at the data from the interviews. Then we compared our findings, both to see if the same persons deviated from the norm within each department and in the whole company and also to see if we did interpret the data the same way.

When deducing the data we looked at the three aspects of PMP, Defensive posture and Stress. By comparing outcomes from all three tests, we could see which employees deviated most from the norm within the company.
4. Case study: Landora Färgindustri
Landora Färgindustri AB (Landora) is a paint company located in Landskrona. It is a small company with just over 20 employees. Landora was one of the first paint companies to emphasize the do-it-yourself market and has now its products for sale in various stores.

4.1 Background & Vision
Landora was established in 1983. The founders came from various companies specializing in the manufacturing of extremely complex color products. Therefore it seemed obvious that Landora should focus on producing specialty products, which were particularly difficult to manufacture. As a consequence, Landora is, and has been focused on product development, long-term testing and quality assurance as part of its key values since its conception.

There are currently 21 employees at Landora, including the CEO. Additionally there is one person working for the company as a contractor and is therefore not a part of our research. Before we started our research we knew that Landora had lost their biggest client only few months earlier and therefore we did expect some levels of de-motivation and increased stress. However, we did experience some lack of cooperation; the employees seemed to think that we had some alternative motives.

4.2 Organization
Landora has a flat organizational structure with just three hierarchal levels. Having only three hierarchal levels makes authority and responsibility clearly defined and should also ease communication. It could be a disadvantage though that each department can make decisions which benefit them rather than the company as a whole.
4.2.1 Administration

There are five employees in the administration department; three from the admin section and two from the lab section. Two of them report directly to the CEO but the other three report to those two. Their offices are not located close to each other and we could not detect much communication between them. They do not operate much as a team, but since each and everyone is responsible for their own particular role that is maybe not an issue here.

4.2.2 Marketing & Sales

There were five employees in the sales department when we did the test. One of them lives in Gothenburg, but the others live in Skåne. The sales department has divided Sweden geographically between themselves each having to travel a lot to their assigned area. Except the employee living and working in Gothenburg, he travels every month to headquarters. By the time we did the interviews a 6\textsuperscript{th} person had been hired, in the position of sales manager. He is not part of our research but those we talked to did all agree that since he had started, things where changing for the better. As a manufacturer the vast majority of their sales are wholesale with many products produced under private labels such as ICA, Coop etc.

Landora offers a complete range of color products for the do-it-yourself market which is for sale in various stores. In addition to this, Landora works closely with their suppliers in the
development of new products (paints, oils, colors, etc.), private branding and packaging solutions. Landora is known for their flexibility in meeting customer needs and has a good reputation in both the wholesale and retail segments. On their webpage they have painting instructions, guides, tips and also interactive pages. In stores they have set up a help telephone, meaning that customers that have some questions are directly connected with one of their painters. Landora emphasis simplicity and do-it-yourself by marking their product with pictures and transparent names instead of using some complicated technical terms. Meaning that wall paints have pictures of walls and roof paints have picture of a roof.

4.2.3 Production

There are ten employees in the production department. The nature of their work makes teamwork crucial for the group dynamics, but unfortunately we did feel there was a lack of coordination in this department. Almost everyone in the department was defensive towards us during the test. However most of them had opened up a little when we did the interview and were less defensive. When we came back to do the interviews, only nine employees of ten were still working there but one of them refused to do the interview. He was reluctant to do the test and needed some convincing. When it came to the interview he refused to talk to us states that he knew himself well enough and did not need anything from us.

4.3 Financial

Landora’s annual turnover remained stable for the three year period from 2006 until 2008, see table below.

<table>
<thead>
<tr>
<th>Annual Report</th>
<th>2008-12</th>
<th>2007-12</th>
<th>2006-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Employees</td>
<td>28</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Turnover (TKR)</td>
<td>72 325</td>
<td>71 293</td>
<td>73 454</td>
</tr>
<tr>
<td>Gross profit (TKR)</td>
<td>538</td>
<td>2 140</td>
<td>5 327</td>
</tr>
<tr>
<td>Net profit (TKR)</td>
<td>448</td>
<td>1 325</td>
<td>3 138</td>
</tr>
<tr>
<td>Total assets (TKR)</td>
<td>26 765</td>
<td>23 973</td>
<td>22 923</td>
</tr>
<tr>
<td>Profit margin</td>
<td>2,45 %</td>
<td>4,11 %</td>
<td>8,07 %</td>
</tr>
<tr>
<td>Cash Liquidity</td>
<td>85,68 %</td>
<td>69,70 %</td>
<td>67,82 %</td>
</tr>
<tr>
<td>Stability</td>
<td>22,88 %</td>
<td>24,58 %</td>
<td>25,34 %</td>
</tr>
</tbody>
</table>

Source: Allabolag.se

Fig.4.1 Landora financial brief for the period 2006-2009
The gross profit however decreased in 2008 to just over 10% as of the period ending 2006. Although not confirmed, this is likely to be due to the construction of a new 1,000m² warm storage facility adjacent to the main production building. Net profit also decreased during this same period to 14.27%. Nevertheless, total assets increased by 16.7% from 22 to 26 million SEK. 2009 has seen a 30% decrease in turnover due to the loss of JULA department stores. This naturally must have consequences in employee motivation.

4.4 Environment

Landora tries to consider the environment and has therefore been working on replacing any potential harmful substances within their paint. Also, they are, and have been, working on reducing their waste and prevent pollution by carefully monitor its system, tanks, pipes and storage facilities. Landora was the first company in Sweden to offer transparent packaging for its paint. Furthermore, Landora offers an Indoor color that has been awarded the Swan seal, which is an established Nordic organic/eco-friendly certification and also have been awarded ISO 14001 certification.

4.5 The Empirical Data

The empirical data is presented in tables plus graphs and field notes, which are both pre-assessment and post assessment in nature. All names have been changed to hide the identity of the individuals involved; however, the company name Landora Paint has been translated into English from its Swedish name Landora Färgindustri AB and its use approved by their C.E.O. Peter Manderius.

The collection of the empirical data was accomplished through person to person interviews and online assessment testing. All online data is stored within a secure password protected database. The quantitative data is generated from raw numbers collected from the position on the slide-bar imputed by each individual in relation to each of the 110 questions. There are twenty motivation questions, twenty defense routine questions, twenty stress questions, and fifty PMP questions. For the purpose of this thesis data related to the defensive routines and PMP are primarily used; however, for statistical and triangulation purposes a third stress variable is also taken into consideration.
The tables and graphs (figures) are organized in three major categories.

1. Defensive routines (Figures 4.2 & 4.3)
2. PMP (Figures 4.4, 4.5 & 4.6)
3. Stress (Figures 4.7 & 4.8)

The table for psychometric assessment Defensive routines and stress (figs. 4.2, 4.7) can be clarified in the following manner. The first row represents the headings: name, question numbers (1-20), average score and total score, the deviation % from the median, and the deviation % from the mean. The vertical column to the left indicates the department and name of the individuals tested, along with, question totals, medians and means for the individual and department. The center data represents the subjective answers inputted by the individuals for each question. The right bottom (in blue) indicates the mean and medians for the entire Landora. Since the PMP section (Fig. 4.5) includes fifty questions the number section in the center has been removed. The entire PMP figures can be viewed in the Appendix. The graphics represent mean averages for the various departments (Production, Admin & Sales).
### Defense Assessment (DPA)

<table>
<thead>
<tr>
<th></th>
<th>Erik</th>
<th>David</th>
<th>Paul</th>
<th>Fredrik</th>
<th>Sven</th>
<th>Adam</th>
<th>Bertil</th>
<th>Thomas</th>
<th>Stefan</th>
<th>Admin</th>
<th>Maria</th>
<th>Anna</th>
<th>Inger</th>
<th>Per</th>
<th>Magnus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Total Production</td>
<td>1,10</td>
<td>1,40</td>
<td>0,84</td>
<td>0,37</td>
<td>1,00</td>
<td>0,86</td>
<td>0,86</td>
<td>1,10</td>
<td>0,86</td>
<td>0,60</td>
<td>0,60</td>
<td>0,60</td>
<td>0,60</td>
<td>0,60</td>
<td>0,60</td>
</tr>
<tr>
<td>Landora DPA Mean</td>
<td>4,35</td>
<td>2,1</td>
<td>6,05</td>
<td>3,15</td>
<td>6,95</td>
<td>4,5</td>
<td>3,9</td>
<td>4,2</td>
<td>1,8</td>
<td>3,65</td>
<td>4,0</td>
<td>3,65</td>
<td>4,0</td>
<td>3,65</td>
<td>4,0</td>
</tr>
<tr>
<td>Median</td>
<td>3,00</td>
<td>0,00</td>
<td>4,80</td>
<td>2,00</td>
<td>7,80</td>
<td>3,40</td>
<td>3,00</td>
<td>1,80</td>
<td>3,60</td>
<td>5,60</td>
<td>5,40</td>
<td>5,40</td>
<td>5,40</td>
<td>5,40</td>
<td>5,40</td>
</tr>
</tbody>
</table>

### Fig. 4.2 Defense Routine Assessment Results

**Fig. 4.3 Defense Routine Graph**
PMP - Landora Paint

Fig. 4.4 PMP Assessment Graph (Departmental averages for questions 1-50)

Fig. 4.5 PMP Results (Full chart in the appendix)

Fig. 4.6 PMP Graph by PMP Environment & Dept.
### Production Stress (SA)

| Name  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | Total | Deviation % from Median | Deviation % from Mean |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|------------------------|----------------------|
| Erik  | 12 | 18 | 18 | 16 | 15 | 14 | 13 | 11 | 11 | 7  | 5  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 91  | 0,765                   | 0,714                 |
| David | 18 | 18 | 18 | 17 | 16 | 16 | 15 | 14 | 14 | 7  | 6  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 245 | 1,322                   | 1,215                 |
| Paul  | 10 | 10 | 9  | 6  | 5  | 5  | 4  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 47  | 0,555                   | 0,516                 |
| Fredrik| 10 | 10 | 10 | 10 | 9  | 10 | 3  | 3  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 78  | 0,866                   | 0,808                 |
| Bosse | 11 | 6  | 6  | 5  | 4  | 4  | 3  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 44  | 0,571                   | 0,532                 |
| Sven  | 10 | 8  | 6  | 6  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1,901 | 0,925                   | 1,094                 |
| Adam  | 7  | 10 | 10 | 10 | 9  | 9  | 8  | 7  | 6  | 5  | 4  | 3  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 1,212 | 1,267                   | 1,237                 |
| Anna  | 15 | 14 | 4  | 0  | 15 | 18 | 10 | 2  | 10 | 2  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4,901  | 0,925                   | 1,094                 |
| Inger | 13 | 6  | 12 | 4  | 3  | 5  | 3  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,801  | 0,925                   | 1,094                 |
| Per   | 7  | 8  | 7  | 5  | 5  | 5  | 4  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0,901   | 0,765                   | 0,957                 |
| Magnus| 14 | 14 | 14 | 3  | 13 | 13 | 12 | 10 | 9  | 8  | 7  | 6  | 5  | 4  | 3  | 2  | 1  | 0  | 0  | 0  | 1,901  | 0,925                   | 1,094                 |

### Administration Stress (SA)

| Name   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | Total | Deviation % from Median | Deviation % from Mean |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|------------------------|----------------------|
| Maria  | 4  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 10  | 0,901                   | 0,925                 |
| Anna   | 15 | 14 | 4  | 0  | 15 | 18 | 10 | 2  | 10 | 2  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4,901  | 0,925                   | 1,094                 |
| Moira  | 13 | 6  | 12 | 4  | 3  | 5  | 3  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,801  | 0,925                   | 1,094                 |
| Eva    | 7  | 8  | 7  | 5  | 5  | 5  | 4  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0,901   | 0,765                   | 0,957                 |
| Ingmar | 15 | 7  | 3  | 1  | 4  | 4  | 4  | 4  | 3  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3,801  | 0,925                   | 1,094                 |

### Sales Stress (SA)

| Name  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | Total | Deviation % from Median | Deviation % from Mean |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|------------------------|----------------------|
| Mats  | 10 | 10 | 10 | 10 | 7  | 12 | 10 | 10 | 10 | 7  | 5  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 10  | 11,901                 | 1,272                   |
| Martin| 10 | 8  | 8  | 7  | 4  | 4  | 4  | 4  | 3  | 2  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4,901  | 0,925                   | 1,094                 |
| Nils  | 10 | 8  | 3  | 1  | 10 | 12 | 6  | 10 | 3  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 4,901  | 0,925                   | 1,094                 |
| Lars  | 3  | 10 | 1  | 10 | 10 | 13 | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1,901  | 0,925                   | 1,094                 |
| Johan | 9  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 9  | 8  | 7  | 6  | 5  | 4  | 3  | 2  | 1  | 0  | 11,901                 | 1,272                   |

### Total Raw Score / Question 202 171 146 146 95 171 173 175 108 171 98 77 123 18 86 120 59 155 165 128,3

### Stress Assessment (SA)

**Fig. 4.7 Stress Assessment Results**

**Fig. 4.8 Stress Assessment Graph**
The field notes were written on two different occasions and from two different contacts with the participants. The first contact occurred prior to the assessment test. Here we explained the purpose behind the tests, issued passwords and login details, and noted our interpretations of the participants’ body language, and other comments while taking the tests.

The second session included all discussions related to the scored tests. Participants were counseled in regard to their tests and discussions about how they felt, whether our assessment was correct and what action plan they could take if any tensions were noted.

The qualitative data includes 540 pages of generated text in connection with the Defensive routines, PMP, and Stress psychometric tests. The data also includes six pages of field notes taken prior to the online testing and our perceptions during the initial meeting. Another eighteen pages of field notes were gathered in the post-test interview where we counseled the participants on their results and an action plan if needed. For the purpose of this thesis, we will only look at the two participants with the greatest deviation from the mean score within the company. Field notes generated in connection with those two participants can be found in the appendix section.
5. **Interpretation of the Empirical Data**

We will begin with a broad perspective of the empirical data and an overview of Landora by looking at patterns, troughs and peaks within their overall defensive routines, PMP levels and a third independent variable stress. For the purpose of this thesis we will only review the lowest troughs and the highest peaks. Although not addressed within this thesis this data can also provide good insight into the patterns associated with organizational culture and leadership.

The interpretation of the data will begin with an overview of Landora by looking at the averages for the various assessments tests, any patterns, peaks and troughs associated thereto. After the overview a comparison analysis will be conducted for each of the departments’ levels (Admin, Sales and Production) where peaks and troughs will also be looked at and any major deviations from the company mean considered. Finally, an analysis of two individuals who display a deviation from the mean will be discussed. This discussion will also include qualitative data from the field notes and comparisons made.

### 5.1 Organizational Overview

#### 5.1.1 Landora Defensive routines

This section will address Landora’s Defensive routines, PMP Environments and even a third independent variable Stress.

Landora’s Defense Routine average score is 5,03/20 pts. (Fig. 4.2) and they are at a relatively good level. Based upon the overall answers Landora seems to have found a good balance; however, the slightly guarded nature along with the transparency issues identified in the pattern peaks (Fig. 5.) suggest that employees could interpret the leadership as being inconsistent and idiosyncratic. The number represented under questions 21 is the mean of the defensive routines.
Defense Routine Troughs (positive sign)

As the graph indicates the two lowest troughs are: Question 15 (1,80/20,0 pts.) designated by a “Not at All” to “Frequently” variables and states that “People say that I tend to blame others for things that have happened to me.” This would indicate that the employees believe that they are open and less defensive to one another. Question 17 (1,75/20 pts.) designated by a “Not at All” to “Frequently” variables and states that “I find it hard to forgive others for what they have done” suggests that the culture is a forgiving environment.

Defense Routine Peaks (negative sign)

As the graph indicates the two highest peaks are represented by questions 13 (12,45/5,0 pts.) and 20 (8,25/20 pts.). Question 13 states “I feel that I am overly nice and amenable” which could suggest and underlying cultural problem of not feeling able to speak out or voice one’s feelings. This could affect the transparency and social environments. Question 20 states “People say that I tend to joke too much and brush-off serious matters” which could also indicate a number of issues related to openness, transparency and knowledge.

5.1.2 Landora PMP Environments

Landora’s PMP average is 3.25 of 5,0 possible points. Their average scores for the company as a whole are rather stable; however, they are slightly low in the External Demand Environment, (2,88 points), the Social Environment (2,92) and the Self-Expectancy Environments (2,98 points). These scores could indicate that change initiatives are met with
slight reservations and skepticism, as the demands cause tension with the self-expectancies of the employees. Since our field notes identified team dynamic problems (in form of low participation levels and lack of responsibility) this can also be linked to the tensions between the self-expectancy and external demand environments.

![Landora Mean PMP Values](image)

There is a clear pattern within the PMP environment and Landora show both peaks and troughs. Although the spread in Fig. 5.2 is limited to the social and self-expectancy environments a clear pattern emerges. Since all historical data is tracked and assimilated within the MMC database, in time, this pattern will tighten to form a norm or benchmark specifically pertaining to the situational environment within Landora.

![Landora PMP Score (0-5)](image)

Fig. 5.1 PMP for Landora Paint

Fig. 5.2 PMP overview graph for Landora Paint. Note the patterns, peaks and troughs.
**PMP Troughs (negative sign)**

As the graph indicates the two lowest troughs are represented by questions 19 (1,09/5,0 pts.) and 36 (1,56/5.0 pts.). Question 19 states “My co-workers and I often go out together after work” which could suggest that there could be an identity, openness or team dynamic issue. Question 36 states “I believe that my pay and benefits are in line with my job description” which indicates everyone feels that they are underpaid which could naturally affect their overall motivation.

**PMP Peaks (positive sign)**

Question 18 (4,46/5,0 pts.) states that “I have good relations with my partner at home or a very close friend” which would indicate that most employees have a stable physiological environment at home. Question 28 (3,73/5,0 pts.) states “It seems that I always have more bills at home than income” is indicated positively with “seldom” as the high variable which since would indicate that the employees have an adequate salary. This is contradictory to the question 36, previously addressed, and suggests that their physiological environment is not in tension and therefore we don’t see this as tension.

**5.1.3 Landora’s Stress (independent variable)**

Tension causes stress, anxiety and defensive routines. Although not introduced earlier in the thesis stress signals and symptoms are widely understood. For the purposes of triangulation stress levels will be used as an independent variable to confirm that the tension caused by increased defensive routines due to low PMP values are statistically significant.

Based upon the answers provided, Landora’s stress average score is 6,42 of 20 maximum points (Fig. 5.3). Landora’s mean stress level is good. This level is considered to be in equilibrium between Eustress (positive stress) and Distress (negative stress) and this balance provides employees with adequate stimulation.
**Stress Troughs (positive sign)**

As the graph indicates the two lowest troughs are: Question 14 (0,90/20,0 points.) designated by a “Not at All” to “Very True” variables and states that “Violence, threat of violence or perceived threat.” This is naturally a basic requirement so not much information can be obtained from this question more than the workplace is free from violence. Question 17 (2,95/20 points.) designated by a “Not at All” to “Very True” variables and states that “Tasks that are in conflict with my own personal values” suggests that external demands do or interfere with personal or cultural obligations such as gender, age or ethnicity.

**Stress Peaks (negative sign)**

As the graph indicates the two highest peaks are represented by questions 1 (10,10/20 points.) and 9 (9/20 pts.). Question 1 is designated by a “Not at All” to “Very True” variables and states that “No balance between job demands and the allotted time to accomplish tasks” which could suggest conflict in their self-expectancy, external demands or educational environment. Question 9 is designated by a “Not at All” to “Very True” variables and states that “Lack of relief when under pressure, having angry outbursts, mood swings or overly negative” and indicates that there is some pressure or frustration related to teamwork, communication and tension between PMP environments.
5.1.4 Department Levels and Differences (Admin / Sales / Production)

Earlier in the theory chapter we introduced situational context, norms and patterns and within one’s environment. In studying the departments within Landora we find a statistical significance in that there are three distinct Means for both the assessment tests and for each of the three departments. This is an important finding as it shows situational-based measurements and patterns linked to individual subjectivity, job type and environment.

Firstly, fig. 5.4 shows mean values for Landora (the entire organization), production, administration, and sales in relation to their defensive routines, PMP and a third variable stress.

<table>
<thead>
<tr>
<th>Mean Values</th>
<th>PMP</th>
<th>Defensive routines</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landora</td>
<td>3,25</td>
<td>5,03</td>
<td>6,42</td>
</tr>
<tr>
<td>Production</td>
<td>2,96</td>
<td>5,97</td>
<td>7,52</td>
</tr>
<tr>
<td>Admin</td>
<td>3,47</td>
<td>4,50</td>
<td>4,50</td>
</tr>
<tr>
<td>Sales</td>
<td>3,63</td>
<td>3,69</td>
<td>6,13</td>
</tr>
</tbody>
</table>

Defensive routine (mean levels) in the Production department show a +61% increase over Sales, a +32% increase over Admin and a +19% increase over the organizational mean. Production PMP levels are -18,5% less than Sales, -14,7% less than Admin, and -8,9% of the organizational Mean. Significant by any means, we still decided to look at mean stress levels as another independent variable. Here to showed Production an increase over the organizational mean and the other to departments. Production’s stress was +18.5% over Sales, +67% over Admin, and +17% over the organizational mean.

Another intriguing point can be made by deducting that since all departments followed a pattern (Fig. 5.5) in their defensive routines that the consistence and relatedness to the situational environment and the individual’s subjective understanding directly supports accuracy of the assessment instruments to the context within each department. That is to say situation-based.

Naturally, the peak in question 13 “I feel that I am overly nice and amenable” which suggests some communication tension culturally within the organizational. However, the Sales department’s mean is -25% less that the organizational, Admin and Production mean and
could be explained by communicative personalities in sales—usually free spoken and verbal in nature. Although small, the only other deviations, other than the three distinct levels that is, are four dips or increases in the patterns related to questions 2, 7, 19, and 20 of the defensive routines (Fig.5.5).

![Defense Routines - Landora Paint](image)

Fig. 5.5 Mean Department Values for Defensive routines per question

(2) Admin department increases contrary to the other departments. Question 2 designated by a, “Not at All” to “Frequently” variables and states that “I feel that everyone seems to be against me; therefore, I have to defend myself often.” Since the nature of the working environment in dealing with administrative tasks is a closely monitored, and since the interviews did not reveal any unusual policing, one could expect that this is just a normal level for this department.

(7) The Production department increase from question six to question seven contrary to the other departments. Question 7 designated by a, “Not at All” to “Frequently” variables states that “I find it difficult to agree with others and I can become cynical and sarcastic.” This is expected as their defensive routines and stress levels are higher and their PMP levels lower. Furthermore, the field notes indicated some resentment incongruence in team-dynamics with Production.
(19) Admin decreased here whereas other departments increased. This is positive; nevertheless, it is also important to know why. Question 19 designated by a, “Not at All” to “Frequently” variables and states that “People say that I tend to joke too much and brush-off serious matters.” Deductively, one could understand that some administrative tasks can be somewhat laborious and quiet important at the same time, therefore one could argue that this is accepted behavior within the culture of the department.

(20) Sales department drops contrary to the other departments. Question 20 designated by a, “Not at All” to “Frequently” variables and states that “People have commented that I tend to intellectualize too much” and can be comically understood that salesmen would have more emphasis on honing their communication skills in an effort to relate to the customer.

Departmental PMP values also show distinct levels as represented by figures 5.6 and 5.7. Here we find that production is lower in all environments. Statistically significant, this confirms that the relationship between high defensive routines and low PMP values to be true. The Production department shows major declines in the: External Demand Environment with a -15.6% to that of Admin and -20.5% for Sales; Social Environment by -25.3% to of that in Admin and -23.7% to that of Sales; Self-Expectancy Environment of -21% to that of Admin and -18.5% to that of Sales; and in the Self-Esteem Environment by -22.8% to that of Admin and -23.6% to that of Sales.

<table>
<thead>
<tr>
<th>PMP Department Values</th>
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<tbody>
<tr>
<td>Score (0-5)</td>
</tr>
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</table>

Educational Environment | External Demand Environment | Social Environment | Physiological Environment | Self-Expectancy Environment | Transparent Environment | Self-Esteem Environment |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Admin</td>
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<td>3.67</td>
<td>3.3</td>
<td>4.01</td>
</tr>
<tr>
<td>Production</td>
<td>3.42</td>
<td>2.59</td>
<td>2.51</td>
<td>2.96</td>
<td>2.69</td>
<td>3.88</td>
</tr>
</tbody>
</table>

Fig. 5.6 PMP Mean Values per Department.
The correlation between defensive routines, PMP and the departments within Landora are quite remarkable. Production with the highest defensive routines shows the lowest PMP values, Sales with the lowest defensive routines also shows the highest PMP values, and naturally Admin lies in the middle. This supports our Hypothesis 1: Employees with high Defense posture will have low PMP.

Stress, which is the independent variable, shows an obvious link to tensions within the PMP environment, which in turn, causes defensive routines to emerge. The Production department shows the highest stress scores with a mean of 7,52 whereas the Sales department follows with 6,13, and Admin with 4,50. Naturally, the nature of the job description will also play a role in the stress levels. The Sales department with very low defense and high PMP values show medium stress levels even though the personnel within the department have good PMP values. There is a definite pattern amongst the departments and the levels seem to be relatively low as shown in figure 4.7. Although only small, we will review the four peaks in the stress patterns related to question 1, 7, 10, and 18 (Fig.5.6).
(1) Admin decreased here whereas other departments increased. This is positive; nevertheless, it is also important to know why. Question 1 designated by a, “Very Good” to “Very Poor” variables and states that “I feel that the balance between job demands and the allotted time to accomplish tasks.” Since Landora is a small manufacturing company it tries to maximize individual output and flexibility. This naturally can produce tensions within the external demand, self-expectancy, and educational environments. Deductively, one could understand that some administrative tasks can be somewhat laborious and quite important at the same time, therefore one could argue that this is accepted behavior within the culture of the department.

(7) Admin decreased here whereas other departments increased. This is positive; nevertheless, it is also important to know why. Question 7 designated by a “Not at all” to “Very True” variables and states that “Poor reward systems (lack of recognition and appreciation for a job well done).” This was confirmed during the interviews. Although most of the employees complained about their pay, the vast majority felt that they never receive recognition for doing their job well. According to Thomas, “At Landora they are quick to tell you when you do something wrong but never when you do it right” thereby affecting the Self-expectancy and self-esteem environments.

(10) Admin decreased here whereas other departments increased. This is positive; nevertheless, it is also important to know why. Question 10 designated by a, “Not at All” to “Very True” variables and states that “I have many simple and monotone tasks.” Since Landora is a small manufacturing this is the nature of the job. However, as indicated in the interviews with Production personnel, an obvious lack of knowledge and poor stimulation is the main reason for this perception since there are many additional and stimulating tasks which one could seek. Their educational and self-expectancy environments are therefore in tension.

(18) Admin decreased here whereas other departments increased. This is positive; nevertheless, it is also important to know why. Question 18 designated by a, “Not at All” to “Very True” variables and states that “Poor justice and inconsistent and unfair treatment of personnel, etc. The interviews with the production personnel revealed that certain managers practice favoritism and are not always consistent in their behavior. This naturally affects the personnel’s self-esteem, social and transparency environments.
5.2 Individual Norms and Deviations

As we have shown an organizational pattern exists, so too can we see departmental means. These mean values differ from department to department, hence can we deduct that a department has a situational norm that best suits the environment and individuals within it since it is the individual themselves that have subjectively answered each of the questions.

Since the assessment platform assimilates and separates all data the question to the individual, department and organization, this data forms a frame around which situational norms. Obviously, the greater the frequency rate that one takes the test (2-4 times per year), the more precise an individual’s norm or range will be.

Interpreting the data in figure 4.2 we see that Thomas and Stefan have the highest Defensive routines at Landora and also within the Production department (Fig. 5.10). Incidentally we also find that they also have the lowest PMP values (5.11) and high stress scores (5.12).

When analyzing Thomas and Stefan we also find that their deviations from the mean of the company are significant. Figure 5.9 shows that Thomas and Stefan have defensive routines that deviate more than 1.98 and 1.89 times the mean. Not only do their Defensive routines
deviate from the mean but also their PMP values \((0.74 \text{ and } 0.66)\) and stress \((1.392 \text{ and } 1.947)\). These calculations can be seen in the appendix (Fig. 8.5).

When looking that the Defensive routines and logarithmic PMP value for Stefan and Thomas (Figs. 5.10, 5.11 & 5.12) in correlation to their department and Landora an obvious connection forms. Since Stefan no longer works at Landora we will focus our attention in Thomas’s filed notes, assumptions and impressions and retrospectively triangulate these to the quantitative data. For this reason we have included a short analysis of a few of the comments that Thomas had during the interview session.

![Defense Routines (Production / Thomas / Stefan)](image1)

**Fig. 5.10** Defensive routines for Thomas, Stefan and the Production Mean

![PMP Logarithmic Scale (10) for Production / Thomas / Stefan](image2)

**Fig. 5.11** PMP Logarithm for Thomas, Stefan and Production Mean
Interview / Field notes with Thomas

Throughout the duration of Thomas’s interview we met with his defensive routines which took on various forms framed around external issues. These included communication, interaction, posture, and unwillingness to divulge or answer certain questions. He often asked for “the next question” when we talked about some sensitive matters like for example his drinking habits. According to his questionnaire he thinks he consumes rather large amounts of alcohol, but when we asked him about it, he refused to answer. Every time we came close to talking about something too personal, he closed us out by stating he was in a hurry and needed to go back to work. However, when the question was regarding something company connected, he had enough time to complain about both his boss and his work. One example was when we asked about his responsibility for others, and his answer was very long with a lot of vulgar language about how he is always blamed for every mistake that is made in the company, how everything was always his fault even though he did not do anything wrong. When we asked about his connections with his co-workers he agreed that he sometimes did shift his focus of blame to some other persons when he was feeling bad and also that he feels like he has to yell to his co-workers so that they listen to him. He does not think that he say’s anything personal when yelling at them and that he only uses coarse language to illustrate his frustration. This behaviour is both very defensive but also connects to the PMP since it indicates tension in his self esteem, educational and self-expectancy environments.

Fig. 5.12 Stress for Thomas, Stefan and the Production Mean
A number of high stress symptoms were also identified. He stated that he has headaches and high tension when leaving work every day. Another symptom we noticed when analysing the interview notes was how negative towards the leadership and company the entire time. When confronted with an action plan to correct some of the identified tensions within his working area and PMP environments he declined every suggestion. Although we had very valid suggestions in how to immediately improve and take control within his situational environment he abstained. He believed that is was hopeless to try to get someone else to do his job, impossible to be moved within the company and not possible to make his job any more bearable. It is very defensive to be so against any change but it also shows that he has tension in his self-esteem and self expectancy environment. The most important part here is though the fact that this employee is very unhappy with his job, and desperately needs some change in his life, however his defensive posture is so high that he declines any possible change. Drawing from our interview discussion and the subjective results of the assessment tests we conclude that his lack of openness or unwillingness to participate in his situational environment is due to tensions within his PMP. These low PMP variables cause Thomas to instinctively protect himself by guarding these weaknesses and defending himself from embarrassment through use of defensive routines.

Argyris (1995) states that \textit{doubts about one’s ability to change} is a attribution that causes low performance and also that \textit{helplessness}. As with Thomas, his subjective understanding of his situation is only compounded by his inability and unwillingness to feeling deal with his PMP conflicts. Furthermore this is only confirmed by his continual \textit{blame of other} and his expression of dissatisfaction with the group he belongs too. All these actions inhibit learning and increase defensive posturing. If Thomas cannot turn things around then this will most likely lead to his resignation in the future.

When comparing his PMP values to that of the department and Landora (Fig. 5.11 & 5.13) we can see that his Educational, External Demand, Self-Expectancy and Self-Esteem Environments deviate significantly from the other mean values.

Additionally, it is important to note that Paul in Production and Martin in Sales (Fig. 7.5, highlighted in blue) show the lowest Defensive routines, highest PMP values, and low stress levels in their respective departments and Landora.
PMP Values (Landora/Production/Thomas)

<table>
<thead>
<tr>
<th>Score (0-5)</th>
<th>Educational</th>
<th>External Demand Environment</th>
<th>Social Environment</th>
<th>Physiological</th>
<th>Self-Expectancy</th>
<th>Transparent</th>
<th>Self-Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMP Mean Values for Landora, Production &amp; Thomas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landora</td>
<td>3.60</td>
<td>2.88</td>
<td>2.92</td>
<td>3.20</td>
<td>2.98</td>
<td>3.87</td>
<td>3.39</td>
</tr>
<tr>
<td>Production</td>
<td>3.42</td>
<td>2.59</td>
<td>2.51</td>
<td>2.96</td>
<td>2.69</td>
<td>3.88</td>
<td>2.94</td>
</tr>
<tr>
<td>Thomas</td>
<td>2.81</td>
<td>1.27</td>
<td>2.05</td>
<td>3.37</td>
<td>2.15</td>
<td>3.65</td>
<td>1.67</td>
</tr>
</tbody>
</table>
6. Conclusions & Findings

This section covers our conclusions, main findings, arguments and contribution to the research and causes of defensive routines within Landora. We will also discuss our result from a broader perspective and reflect on some conclusions and findings in relation to our hypotheses.

Until recently most opinions regarding defensive routines were far and few between as little are understood about them. Argyris (1993) suggested that either should the routines be bypassed or they suggested acting that would strengthen the routines. Schein states that the human mind needs cognitive stability and any challenge that questions one’s basic assumption will release anxiety and defensiveness (Schein, 2004: 32). He also suggests that espoused beliefs and values represent a group’s internal relations. This we confirm in that we can show clear cut patterns in how individual within a group answer their questions. Significant levels for each department are present.

By framing defensive routines we found a clear connection to their causes. Collective patterns were also evident and these showed obvious correlations to organizational behavior. Some people could argue that this is by default the organizational culture. Schein says that the fundamental act of culture formation is the defining of crude group boundaries (2004: 68). We could argue that these boundaries are also represented by the departmental and organizational patterns shown herein. These are, in part, represented by Defensive Routines, Stress and even PMP values.

What is unique here is that we have found that individual deviations in one’s defensive routines can be linked to low values and tensions within an individual’s seven PMP variables. The evidence has shown that a correlation between high defensive routines, high stress, and low PMP values exists.

Defensive routine questions which deviated from the mean values, from that of the department and organizational as a whole, were also correlated to tensions in an individual’s PMP variables. When evaluating these deviations, peaks and troughs, from the department and the company values, clear distinctions could be made. The connection between the
defensive routine deviations and individual tensions were also confirmed during the interview and counseling sessions.

A number of conclusions could therefore be drawn from the interpretation of the data. One, the quantitative data correlated to the qualitative interviews. Two, a pattern at the organizational, department and individual level was evident. Three, this pattern can therefore be considered the defensive routine culture of the organization, department and individual. Four, each department showed statistically significant mean values for all three assessments (defensive routines, stress, and PMP values). Five, correlations between high stress and high defensive routines were evident. Six, we also realized that these causes were related to low departmental and low individual’s PMP values.

6.1 Hypothesis

In chapter 3 we stated that employees with high Defensive posture would have low PMP as our hypothesis 1. As we have seen the two employees with the highest defense posture do have a low PMP. We have therefore shown, through triangulation, deduction and quantitative data that there is a direct connection between defensive routines (defense posture) and low PMP values. The evidence is statistically significant throughout the whole company, from the individual to the department and throughout the organization. Defensive routines in the Production department showed means levels of +61% increase over Sales, a +32% increase over Admin and a +19% increase over the organizational mean.

The independent variable stress showed significant correlations to high defensive routines and low PMP values confirming our hypothesis 1. Mean stress levels showed Production had an increase over the organizational mean and the other to departments. Production’s stress was +18.5% over Sales, +67% over Admin, and +17% over the organizational mean.

Furthermore, as indicated in our hypothesis 2, employees with high defensive posture would also show high stress. Production PMP levels are -18.5% less than Sales, -14.7% less than Admin, and -8.9% of the organizational mean. We have also shown through triangulation, deduction and quantitative data that there is a direct connection between defensive routines (defense posture) and high stress values. Here the evidence is also statistically significant throughout within Production and Administration departments. However, the increased stress
within the Sales department was not due increase defense routine but due to the pressure associated with the loss of a major customer reducing turnover by approximately 30%.

6.2 Findings

In the beginning of this paper, we stated that this thesis is part of an ongoing consultancy project at Landora. The consultancy project is looking into ways to improve participation amongst its Landora employees, and this thesis would look into a number of factors inhibiting individual and organizational participation. The Production department has almost twice the defensive routines (Table 6.1) of Sales and almost one third higher to that of Admin. Their stress levels are highest and their PMP score the lowest. It goes to say that high defensive routines will inhibit participation. According to Schein (2004, 29) one needs to reduce uncertainty in critical areas if one is to deal with situational behavior. Naturally, finding these key areas is not as easy as one might think. Our research has found that the Production department has the least amount of participation amongst its members and communication is poor. By isolating their defensive routines and PMP variables we find critical keys areas where action can be taken.

<table>
<thead>
<tr>
<th>Department</th>
<th>Defensive Routines</th>
<th>Stress</th>
<th>PMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>119</td>
<td>150</td>
<td>2.96</td>
</tr>
<tr>
<td>Admin</td>
<td>89</td>
<td>90</td>
<td>3.47</td>
</tr>
<tr>
<td>Sales</td>
<td>69</td>
<td>123</td>
<td>3.63</td>
</tr>
</tbody>
</table>

Table 6.1. (Mean Department Values for Defensive Routines, Stress & PMP)

The MMC assessment tests were instrumental in effectively locating deviations, means, peaks and troughs which are normally hidden below the surface, and which in most cases can take many counseling sessions to find. The test platform offered by Modern Management Consulting saved time and money in quickly providing us with the data necessary in understanding the mechanisms behind the participation phenomena at Landora FärgIndustri

Our aim with this study was to gain insight into the explanatory factors behind employee’s negotiation of participation and also to explain how tension in one’s personal environment
can affect one’s defense posture. In reviewing this study we can conclude that it has provided a deeper insight of the connections between Defensive routines and PMP within Landora.

The correlation between defensive routines, PMP and the departments within Landora are significant. Production with the highest defensive routines shows the lowest PMP values, Sales with the lowest defensive routines also shows the highest PMP values, and naturally Admin lies in the middle.

Stress, which is the independent variable, shows an obvious link to tensions within the PMP environment which in turn cause defensive routines to emerge. Naturally, other issues in regard leadership, communication, stimulation, and competency development all factors that can affect participation. However, our position remains the same, low PMP values will cause Defensive routines to inhibit an individual’s negotiation to participate while at the same time increasing stress.

As the evidence has shown, we believe that we have a model that can support Human Resource Managers, Department Managers, Consultants and even Medical Physicians with their diagnosis and/or efforts in putting context into the situational environment.

6.3 Directions for future studies

Even though the PMP model has been successfully used within MMC consultancy for years now, and it has been tested in various cultural settings and organizations from office to industrial settings to assess its true value, this is the first published research.

We believe that we have contributed to further understanding of defensive routines and the underlying causes thereto. Unfortunately, due to the time requirements and limitations of this thesis we are unable to address many other related issues to this study; however, with additional research one will be able to conduct further advanced studies. These studies can include a historical perspectives, patterns, organizational culture, individual norms, ranges and variances within an individual’s norm, as well as seasonal, departmental and organizational changes which are all extremely interesting and beneficial to society as a whole.
7. Appendix

Pre-test Interpretation of personnel with large Deviations from the average, February 2010:

Deviation One (Thomas)
10:11; Thomas from production comes into the office. The session starts with normal information about the questionnaire, how it looks like, why he is taking it and what will happen to the results. He is asked to go over his personal information and see if they are correct. He does not look very interested but still seems okay to be here. He starts the test at 10:18 without asking any questions. He finishes the test at 10:44 without asking any questions or showing any interest at all. The researcher gives Thomas a little bit more information about what is will happen next time, since then he will only get an email and can take the test at home. We ask him to ask someone to come and see us and he agrees to that.

Deviation Two (Stefan)
13:39; Stefan from production comes in with the researcher. When he was asked first to come to us by his co-workers he said no, so we had to go to him and tell him what this was all about before he agreed to come and take the test. The session started with some introduction about the questionnaire, some information about why he is taking it and what will happen to the results. He is also asked to go over his personal information to see if they are correct. He did the first test in English without telling us (until he was finished), so we had to redo the login, in order for him to be able to take his next test in Swedish. He starts the test again at 13:44 and is finished at 13:57. The researcher gives Stefan a little bit more information about what will happen next time, then he will only get an email and can take the test at home. He has no questions or shows any interest at all, and leaves at 13:59 without saying goodbye.

Interview, April 2010
(For the sake of clarity we have eliminated more than 100 uses of inappropriate language from this transcript)
09:40 Thomas from production comes into the office with the researcher. They start the interview with a little information about the 360 test, how it works and how it looks like. Then they talk about the overview of Thomas’s tests. The researcher shows Thomas how most of the employees within each department follow the same pattern. How everyone within
production follows the same pattern more or less, but some questions deviate and that are the
questions we are going to look better at now.

We start with his Stress assessment; he reads the assessment and thinks its fits very well. Following questions are those that deviate from the norm within the company:

Questions 6 and 7: he agrees with the assessment and says that is how he feels.

Question 10: there are many boring and simple tasks in his workday.

Questions 12: There is shift work and irregular working time in his job but he thinks that is okay but not that bad (he does not consider irregular working time as a flaw).

Question 15: he thinks that he has too much responsibility for others, since he does have some extra responsibility but does not have any higher pay (no reward). He has not had a pay rise since he started this job.

Question 19: He has headache every day, but sleeps well and has no other problems. He blames his boring job.

Then he reads his Defence assessment and thinks that fits very well. There are not so many questions there that deviate from the norm, but those that do, deviate a lot.

Questions 1: is about blaming others; Thomas feels like he has to yell to his co-workers so that they listen to him, (he has obviously some problems with responsibility), but he thinks he does not say anything personal when yelling.

Question 8: he likes to joke about other persons, but does not think he is mean to them; it is not his attention to hurt anyone’s feeling though he makes some jokes.

Question 11: is about drinking habits, and he does not want to talk about that (why? Drinks too much? If not, why does he not want to talk about it?). He just says he is in a hurry, and does not want to talk about that, he asks for “next question”.

Question 15: Thomas feels like he has the responsibility for productions, even though he is not the boss. He does not feel that the boss is doing so much, but says that his boss tends to blame him.

Question 17: Thomas agrees that he sometimes does shift his focus of blame to some other persons, when he is feeling bad.

Next we look at his PMP outcome. Thomas thinks it is hopeless to try to fix anything and is frustrated with his co-workers and his boss. He thinks he is very intelligent and could handle so much more than he is doing now. (He might need to work with his personality though, not to be so negative and arguable). Thomas often asks us to keep on going since he must go and keep working (but still he keeps complaining about how boring and hopeless his job is).
**Question 12:** He does feel like his boss does not have the same requirements to him as the others, and also that the requirements are unrealistic.

**Question 16:** he does not like to have to take responsibility for all the others job as well as his own. Especially since others sometimes screw something up and then he has to take the blame (he feels like every time when somebody makes a mistake, he gets blamed).

**Question 19:** is about social environment and Thomas does have friends within the company (that he meets out of the workplace) though he would not say that everyone are friends within the department.

He does not think that anyone wants his job; so it is hopeless to try to get something else to do within the company (get transferred to some other position). There is also nothing that can be done to improve his job (he declines everything we suggest). He really wants to do something else, really dislikes his job and cannot say anything positive about it. At **10:45** we have gone over all the questions and Thomas leaves, as he is leaving we ask him to try to get someone to come to us next and he did promises to try (did not say yes, only that he will try).

We are not able to interview Stefan since he does not work for the company any longer.
### Defense Routine Questions (DPA)

<table>
<thead>
<tr>
<th>Question</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can lose my patience often and I tend to blame others very quickly.</td>
<td>Not at all</td>
</tr>
<tr>
<td>2. I feel that everyone seems to be against me; therefore, I have to defend myself often.</td>
<td>Not at all</td>
</tr>
<tr>
<td>3. People often say that I tend to have very long, drawn out replies when rationalizing.</td>
<td>Not at all</td>
</tr>
<tr>
<td>4. I often feel sorry for myself.</td>
<td>Not at all</td>
</tr>
<tr>
<td>5. People say that I am inflexible.</td>
<td>Not at all</td>
</tr>
<tr>
<td>6. I don't like change situations.</td>
<td>Not at all</td>
</tr>
<tr>
<td>7. I find it difficult to agree with others and I can become cynical and sarcastic.</td>
<td>Not at all</td>
</tr>
<tr>
<td>8. I like to make jokes about other people.</td>
<td>Not at all</td>
</tr>
<tr>
<td>9. I find it hard to concentrate when others talk to me and I tend to block them out.</td>
<td>Not at all</td>
</tr>
<tr>
<td>10. Others say that I am eccentric (an oddball/somewhat different), but I believe that I am unique.</td>
<td>Not at all</td>
</tr>
<tr>
<td>11. I consume alcohol daily (drink more than three drinks daily), take pain relievers daily and/or require sex daily.</td>
<td>Not at all</td>
</tr>
<tr>
<td>12. I feel that I have to defend my point of view often and I believe that attack is the best defense.</td>
<td>Not at all</td>
</tr>
<tr>
<td>13. I feel that I am overly nice and amenable.</td>
<td>Not at all</td>
</tr>
<tr>
<td>14. I sometimes spontaneously act dumb or play a little crazy in order to get what I want.</td>
<td>Not at all</td>
</tr>
<tr>
<td>15. People say that I tend to blame others for things that have happened to me.</td>
<td>Not at all</td>
</tr>
<tr>
<td>16. I find it hard to forgive others for what they have done.</td>
<td>Not at all</td>
</tr>
<tr>
<td>17. I sometimes feel really bad about things that have happened to me and this distraction can on occasion cause me to have a mishap or even injuring myself by accident.</td>
<td>Not at all</td>
</tr>
<tr>
<td>18. For some odd reason, I am frequently telling others that &quot;I know&quot; or &quot;leave me alone.&quot;</td>
<td>Not at all</td>
</tr>
<tr>
<td>19. People say that I tend to joke too much and brush-off serious matters.</td>
<td>Not at all</td>
</tr>
<tr>
<td>20. People have commented that I tend to intellectualize too much.</td>
<td>Not at all</td>
</tr>
</tbody>
</table>

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Fig. 7.1 Defense Routine Questions
### Stress Assessment Questions (SA)

| Very good | 1. I feel that the balance between job demands and the allotted time to accomplish tasks. | Very poor |
| Very good | 2. I feel that the leadership, support, feedback and/or information is. | Very poor |
| Very true | 3. I am unable to use my competence and experience at work. | Not at all |
| Not at all | 4. I am not allowed to give my opinion at work. | Very true |
| Not at all | 5. Poor balance between taking responsibility, authority to make decisions and/or use of resources. | Very true |
| Not at all | 6. Unclear goals and a lack of organizational vision. | Very true |
| Not at all | 7. Poor reward systems (lack of recognition and appreciation for a job well done). | Very true |
| Not at all | 8. Lack of ability to vent complaints. | Very true |
| Not at all | 9. Lack of relief when under pressure, having angry outbursts, mood swings or overly negative. | Very true |
| Not at all | 10. Many simple and monotone tasks. | Very true |
| Not at all | 11. Many conflicts, poor teamwork, harassment, and name calling. | Very true |
| Not at all | 12. Shift work and irregular working times. | Very true |
| Not at all | 13. Poor environmental conditions, inadequate lighting, uncomfortable tasks, etc. | Very true |
| Not at all | 14. Violence, threat of violence or perceived threat. | Very true |
| Not at all | 15. Too much responsibility for others. | Very true |
| Not at all | 16. Insecure working environment (too much change, layoffs, etc.) | Very true |
| Not at all | 17. Tasks that are in conflict with my own personal values. | Very true |
| Not at all | 18. Poor justice and inconsistent and unfair treatment of personnel, etc. | Very true |
| Not at all | 19. Frequent headaches, teeth grinding, tiredness, and worrying. | Very true |
| Not at all | 20. Having difficulties in concentrating, forgetfulness, often restless and anxious. | Very true |

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**Fig. 7.2 Stress Questions**
### Educational Environmental

<table>
<thead>
<tr>
<th>Level</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little</td>
<td>1. I have the practical (tacit) knowledge necessary to be good at my job.</td>
<td>Absolutely</td>
</tr>
<tr>
<td>Very little</td>
<td>2. I have the formal technical (explicit or On-the-Job-Training) knowledge necessary to be good my job.</td>
<td>Absolutely</td>
</tr>
<tr>
<td>Very little</td>
<td>3. I have the skills to communicate and negotiate situations around my job description.</td>
<td>Absolutely</td>
</tr>
<tr>
<td>Very little</td>
<td>4. I have ability to think outside of the box, innovate, and create new ideas at work.</td>
<td>Absolutely</td>
</tr>
<tr>
<td>Very little</td>
<td>5. I understand the workflow of goods/services before, within, and after my working position.</td>
<td>Absolutely</td>
</tr>
<tr>
<td>Very little</td>
<td>6. I can discuss all of the processes within my job description and working environment.</td>
<td>Absolutely</td>
</tr>
<tr>
<td>Seldom</td>
<td>7. I feel that my knowledge (knowledge, skills, ability and competence) is improving on a weekly basis.</td>
<td>Very often</td>
</tr>
</tbody>
</table>

### External Demand Environment

<table>
<thead>
<tr>
<th>Level</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little</td>
<td>8. I find that it is easy to accomplish the tasks asked of me.</td>
<td>Very often</td>
</tr>
<tr>
<td>Very little</td>
<td>9. I feel that my workload is in balance with the demands placed upon me.</td>
<td>Very often</td>
</tr>
<tr>
<td>Very little</td>
<td>10. I feel that my co-workers/teammates do their fair share.</td>
<td>Very often</td>
</tr>
<tr>
<td>Absolutely</td>
<td>11. I feel that my partner/teammates/boss place too much responsibility on me.</td>
<td>Not at all</td>
</tr>
<tr>
<td>Absolutely</td>
<td>12. I feel that my boss has unrealistic demands and requires too much from me.</td>
<td>Not at all</td>
</tr>
<tr>
<td>Absolutely</td>
<td>13. I believe that there is some tension or conflict in regard to processes and workflow at work.</td>
<td>Not at all</td>
</tr>
<tr>
<td>Always short of time</td>
<td>14. I often find that I have very little time to complete my tasks properly.</td>
<td>All the time I need</td>
</tr>
</tbody>
</table>

### Social Environment

<table>
<thead>
<tr>
<th>Level</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little</td>
<td>15. I like to participate in new assignments and/or focus groups.</td>
<td>Very often</td>
</tr>
<tr>
<td>Very little</td>
<td>16. I like to take responsibility for my teammates at work.</td>
<td>Very often</td>
</tr>
<tr>
<td>Absolutely not</td>
<td>17. I feel like my working colleagues are like a second family to me.</td>
<td>All the time</td>
</tr>
<tr>
<td>Rather poor</td>
<td>18. I have good relations with my partner at home or a very close friend.</td>
<td>Very good</td>
</tr>
<tr>
<td>Very little</td>
<td>19. My co-workers and I often go out together after work.</td>
<td>Very often</td>
</tr>
<tr>
<td>Very little</td>
<td>20. It often feels good to belong to the organization.</td>
<td>Very often</td>
</tr>
<tr>
<td>Very little</td>
<td>21. I feel that my teammates do their fair share at work and they are also my best friends.</td>
<td>Very often</td>
</tr>
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Fig. 7.3 PMP Questions continues on next page.
### Self-Expectancy

<table>
<thead>
<tr>
<th>Rating</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little</td>
<td>29. I often have a good balance between my private life and work.</td>
</tr>
<tr>
<td>Very little</td>
<td>30. I find time for my hobby/ies every week.</td>
</tr>
<tr>
<td>Very few</td>
<td>31. I have achieved many of my personal goals over the years.</td>
</tr>
<tr>
<td>Very little</td>
<td>32. I am able to establish goals at work and make plans on how to achieve them.</td>
</tr>
<tr>
<td>Absolutely not</td>
<td>33. I enjoy new challenges and a changing environment.</td>
</tr>
<tr>
<td>Very little</td>
<td>34. I get a lot of satisfaction from my work.</td>
</tr>
<tr>
<td>Very little</td>
<td>35. I often feel appreciated for my work by my boss or the collective.</td>
</tr>
<tr>
<td>Really underpaid</td>
<td>36. My believe that my pay and benefits are in line with my job description.</td>
</tr>
</tbody>
</table>

### Transparent Environment

<table>
<thead>
<tr>
<th>Rating</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very difficult</td>
<td>37. I feel that it is easy to voice problems at work or at home.</td>
</tr>
<tr>
<td>Very little</td>
<td>38. I trust my teammates or boss.</td>
</tr>
<tr>
<td>Very bad</td>
<td>39. I truly feel that I can communicate openly with my boss.</td>
</tr>
<tr>
<td>All the time</td>
<td>40. I sometimes feel a little isolated at work and feel that I am not really part of the team.</td>
</tr>
<tr>
<td>Very seldom</td>
<td>41. I try to accept people for who they are and not what others think they should be.</td>
</tr>
<tr>
<td>Very little</td>
<td>42. I can talk to my best friend or partner (at home) about anything.</td>
</tr>
<tr>
<td>Very seldom</td>
<td>43. I usually look into the eyes of people when I talk to them.</td>
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</table>

### Self-Esteem

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<th>Rating</th>
<th>Statement</th>
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</thead>
<tbody>
<tr>
<td>Very little</td>
<td>44. I feel that I can identify with my work, education and organization.</td>
</tr>
<tr>
<td>Poor</td>
<td>45. I believe that I have a good image about how I balance myself, my private life and my work.</td>
</tr>
<tr>
<td>Very little</td>
<td>46. I feel good about myself and my knowledge (tacit &amp; explicit) skills (communication) and ability (aptitude, physical ability &amp; discipline).</td>
</tr>
<tr>
<td>Absolutely not</td>
<td>47. I find that the criticism from my supervisor is positive and constructive.</td>
</tr>
<tr>
<td>Very little</td>
<td>48. I find that my colleagues come to me for advice and help often.</td>
</tr>
<tr>
<td>Very little</td>
<td>49. I like to tell my friends about my work and about the company.</td>
</tr>
<tr>
<td>Not important</td>
<td>50. I believe the work that I am doing is important.</td>
</tr>
</tbody>
</table>

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Fig. 7.3 PMP Questions continued from previous page.
<table>
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<tr>
<th>PMP Assessment</th>
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<th>PMP Deviation % from Mean</th>
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<td>118.40</td>
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<td>3.59</td>
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<td>0.90</td>
<td>2.82</td>
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<td>0.93</td>
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<td>136.70</td>
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<td>2.82</td>
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<td>0.92</td>
<td>136.70</td>
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<td>3.53</td>
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<tr>
<td>0.78</td>
<td>108.60</td>
<td>0.89</td>
<td>2.82</td>
</tr>
</tbody>
</table>

Fig. 7.4 PMP Calculations per question
<table>
<thead>
<tr>
<th>Defense Assessment (DPA)</th>
<th>Stress</th>
<th>PMP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg.</td>
<td>Total</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erik</td>
<td>5,1</td>
<td>102</td>
</tr>
<tr>
<td>David</td>
<td>6,5</td>
<td>130</td>
</tr>
<tr>
<td>Paul</td>
<td>1,7</td>
<td>34</td>
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<tr>
<td>Fredrik</td>
<td>3,2</td>
<td>60</td>
</tr>
<tr>
<td>Bosse</td>
<td>7,3</td>
<td>146</td>
</tr>
<tr>
<td>Sven</td>
<td>7,5</td>
<td>150</td>
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<tr>
<td>Adam</td>
<td>4,7</td>
<td>80</td>
</tr>
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<td>54</td>
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<td>Inger</td>
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<td>Mats</td>
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</tr>
<tr>
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<td>Johan</td>
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<td>74</td>
</tr>
<tr>
<td>Total Raw Score/Question</td>
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<tr>
<td>Landora DPA Mean</td>
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<td>Landora DPA Median</td>
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<tr>
<td>Production DPA Avg.</td>
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<tr>
<td>Admin. DPA Avg.</td>
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<td>4,50</td>
</tr>
<tr>
<td>Sales DPA Avg.</td>
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<td>6,13</td>
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Fig. 7.5 Defensive routines, PMP & Stress Deviation Calculations
8. Bibliography:


