



Motivation in a Blue-Collar Environment

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Abstract: <p>The organization's ultimate goal is to increase profits, and motivation is the ultimate driver behind everything we do in our private and personal lives. However, how do these two intertwine? A motivated employee is a productive employee who ultimately is more likely to stay at the organization. In our current changing work environment, motivated employees are a necessity and not a luxury for successful corporations.</p> <p>This thesis aims to understand the forces behind the motivation of employees in a specific organization, and this is done to build a better model of why employees act the way they do and which factors could be used to change this behaviour for the better. Through the hypothesizing of a motivational model this thesis aims to simplify the motivational factors of the case company.</p> <p>This study is conducted using a quantitative method combined with a case study where the focus lies on the motivational factors in the company. With the collected data, statistical analyses are performed to interpret the findings and further refine the findings. Through these results a clear connection between a few selected factors and employee motivation is presented. Through the understanding of these connections the organization is able to create a better motivating workplace for the average employee.</p> <p>The results indicate that job satisfaction is the best predictor of work motivation in this organization. Job satisfaction is also highly impacted by finding work interesting, which turned out to be the strongest relationship for worker motivation. The regression model includes other variables that also impact motivation to a lesser extent. These factors are workplace enjoyment, pay satisfaction, and commitment. With these factors, the regression model is able to predict the motivation of the sample with an accuracy of 94,7%</p>	
Keywords: Case, Employee, Motivation, Blue-collar, Productivity, Goal-setting, Regression	

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Abstrakt: <p>Motivation är individens drivkraft och denna är beroende av faktorer både i det privata- och arbetslivet. Organisationer strävar efter att uppnå det bästa möjliga resultat och detta görs bäst genom en motiverad arbetskraft. Speciellt i den osäkra miljön som arbetsmarknaden befinner sig i nu är det ytterst viktigt att arbetare känner sig motiverade och uppskattade.</p> <p>Syftet med denna avhandling är att förstå vad som motiverar individerna vid fallstudiebolaget på en högre nivå genom att generalisera alla individers svar till en slutlig motivationsmodell. Denna motivationsmodell skall öka förståendet för vilka faktorer som motiverar individer vid detta bolag.</p> <p>Denna avhandlings byggs upp av en kvantitativ fallstudie där fokuset ligger på motivationsfaktorer inom ett företag. Resultaten av den insamlade datan har framställts genom ett flertal statistiska analyser. Genom dessa resultat så presenterar denna undersökning att det finns ett klart samband bland utvalda faktorer och individuell motivation. Genom dessa resultat så är det möjligt att förstå och bygga ut processer för att motivera individer i deras arbete.</p> <p>Resultatet som presenteras är att arbetsglädje är den variabel som har den största inverkan på arbetsmotivation överlag, arbetsglädje påverkas i sin stora del av hur intressant individen finner arbetet. Regressionsmodellen som presenteras innehåller andra variabler som även predikterar av motivation så som hur lojal individen är mot organisation och hur nöjd dessa är med lönen. Dessa faktorer beskriver med en säkerhet på 94.7% motivationen av en individ inom den undersökta organisationen.</p>	
Nyckelord: Fallstudie, Anställd, Motivation, Arbetare, Produktivitet, Regression	

CONTENTS

1	INTRODUCTION	1
1.1	The motivational conundrum	1
1.2	Aim of the study.....	2
1.3	Delimitations.....	3
1.4	Study Structure	3
2	Individual Motivation	5
2.1	Motivation.....	5
2.1.1	Extrinsic Motivation.....	5
2.1.2	Intrinsic Motivation	6
2.2	Motivation Theories.....	6
2.2.1	Content Theories	7
2.2.1.1	Maslow’s Hierarchy of Needs.....	7
2.2.1.2	Alderfer’s Modified Hierarchy of Needs (ERG Theory)	9
2.2.1.3	Hertzberg’s Two-factor theory.....	10
2.2.1.4	McClelland’s Achievement motivation theory.....	12
2.2.2	Process Theories.....	12
2.2.2.1	Expectancy Theories.....	12
2.2.2.2	Equity Theory	15
2.2.2.3	Goal-Setting Theory and Task Performance	17
2.3	The impact of Age and Gender on motivation	18
2.4	Motivational Factors at Work	19
2.4.1	Individual Characteristics	19
2.4.2	Job Characteristics	20
2.4.3	Workplace Environment.....	20
2.5	Connecting Work Satisfaction and Motivation.....	21
2.6	Motivational Factors at Work	22
3	METHODOLOGY.....	24
3.1	Research approach	24
3.2	Research Design.....	25
3.3	Method Bias	26
3.4	Case study	28
3.4.1	Case presentation.....	29

3.5	Data collection method	30
3.6	Population.....	30
3.7	Survey Design.....	31
3.8	Measures and variables	33
3.8.1	Dependent variables.....	33
3.8.2	Independent variables.....	33
3.8.3	Control variables.....	34
3.9	Data collection execution	34
3.10	Data analysis.....	34
3.10.1	Reliability Analysis	35
3.10.2	Pearson Correlation.....	35
3.10.3	ANOVA analysis	36
3.10.4	Paired sample T-test.....	36
3.10.5	Linear regression	36
3.11	Research Ethic	37
4	RESULTS	39
4.1	Descriptive statistics	39
4.2	Reliability Analysis.....	42
4.3	Data Normality.....	42
4.4	Data Independence.....	43
4.5	Homoscedasticity.....	43
4.6	Pearson Correlations.....	43
4.6.1	Satisfaction with future opportunities increases motivation	44
4.6.2	Positive interactions with co-worker's increase motivation.....	44
4.6.3	Perceived equity in financial rewards (pay) increases motivation.....	45
4.6.4	Organizational commitment increases work motivation.....	46
4.6.5	Performance score increases motivation.....	46
4.7	ANOVA	47
4.7.1	Motivation and Gender	47
4.7.2	Motivation and Age	48
4.8	Regressions	48
5	Discussion	54
5.1	Descriptive findings.....	54
5.2	Individual fit	55

5.3	Environmental factors	57
5.4	Demographic factors.....	58
6	Conclusion	59
6.1	Implications.....	60
6.2	Limitations	61
6.3	Further Research.....	62
	References	63

APPENDIX

Attachment 1	Survey	68
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TABLES

Table 1	Common method biases adapted from Podsakoff et al., 2013	27
Table 2	Survey respondents gender distribution	39
Table 3	Survey respondents age distribution	40
Table 4	Survey respondents' education	40
Table 5	Survey respondents Tenure at employer.....	41
Table 6	Question descriptive statistics	42
Table 7	Homoscedasticity tests	43
Table 8	Pearson correlation: Motivation and future opportunities.....	44
Table 9	Pearson correlation: Co-workers, enjoyment and motivation	45
Table 10	Pearson correlation: Perceived equity and motivation	46
Table 11	Pearson correlation: Commitment and motivation.....	46
Table 12	Paired sample T test: Performance score	46
Table 13	Pearson correlation: Performance scores and motivation	47
Table 14	ANOVA: Motivation & Gender	48
Table 15	ANOVA: Motivation & Age	48
Table 16	Regression Model summary.....	49
Table 17	Regression 1: Motivation	50
Table 18	Path analysis: Motivation	51
Table 19	Summary findings.....	53

FIGURES

Figure 1	Thesis Structure.....	4
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Figure 2	Overview of Main Classical Theories of Motivation	6
Figure 3	The Hierarchy of Needs	8
Figure 4	Alderfer's Modified Hierarchy of Needs	10
Figure 5	Hertzberg's Two-factor model	11
Figure 6	Porter and Lawler Expectancy Theory	14
Figure 7	Inequity Table	16
Figure 8	Motivational framework	22
Figure 9	Sampling Process.....	31
Figure 10	Motivation path analysis	51
Figure 11	Motivational Framework.....	60

1 INTRODUCTION

What drives individuals in the workplace? How can we understand if performance or commitment results from motivated employees or something else? Of course, organisations strive to motivate employees to create the most efficient and productive workplace. Nevertheless, how do we know which factors affect that particular employee in that specific environment? This thesis aims to find out what motivational drivers exist in an SME through a study of the employees.

1.1 The motivational conundrum

All organizations essentially strive to succeed, and employees are essential in this equation. Thus, motivating employees has been an important part of societies for thousands of years. The practice of inspiring employees has thus been with us for a long time. Throughout history, one of the oldest methods for this has been the “carrot and whip” method (Okine et al., 2021). Unfortunately, while motivational methods have evolved since ancient times, humanity cannot, with a good conscience proclaim to understand motivation fully. It is not for a lack of trying, as seen below in chapter 2, where a multitude of methods and theories are presented. This is not an all-encompassing overview of the field but covers the critical theories.

Through research we have deduced that motivation is one of the most critical factors affecting workplace effectiveness (van Knippenberg, 2000). Going further on this fact, an organization's profits results mainly from the effort the personnel are willing to put into their work. This input is a combination of both the workers' professional skills and motivation (Vasilenko, 2019). This link is essential to understand, which in plain terms means that motivation is a significant factor driving corporate profits. With such a direct and obvious link, this fact should be at the top of every firm's to-do list, but in reality, it is not. How corporations still to this day neglect employee motivation and well-being is a mystery, and this focus should be changed (Rivaldo, 2021).

While this is no recent issue, there are now different factors at work that require a rethink. The phenomenon dubbed the great attrition has complicated hiring and retention in the post covid era. According to a report by McKinsey, 40% of workers globally expect to leave their jobs in the near future. An enormous number of individuals are not currently content at their jobs for various reasons, with much tying back to motivational efforts (de Smet et al., 2022). This employee mobility is primarily driven by factors such as lack of career development, inadequate total compensation, bad

leadership and lack of meaning in work (de Smet et al., 2022). These factors are just a few mentioned in the report, but a common theme can be found. Namely, they are all factors that employers should use for motivational purposes. According to this report there is an apparent mismatch between efforts that are conducted by employers and what employees want.

With the task of understanding and motivating employees comes great responsibility. Incentives and personalization can work to motivate employees. However, they can also demoralize and demotivate just as quickly. Perceptions play a prominent role in an individual's motivation, as seen in the work by Adams (1976). Getting motivational factors right is key to keeping employees committed and happy, which is why this research will focus on understanding what drives individuals in this organization and what kind of relationships we can find between these drivers.

As there are many different theories the literature on this subject is also scattered. This thesis will combine insights from different authors about what motivates individuals and how that translates into workplace motivation. With this insight in mind, the hypotheses will be tested on the employees of an SME to see how these insights translate to a natural environment.

1.2 Aim of the study

This thesis at its core, aims to understand what motivates the blue-collar worker. By understanding this fact, organizations can build better places to work that motivate individuals. Hence the ultimate purpose will be to define what factors impact motivation at this company.

In order to evaluate what drives individuals in blue-collar employment relationships and ultimately empower organizations to adapt to these needs. This study aims to answer the research question:

“What can organizations do to motivate blue-collar employees”

In addressing this central question, it can be divided into two sub-questions to create better insight:

1. *“Which factors contribute the most to an employee’s workplace motivation.”*
2. *“Which factors make up a holistic view of workplace motivation”*

1.3 Delimitations

This study aims not to find the golden rule to motivating employees, as there can be no such thing. As this study is conducted on a small sample size within only one organization, the results can only be interpreted as such. As such, the aim is to understand motivating factors in the organization better and through analysis be able to tie these back to theory.

As this study focuses exclusively on one company, this entails its own limitations on the transferability of the results. Therefore, the results should be interpreted only as such. There will undoubtedly be transferable ideas, but any framework that is created will need to be adapted to the organization at hand.

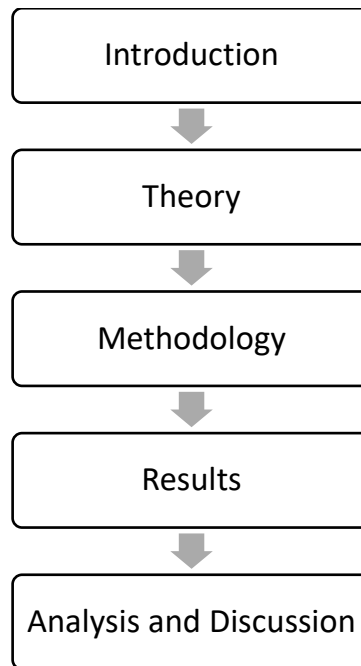
To get the best understanding of the blue-collar workers, management and individuals with significant sway over the organisation have been excluded from the data collection. This fact also eliminates any bias from ownership stakes, which means that the empirical research is limited to only blue-collar workers.

Geographically the location of the factories is Vaasa and Pori. As such, any cultural norms within these regions or Finland must be considered when translating the results.

1.4 Study Structure

This thesis starts with an introduction that covers why motivation is such an essential concept for organizations and the purpose of the study. In chapter 2, the theoretical framework will be presented to create an overview of existing motivational literature. Next, the theoretical framework will cover various aspects of an individual's motivation and how these tie into workplace motivation. In chapter 3, the choice of research method and why such a method was chosen is presented. In chapter 4, an in-depth data analysis will be presented and briefly discussed to create context. In chapter five, the results will be discussed and compared with theories presented in chapter two. Lastly, a discussion around the results, research question, limitations and recommendations for further study will be discussed. The sequence of this thesis can also be seen in figure 1 below.

Figure 1 **Thesis Structure**



2 INDIVIDUAL MOTIVATION

This chapter will present the mainstream theories that exist concerning individual motivation. In presenting these theories, the chapter will start with intrinsic and extrinsic drivers before moving on to content and process motivation theories. Finally, workplace characteristics will be covered. Through these theories, the aim is to create credible hypotheses for understanding motivational drivers at the target company.

2.1 Motivation

Motivation is a powerful driver for all individuals, a source of energy that affects an individual's personal- and work life (Hauser et al., 2014). The word is derived from the Latin word *movere*, which means "to move" (Haruna, 2013).

Motivation is an internal process and can be thought of as a need or a drive. Motivation is our innate desire to change ourselves or the environment around us. This desire gives individuals energy to move forward in an "adaptive, open-ended, and problem-solving sort of way" (Reeve, 2015)

In driving individual performance, both intrinsic and extrinsic incentives are used to drive productivity. While these two ways of incentivizing individuals focus on driving different types of goals, both ways of incentivizing serve the goal of increasing productivity. Extrinsic incentives focus on incentives and rewards gained from completing specific tasks, while intrinsic incentives focus more on satisfaction or appreciation (Lin, 2007).

2.1.1 Extrinsic Motivation

In achieving optimal performance and commitment from employees, stimulating the extrinsic motivational needs of individuals is critical. These needs can be met in many ways, such as remuneration, financial, and social incentives (Burke, 2002). Research has suggested that external incentives are correlated with higher productivity, and rewards such as awards, promotions and salaries fulfil the need for recognition felt by employees (Walker et al., 2006).

Extrinsic motivators serve to guide the actions of the individual and can under certain circumstances, lead individuals to conduct activities that were not of their own volition. Getting individuals to perform such actions can be done by actions such as compliments, payments, or dictations of others (Kim et al., 2011).

In essence motivational techniques and rewards that fulfil our needs of achievement and status can be classified as external motivators. The sense of fulfilment felt by individuals is typically more short-lived than the satisfaction from rewards that serve our internal motivators.

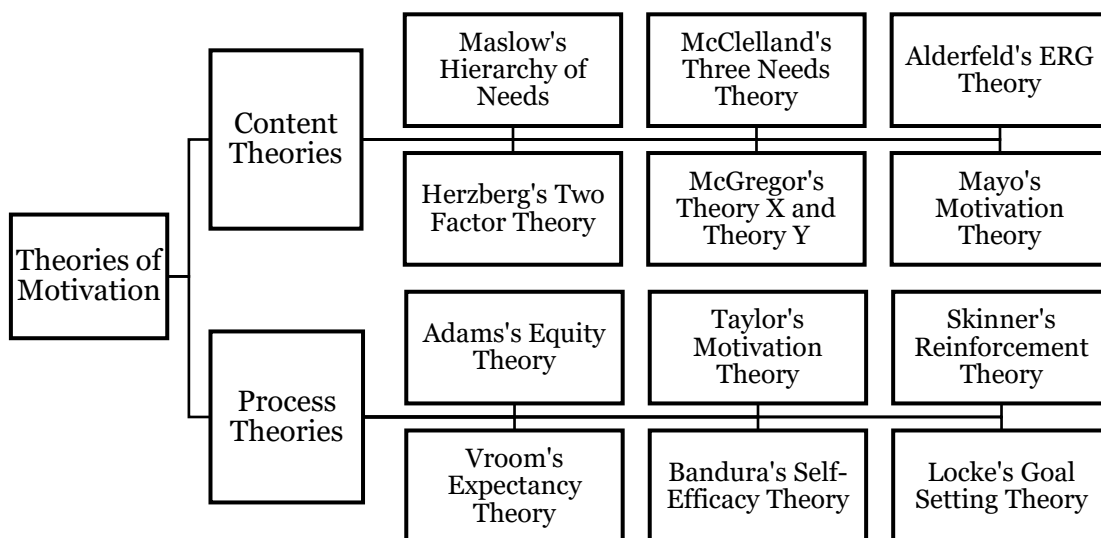
2.1.2 Intrinsic Motivation

Intrinsic motivators are more elusive. They are not physical goals that we can touch but rather internal feelings of individuals. Internal motivators can best be put into words such as satisfaction, gratitude, and feeling cared for. These motivators can be seen most strongly in certain professions where the work can be likened to a calling, such as teaching and healthcare (Bloom et al., 2020). In these professions, workers can be seen completing tasks for no apparent benefit but the satisfaction that comes with the chosen profession (Okine et al., 2021).

2.2 Motivation Theories

Motivation is a very well-studied phenomenon, with many authors hypothesizing different theories. This means that many theories can coexist because the subject is so complex. We do not know the answer or if there is one singular answer to why humans work the way we do. The different theories show us the many different motives that influence behaviour and create a framework for motivating staff in the most efficient way, as shown below in figure 2 (Dinibutun, 2012)

Figure 2 Overview of Main Classical Theories of Motivation



(Dinibutun, 2012)

While the chosen motivational theories will be presented below, these barely scratch the surface regarding the whole motivational field. Therefore, it has been necessary to scale down the material presented in this thesis to give the reader the best possible insight while covering as broad a view as possible. While this is the case with this study, it is essential to acknowledge that there exists a plethora of theories that are not covered. Therefore, the list below, while not exhaustive of the whole field will show some of the theories omitted from this study.

- Altruism
- Egoistical Self-Serving
- Structured Conscious Performance
- Unconscious Dynamic
 - Anomie
 - Depression
 - Rebellion to Achieve Independence of Paternalized Authority
 - Jonah Complex
 - Seeking Something Else
 - Attention
 - Sadistic thrill
 - Masochistic gratification
 - Lower needs frustration
 - Role-playing
- Social Conformity and Imitation
- Psychological States
 - Stimulation by contagion
 - Overload

(Etheredge, 1976)

2.2.1 Content Theories

If one can understand what individuals want and/or need, one can understand how people are motivated according to motivational content theories. Content theories focus on the needs felt by people. Therefore, the theories base their claims around the notion that individuals are motivated by satisfying these needs. The majority of the works within content theories build upon the original ideas presented by Maslow (1943).

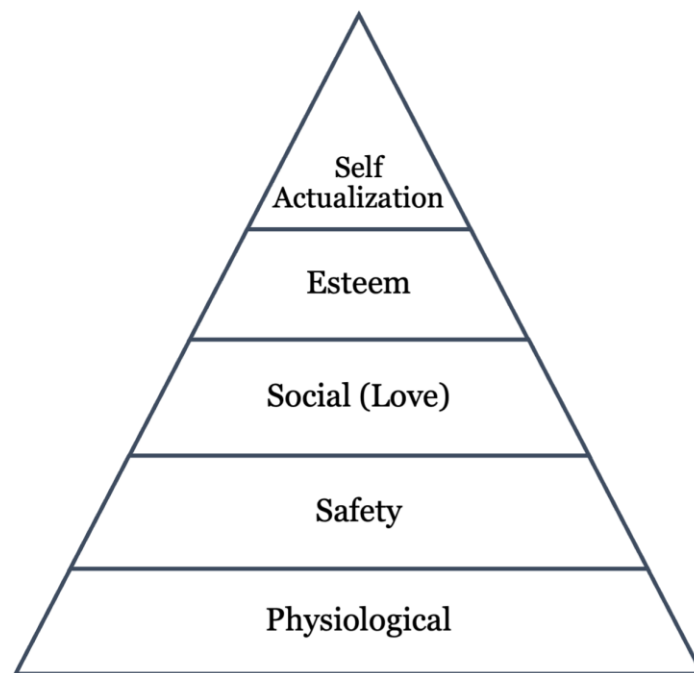
2.2.1.1 Maslow's Hierarchy of Needs

Maslow's hierarchy is considered a cornerstone of motivational research. One seldom finds further motivational research without mentioning Maslow's early work in 1943. Developing the theory of individual development and motivation to understand the individuals act the way they do. The theory lays out the claim that an individual is always striving for more, and what the individual wants depends on what they already possess. The suggestion is that a human is composed of five primary levels of needs, ranked in a

hierarchy of importance. The levels range from physiological needs on the lowest level through safety, social (love), internal and external esteem needs to wind up at the top with self-actualization. (Maslow, 1943; Dinibutun, 2012)

Interestingly, the pyramid or any other visualization was never presented in the original paper published as a psychological article. The multitudes of visual interpretations in modern literature have all been created along the way. (Maslow, 1943)

Figure 3 The Hierarchy of Needs



(Maslow, 1943)

Physiological needs make up the base needs of an individual. These needs must be met for the individual to survive. The physiological needs stem from our primal needs of eating, sleeping, drinking, and reproducing to survive and thrive. Once these needs are met and survival is guaranteed, one will be motivated to strive for the next level of higher needs.

Safety needs can be boiled down to the avoidance of pain and physical harm, being safe from harm and existing in an environment of predictability and order. *Social (Love)* needs have evolved from the proposed need for love by Maslow (1943) to social needs. Although love is still included as a core need, it is in conjunction with other needs such as affection, belonging, socializing and friendships.

Internal and external esteem starts to represent human's higher needs, both from oneself and others. Internal esteem involves striving for confidence, independence, freedom, and achievement. In contrast, external esteem details striving for appreciation, attention, prestige, and status.

Self-actualization needs, to truly realize one's full potential. These needs are the most varied, according to Maslow (1943), in that there is no standardized set of goals and needs that could be imposed upon the majority of the population. These needs could be anything from growth to creative goals. Maslow (1943) states that these individuals are "What humans can be, they must be".

Maslow argues that in always striving for more, the individual must have fulfilled the needs of a previous level in the hierarchy. Once the need of a level has been successfully fulfilled, it will no longer motivate the individual as strongly. Fulfilling the next level's needs becomes the individual's driving force. This entails that the needs of an individual are dynamic and driven by what is previously possessed. That the individual is only motivated by unsatisfied needs. (Dinibutun, 2012)

2.2.1.2 Alderfer's Modified Hierarchy of Needs (ERG Theory)

Alderfer's (1972) modified model builds upon that of Maslow (1943) in condensing the model into three "core" needs of the individual. This theory is built to divide the needs of individuals into only three categories of Existence-, Relatedness- and Growth needs.

Existence needs cover the two bottom levels of the pyramid to make up the base, upon which all other needs are stacked. Existence needs are tied to an individual's survival and the physical existence of the individual. Grouped into existence needs are also the safety of the individual, both on a physical and psychological plane.

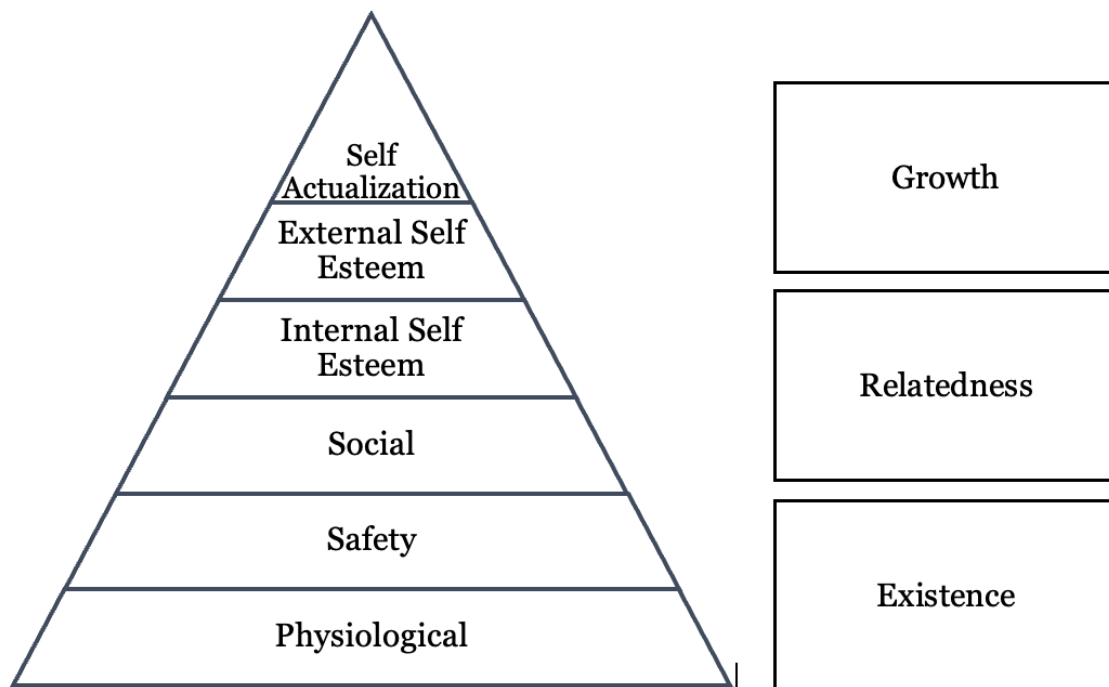
Relatedness needs touch on the individual's social environment and all that entails, from love and fellowship to social connections. Relatedness blankets all the relationships that an individual feels the need for and craves.

Growth needs cover the remaining one and a half levels at the top of the pyramid. Here one can find the development of the individual, of the self and of potential. Achieving the highest goals in individual strives for to complete the journey to "What humans can be, they must be". (Maslow, 1943)

While there are multiple similarities between Maslow & Alderfer, such as the needs being divided into similar levels, albeit three instead of five. Where Maslow suggests that an individual must fulfil a need to be motivated by another, Alderfer suggests that the needs are more progressive and being driven by one need does not exclude striving for a higher need simultaneously. That progress is agnostic of direction and can move either up or down the levels in motivation, and that there is no need for the levels to be linearly completed before a higher-level need motivates the individual.

According to the ERG theory, an individual can be motivated by one or many needs in the hierarchy, and if needs at one level are not attainable, the individual will strive for even higher (or lower) level needs in search of fulfilment.

Figure 4 Alderfer's Modified Hierarchy of Needs



(Alderfer, 1972)

2.2.1.3 Hertzberg's Two-factor theory

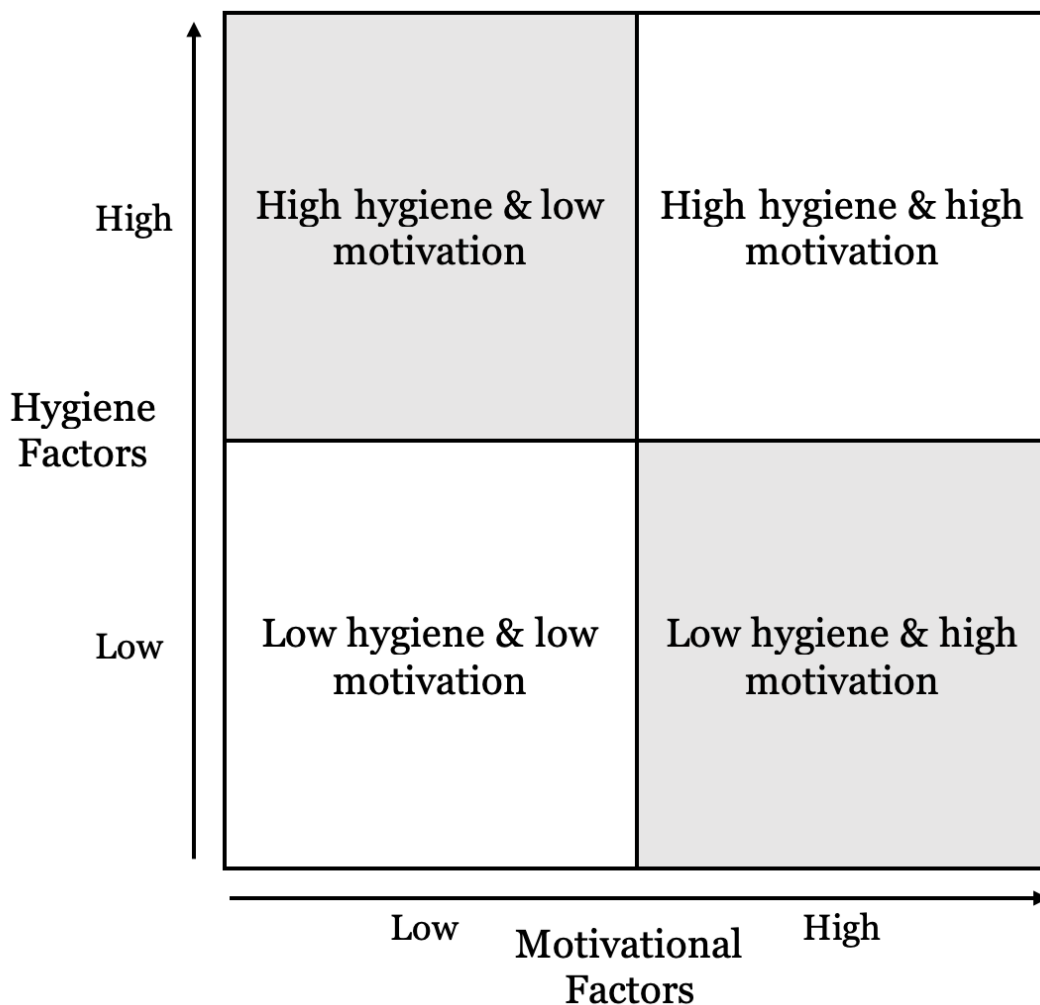
The two-factor theory by Herzberg, Mausner, & Snyderman (1959) is another continuation of Maslow's (1943) hierarchy of needs. In this work, Hertzberg (1959) builds upon the hierarchy of needs to create a theory for a subset of an individual's motivation, namely working motivation.

Hertzberg's theory, also known as the motivation-hygiene theory, argues that job satisfaction and dissatisfaction can be derived from different mutually exclusive factors in the workplace. This is to say that satisfaction and dissatisfaction are interdependent on each other. (F. Herzberg et al., 1959)

The two factors divided up by (F. Herzberg et al., 1959) are motivational and hygiene factors. Hygiene factors are extrinsic to the work and lead to lower job dissatisfaction, these hygiene factors are related to avoiding unpleasantness. Rather than being related to work, these factors are often contextual such as salaries, social workplace relationships and company guidelines. (Herzberg, 1966)

Motivational factors, on the other hand are intrinsic to the job and serve to improve job satisfaction. These factors satisfy the individual's need for growth and self-actualization. (Herzberg, 1966)

Figure 5 Hertzberg's Two-factor model



(Herzberg, 1966)

2.2.1.4 McClelland's Achievement motivation theory

According to McClelland (1985), individual focuses can be categorized into three needs: achievement, power, and affiliation. The dominating motivator will also be dependent on the individuals' preferences and beliefs. According to McClelland (1985), these motivators are learned during our life and are shaped by our experiences, environment, and culture.

Achievement encompasses the following motivational factors and personality traits. An individual driven by achievement feels a strong need to set and achieve challenging goals and has a lower risk aversion than others. As achievement plays a big part, the individual also prefers that progress and achievements are actively evaluated, this is also in combination with preferring to work solitarily and avoid reliance on others.

Individuals driven by affiliation instead crave interaction and belonging to a group, these individuals can be characterized by looking at social aspects. The individual aim is to please, wants to be liked, and often gives in to herd mentality and goes with the group's majority. These individuals are more risk-averse than those driven by achievement but favour collaboration instead of acting solo (McClelland, 1985).

Lastly, individuals driven by power strive for control and influence. They want to engage in competitive behaviour actively and win. These individuals enjoy the spotlight and want others to recognize their successes and the spotlight accompanying such success. Individuals driven by power can be split into two groups, striving for personal or institutional power. Individuals striving for personal power seek to control others directly, while individuals seeking institutional power seek to drive the institution's efforts forwards through a team effort (McClelland, 1985).

2.2.2 Process Theories

2.2.2.1 Expectancy Theories

Expectancy theory is based on the principle that individuals are influenced by the expected result of their actions. Hence based on the assumption that motivation is built on the relationship between the expended effort and perceived level of reward. This

entails that the individual believes that rewards are 1. Available and 2. A function of their effort and performance (Dinibutun, 2012).

There are several different interpretations of expectancy theory, as this is classified as a “generic” theory of motivation. Among the most notable versions are approached by Vroom (1964) and Porter and Lawler (1967), which have been used for further study numerous times (van Eerde & Thierry, 1996).

Vroom theorizes that an individual prefers specific goals over others and anticipates greater satisfaction if a preferred goal or outcome is achieved. This feeling is described as *valeance*. Valeance can be both positive and negative, in the terms that positive valeance is reaching the preferred goal and negative valeance is not reaching a goal (that is not preferred). Outcomes are able to have valeance in their own right or as a means to another outcome. In this regard earnings may be what one individual strives for, while for another it may only be the means to a bigger goal (Miner, 2005). Valeance is described as follows by Vroom:

“The valence of an outcome to a person is a monotonically increasing function of the algebraic sum of the products of the valences of all other outcomes and his conceptions of its instrumentality for the attainment of these other outcomes.” (Vroom, 1964)

Valeance as such can be assigned to outcomes across the individual’s chain of priorities, with multiplication for goals that are instrumental in achieving a larger valeance goal. Vroom (1964) in his work applies the concept of valeance specifically to the topics of occupational choice, job performance and job satisfaction.

The second variable touched on by Vroom (1964) is *expectancy*. With expectancy, people develop scenarios which estimate whether or not a specific action will lead to the desired outcome. In this sense the action performed by the individual specifically affects the outcome, desired or not. Finally, expectancy in combination with the combined valeance describes an individual’s potential for motivation or performing a specific task, this is blanketed under the term *force*, which describes the combination.

Vroom describes force in the following way

“The force on a person to perform an act is a monotonically increasing function of the algebraic sum of the products of all the valences of all outcomes and the strength of his expectancies that the act will be followed by the attainment of these outcomes.” (Vroom, 1964)

Hence, according to Vroom an individual’s force is not influenced by outcomes that are not deemed worthy, have no valeance. Nor by unlikely outcomes that result from actions

taken. Individuals are assumed to act rationally to maximize force through the completion of positively valence outcomes. This rationality to strive for higher valence outcomes is the foundation for the force that drives individuals to strive for certain careers, stay in them, and perform well in them.

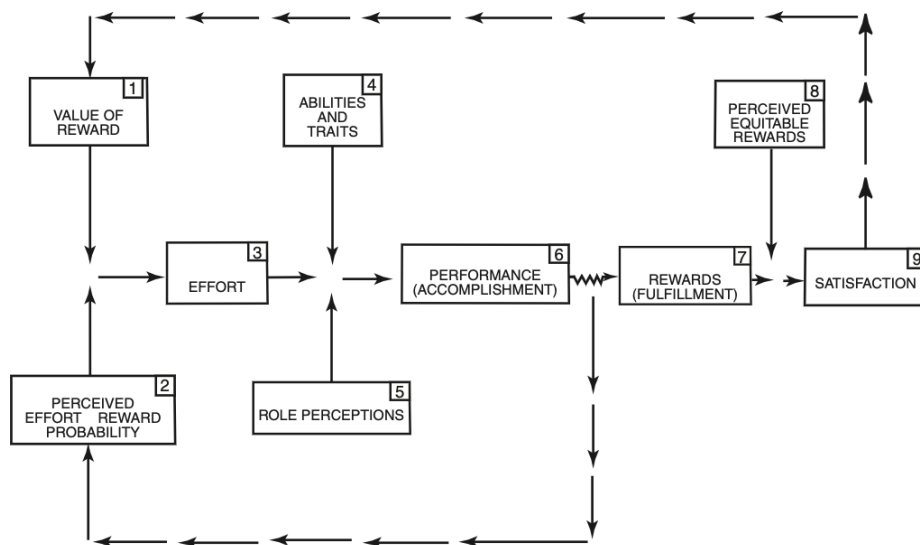
build their model with heavy influence from that of Vroom (1964). The model builds further on the previously presented concept of *motivational force* to encompass performance in its entirety.

The model proposed by Porter and Lawler includes more variables than Vroom's original theorizing, which are detailed in the model below.

1. The value of reward: *valence, attractiveness of an outcome*
2. Effort-reward probability: *expectancy if different rewards are based on differences in effort*
3. Effort: *force, the effort used to complete a task*
4. Abilities and traits: A person's permanent characteristics
5. Role perceptions: The effort that is considered necessary to be effective by a person
6. Performance: Successes in their work
7. Rewards: desired rewards received either from one's own actions or other's actions
8. Perceived equitable rewards: That the individual feels the rewards received are fair
9. Satisfaction: Individuals feel that the rewards are equal or above the expected level

(Miner, 2005)

Figure 6 Porter and Lawler Expectancy Theory



(Porter & Lawler, 1967; Dinibutun, 2012)

While the first three factors are similar to Vroom (1964) and hence effort can be seen as a result of multiplying together valence and expectancy. Porter and Lawler also include feedback loops in their framework to make it more dynamic over the course of an individual's journey. This loop can be seen between when performance results in reward, which leads to the perceived effort-reward being increased, and when that reward results in satisfaction it feeds back into the future value of that particular reward.

2.2.2.2 Equity Theory

Adam's (1976) equity theory bases itself around the transactions that take place in an individual's life, namely with the exchange relationship that individuals engage in on a daily basis. What an individual gives are classified as an input or investment into that particular relationship. These inputs need to be recognized by both parties and be relevant to the relationship. While the "giving" individual might consider them relevant to the relationship, the other party may or may not recognize these inputs as relevant.

The individual is also expected to receive things in exchange for their input. This is also the point where inequity can appear, whereas there is a miss match between the parties and their inputs. The same principle applies with outputs as with inputs, in that the individual receiving them needs to consider them relevant for the relationship to function effectively. The shared concepts which determine what is equal and fair in these transactional relationships are learned as part of the socialization process. Examples of inputs in a work-related relationship may be education, job effort, health, seniority, or experience among others. Outcomes on the other hand can be pay, benefits, status, Herzberg's dissatisfiers (1966) or monotony, as not all outcomes or inputs are positive.

In a vacuum, this transactional relationship would function solely based on these two facts, but as these relationships don't exist in a vacuum the third variable in the model comes into play. Namely a reference person or group to whom the individual is able to compare their own transactional relationship and evaluate if the relationship is deemed equal and fair. The person or group that is used for the purpose of comparison can be almost anyone, from a co-worker to a group in a completely different social- or work role. The person or group used for comparison is entirely up to the individual themselves if there exists at least one common attribute. Adams (1976) does not elaborate on who this object for comparison should be, but it is assumed that the most common use is co-workers (Miner, 2005)

Figure 7 Inequity Table

Perception of Reference Source

		Inputs low – outcomes high	Inputs high – outcomes low	Inputs low – outcomes low	Inputs high – outcomes high
Perception of oneself	Inputs low – outcomes high	No inequity	Much inequity	Some inequity	Some inequity
	Inputs high – outcomes low	Much inequity	No inequity	Some inequity	Some inequity
	Inputs high – outcomes low	Some inequity	Some inequity	No inequity	No inequity
	Inputs high – outcomes low	Some inequity	Some inequity	No inequity	No inequity

(Miner, 2005)

As Adam’s theory more often than not touches on the equilibrium relationship, inequity is a large part of the dissatisfaction that can be felt by individuals. As the scenarios where true equity is achieved are few, reaching equilibrium is not easy. This is in addition to over-reward, where individuals often rationalize the reward as good fortune. As to feel inequity with being over-rewarded the reward must be substantial compared to peers in order to create discomfort for the individual. (Adams, 1965)

Hence inequity can appear both as a consequence of under- and over rewarding. This creates strong feelings of either anger or guilt for the undersized respective oversized rewards. This creates tension in the transactional relationship, which is proportional to

the amount of perceived inequity. Due to this the individual feels a strong sense to diminish the inequity to equilibrium again, and this is done either by increasing or decreasing inputs. This action and its direction are correlated with if the inequity is over or under equilibrium, and the firmness of the response is a consequence of the discrepancy.

A possible second outcome of inequity is distortion, in that the individual may start distorting facts about either themselves or the reference object. According to Adams (1965), such outcomes as distorting are extreme and highly unlikely but serve a purpose in a theoretical sense.

While Adam's laid out original theoretical statements in the original paper in 1965, these have subsequently been developed by Walster et al. in 1973. These further developments have also been endorsed by Adams. (Adams & Freedman, 1976)

- 1) An individual will always try to maximize their rewards
- 2) In a group settings individuals are able to create fair distributions of reward according to input for each member. This creates a system of equity that is adhered to by all individuals
- 3) In group settings well behaved individuals will often be more highly rewarded than those who treat others badly.
- 4) Individuals become troubled when engaged in relationships that are not fair, and this distress increases with the inequality.
- 5) Individuals always strive to create balance in the relationships, either by reducing input or changing outputs. This effort is increased by the amount of inequity

(Miner, 2005; Walster et al., 1973)

2.2.2.3 Goal-Setting Theory and Task Performance

The goal-setting theory at its heart is a theory about why some individuals perform better at work-related tasks than others. The theory was developed to its current state by Locke & Latham (1990) by inductively analysing 400 laboratory studies from over 25 years (Locke & Latham, 2006). The results from these studies indicated that challenging specific goals produces a higher level of performance, in contrast to easy or unclear goals.

So long as a person is committed to the goal, has the requisite ability to attain it, and does not have conflicting goals, there is a positive, linear relationship between goal difficulty and task performance. (Locke & Latham, 2006)

According to Locke & Latham, goals provide a mechanics with which unsatisfied needs are translated into actions. In seeking satisfaction, the individuals' unsatisfied needs drive them to seek ways to satisfy these needs, which is done by creating specific goals.

For goal setting to be successful, there are specific points that need to be addressed in goal creation to achieve the desired outcomes (Lunenberg & Samaras, 2011)

- Clarity: goals must be specific
- Challenge: goals must be sufficiently tricky but reachable
- Feedback: must be a part of the process once the goal is reached
- Deadlines: realistic timelines lead to better goal completion
- Learning: Individuals feel motivated by not just doing but learning
- Audience: Setting proper goals for the group as well as the individual

(Lunenberg et al., 2011)

Goal-setting theory has been further developed to create a more nuanced understanding of the actual goal setting instead of the motivating factor it induces in individuals. Such as including learning goals instead of performance goals ((Bell & Kozlowski, 2002; Cianci et al., 2010). The pitfalls of setting too narrow, too challenging, or too many goals have also been studied. Setting the wrong types of goals has led to disastrous consequences in subject behaviour and goal achievement (Ordonez et al., 2009)

2.3 The impact of Age and Gender on motivation

In studying the effects of age and gender on motivational factors, three factors were used to understand individual motivation in the different groups. These three factors were passion, grit and mindset(Sigmundsson et al., 2022). Passion is described as a good predictor of exceptional motivation, as an interest or a passion towards a subject naturally increases the willingness. Passion is also described as influencing the state of “immersion” which influences and assists the focus that is needed to have sustained motivation (Jachimowicz et al., 2018; Sigmundsson et al., 2022).

Grit is the second factor that influences overall motivation and serves as a predictor of overall success. Grit plays a role in the sustained effort that an individual needs to keep a sustained motivation in a task or activity. Prolonged effort in activities cannot always be sustained purely on interest, as interest is something that can wane during tough or uninteresting stretches of time. Hence grit serves as an additional motivational force in keeping the individual motivated during hard times (Sigmundsson et al., 2022).

Mindset, or “growth mindset” as it is described by the authors, describes the willingness to continually evolve and learn. This then maintains an important role in nurturing motivation, as stagnating knowledge results in less interesting tasks and challenges.

That these three factors are intertwined can be seen in how they serve to reinforce each other. While the development of these factors in individuals is not completely understood it can be assumed that the interconnectedness results in some mutual reinforcement (Sigmundsson et al., 2020).

Significant differences in how motivational factors change during the duration of one’s life can be found in the study by Sigmundsson, et a. (2022). These findings point towards a decrease in both mindset and passion as individuals age, while the grit of individuals increases. These results can prove instrumental in crafting workplaces and tasks that cater to workers at different stages in their lives.

2.4 Motivational Factors at Work

An individual’s work motivation is a product of four factors: Individual characteristics, job characteristics, work environment characteristics and external environmental characteristics (Setiawan & Wakhyuni, 2020). These factors are what make up an individual’s motivation, and in order to change the status quo, one or more of these factors need to be changed. An employer is able to influence three of these four factors in building a motivating environment as changing external characteristics is normally outside the purvey of the ordinary organization (Perry & Porter, 1982).

2.4.1 Individual Characteristics

Individual characteristics work to explain discrepancies between employees that work in identical environments. These characteristics are brought into the workplace by individuals and have often been formed by developmental experiences in the individual’s life. This is what makes each worker unique no matter the standardization of the workplace. Although these are what make up the individual they are also continually evolving. This means that an organization can play a key role in developing good characteristics while an individual is employed (Perry et al., 1982).

How interested an individual is in completing particular tasks on the base level is not something that the organization can influence easily. This interest also plays a key role in the quality and work ethic of individuals. It’s instrumental that an organization caters to these individual interests and wants to create a productive workplace. Because an

individual's own interest plays a key role in building a base on which external incentives can work (Viitala, 2004). If an individual's interests and the work offered by the firm are aligned then the likelihood of a worker being inspired and motivated are significantly higher (F. Herzberg, 2003). On the flipside if these interests are not aligned the employee might develop negative attributes towards the work that result in lower performance (Viitala, 2004).

2.4.2 Job Characteristics

Designing the characteristics of the job also play to serve a crucial role in performance, as an external characteristic this is the responsibility of the organization. The mismatch of job characteristics and individual values can have a negative impact on both work task- and workplace motivation (Latham & Pinder, 2005). An employee's effort in a job characteristics context is shaped by such factors as meaningfulness, variability, responsibility, independence, recognition, and feedback. Employees are also able to directly shape some of the terms by negotiation with the employer, this also serves as an important source of information for future development (Rousseau, 2004). Job characteristics cannot be created in a vacuum, as then individual difference would not be considered.

The importance of job characteristics can be drawn from Herzberg (2003) where work related factors can be seen as important predictors of overall job performance and satisfaction. As similar factors to those above can be seen in Herzberg's earlier work.

2.4.3 Workplace Environment

The workplace environment is made up of two separate but intertwined environments, namely the personal work environment and the firm environment (Perry et al., 1982). These environments are formed by factors such as economic- and social benefits, working conditions, workplace organization and safety (Ruohotie & Honka, 1999).

In a similar way to that of job characteristics, environmental factors tie into the theory presented by Herzberg (1952). As the factors that produce job motivation are distinctly different from those that prevent dissatisfaction, the environmental factors play a crucial role in only preventing dissatisfaction (Herzberg, 2003) These being crucial parts of the hygiene factors that make up the base of the pyramid in preventing workplace dissatisfaction.

2.5 Connecting Work Satisfaction and Motivation

Individual motivation plays a key role in the commitment and performance of individuals. While the concept might seem simple and straightforward getting to the point of affecting the multitude of factors that make up our individual motivational triggers takes significant effort and research on the part of organizations. Viewing individuals as a complex equation that displays similarities to each other while being unique might be more appropriate.

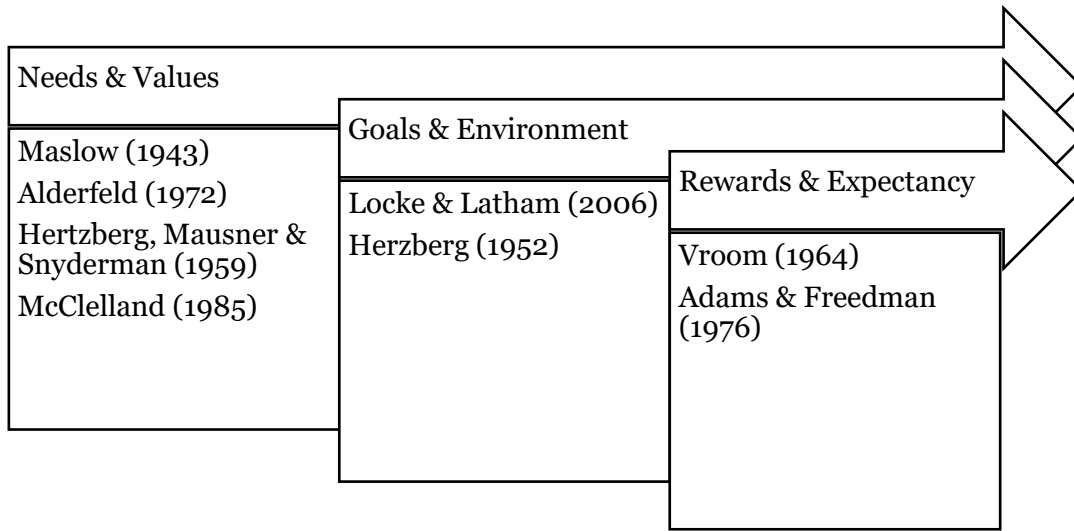
The multitude of what drives us as individuals requires striking a balance between individual and organizational goals and objectives. Creating a stable base of intrinsic and extrinsic motivational incentives that cater to our individual and ties into the hygiene factors of Herzberg (Herzberg et al., 1959). Can serve as a starting point to work against adverse negative reactions, while building on the elemental blocks of Maslow's (1943) theory of motivation. Catering to a human's primal needs sets up the relationship for success, as all factors related to motivation are not in any organizations control.

In creating the fostering and stimulating workplace that will further cement the individual's values in their work tasks, the need for proper goal setting comes into play. By creating goals that are hard to reach but within reason one can drive motivation in individuals to reach for lofty goals, if properly planned (Locke et al., 2006; Ordonez et al., 2009).

To further build upon the basal needs the workplace design and adaptation is next, creating an environment where incentives are created to match the expectations of employees (Lawler & Porter, 1967). With incentives the problem of expectancy arises between individuals, who is getting paid fairly and how those lines up to one's own expectations of equity (Adams et al., 1976).

The whole motivational process happens through the right match of individual and organization values, correctly stimulating tasks, and equitable rewards systems.

Figure 8 Motivational framework



2.6 Motivational Factors at Work

Throughout the chosen theories hypotheses have been developed to assist in the creation of the questionnaire that will be used during the study. Some of these hypotheses tie only back into one theory while the majority are built upon the collective knowledge by the authors.

H1: Satisfaction with future opportunities increases motivation

H1₀: Satisfaction with future opportunities decreases motivation

H2: Positive interactions with co-worker's increase motivation

H2₀: Positive interactions with co-worker's decrease motivation

H3: Perceived equity in financial rewards (pay) increase motivation

H3₀: Perceived equity in financial rewards (pay) decrease motivation

H4: Organizational commitment increases motivation

H4₀: Organizational commitment decreases motivation

H5: The perceived performance score increases motivation

H5₀: The perceived performance score decreases motivation

H6: Age impacts motivation

H6₀: Age does not impact motivation

H7: Gender impacts motivation

H7o: Gender does not impact motivation

H8: Job satisfaction increases motivation

H8o: Job satisfaction decreases motivation

H9: Satisfaction with pay increases motivation

H9o: Satisfaction with pay decreases motivation

These hypotheses will be tested and discussed during the upcoming chapters. In keeping with the abductive method of this study the results will include any additional findings that are done during the analysis of the results. This will provide a clearer picture than just based upon the hypothesised outcomes.

3 METHODOLOGY

In this chapter, I will present the research methodology used during this study. The chapter will start with which research philosophy has been used and why. In the second chapter I will discuss the research design for this study. The third chapter will present the data that is needed and how it is going to be collected. The last chapter will provide an overview of the statistical methods that are going to be used in the analysis of the data.

The purpose of this methodology chapter is to justify the methods that have been used and enable the reader to assess the validity of this thesis more easily, hence this chapter will also need to outline the data collection process and analysis.

This thesis aims to identify the motivating factors of blue-collar workers and identify relationships between these variables. Therefore, the empirical data focuses on the motivational factors in the workplace and the interplay that exists between them.

3.1 Research approach

This thesis started to take shape a while before writing began, my own experiences working for the firm sparked an interest in finding what factors influenced my co-worker's work motivation. There was a clear difference in work methodology and effort between the individuals working at the firm during their studies and the full-time staff. This difference was clear and while I could understand my own motivations, I never was able to grasp the factors that went into motivating the full-time staff.

A few years after I left the firm, through discussion with individuals in management the idea started to form. What drives the motivations of the workers on the factory floor, and how could a workplace be designed around these factors? This study was then done to both enhance my knowledge and provide valuable insight to the firm and its collaborating firms.

The thesis then moved from an ideating stage to researching theories and looking up existing literature on the subject of motivation. This research then led to the design of a survey and working hypotheses that could be tested with the empirical data. This method could therefore be classified as deductive research. In deductive research, the researcher starts from existing knowledge, e.g., established theories and knowledge. (Bryman & Bell, 2015). Deductive research is the opposite of abductive research, whereby one starts with collected data and builds an understanding based on it (Saunders et al., 2016).

During the process of building an understanding from both the theory and data this thesis has instead morphed into one following an abductive way of researching

Abductive reasoning as opposed to inductive or deductive to fully utilize the theories and data at hand. According to Bryman & Bell, (2015, pg.27) the abductive method is proposed as a solution to overcome the limitations of deductive and abductive positions. Using abductive reasoning in research enables the researcher to work back and forth between the problem at hand and literature. This enables us to combine the inductive and deductive approaches.(Saunders, Lewis & Thornhill 2016, p.148)

To support the aims of this thesis a quantitative method was chosen as opposed to a qualitative method of gathering data. Quantitative methods enable the researcher to create more generalized results by controlling a variety of factors such as survey questions, population, locations. The most important criteria for a quantitative study are reliability, validity, and general applicability (Bryman et al., 2015).

The quantitative research method has shortcomings in that it aims to conform reality to a set number of recording instruments and processes (Bryman et al., 2015). Once questions for collecting the data have been created and used the researched cannot change the criteria, because this would invalidate results from the questionnaires. In essence unlike qualitative research the researcher cannot keep iterating and improving the questions and process of collection.

3.2 Research Design

This thesis focuses on understanding the underlying motivations of employees in blue-collar work environments. This thesis was initially inspired by developing a deeper understanding of motivation and drive within the population that manages many of the invisible jobs in our day-to-day lives. This thesis aims to delve deeper into employees' psychological underpinnings and core values by focusing exclusively on blue-collar work. Additionally, there is a significant gap in researching blue-collar work as the majority of motivation research has been conducted on knowledge workers. This trend is bound to continue with the changing workplace dynamics after the covid-19 pandemic. Therefore, this research aims to better understand motivating forces in blue-collar work and contribute to a more hospitable and motivating workplace environment.

The data will be exclusively collected using a survey in following with quantitative research. This is done to create an understanding of the motivations of employees in

these blue-collar environments. By not mixing in management knowledge and opinion, the research aims to create the best understanding of the individuals driving forces unsullied by management views. In addition, the survey provides respondents with the option of answering with qualitative input if none of the supplied options reflects their views.

3.3 Method Bias

Method biases are a crucial and often underestimated part of scientific study as the issues that arise from method bias can threaten the validity of the whole research. Common method biases are often prevalent in studies where the independent and dependent variables are obtained from the same source at the same time. This is then classified as a measurement error. The measurement errors can have both a random and a systematic effect on the data, ultimately affecting the outcome. In the case of this study, it needs to be taken into account that the results gathered are from the same source(s) simultaneously.

When the questions are aimed at researching motivation, multiple of these are inherently similar. Unfortunately, this also introduces the anomaly whereby respondents might seek similarities between questions asked, which results in motivational relationships that do not exist in reality (Podsakoff et al., 2003).

Podsakoff et al. (2003) present a wide range of potential sources of common method bias in their literature review. Several of these apply to this study and are detailed in a table below

Table 1 Common method biases adapted from Podsakoff et al., 2013

Potential Cause	Definition
Common rater effect	Artifactual covariance between the predictor and the criterion variable
Item characteristic effects	Artifactual covariation caused by influence or interpretation
Item context effects	Influence or interpretation that an individual relates to items because of its relation to other items
Measurement context effects	Artificial covariation produced from the context

(Podsakoff et al., 2013)

Method bias is primarily controlled in two ways, study design or statistical controls. In an ideal world, one would be able to obtain variables from different sources to control for different biases, but in this case when an individual is the subject of the study this cannot be done. What can be done instead is to create what Podsakoff et al. (2003) dubs as “Temporal, proximal, psychological, or methodological separation of measurement”. With this, the respondents are less likely to be influenced by earlier questions in the survey. In this case, the method enables separation by splitting questions into different pages, from which the participants cannot look back at previous questions.

Another important control is the clear and precise design of the questions and the scale used to collect answers. It being crucial to avoid vagueness, keep a clear and straightforward language while avoiding double-barrelled questions. These controls will play to the validity of the subject being studied and enable more precise results to be extracted without uncertainty. In choosing a scale it has been deemed important to use verbal labels instead of numbers to feel more familiar to the individual. Furthermore, too many changes in the scale to counter method bias can impact the scale's validity, which means that a delicate balance is required between scale reliability and method bias. (Podsakoff et al., 2003).

In controlling for method bias in this study a Harman’s single factor test has been conducted, this method determines if a majority of variance in the data can be attributed to one single factor. This is in line with the recommendation put forth by Podsakoff et

al., (2003). The total variance extracted in this study is 40,6% which is under the recommended maximum of 50%. This means that the validity of this study is not majorly impacted by factor bias.

3.4 Case study

As this research focuses on the contemporary phenomenon within one organization, this is classified as a case study. Typically, case studies are more common in the qualitative research field as they are very suited to the creating and testing theories. A case study is a method particularly suited to understanding a single situation in a single setting, which means that the findings have low transferability to other research or even other firms (de Massis & Kotlar, 2014). While the method is more commonly used in qualitative research, as a tool it can also be used in quantitative research. The method relies heavily on the skill and expertise of the person conducting the study and how this individual can translate the theory of case studies into practice. (Yin, 2014)

There are six elements to a case study according to Yin (2014), Plan, design, preparation, collection, analysis and reporting. These make up the keys to conducting a successful case study and utilizing the method to its full advantage. The combination of a quantitative method with a case study can seem counter-intuitive in that the case study aims to explore specific phenomenon. However, staying on a “high” level of insight that quantitative research provides, the researcher has ample opportunity to match the finding to existing theories. This enables us to draw large high-level conclusions from the data analysis while tying it back to theory for wider insights. This thesis is aiming for revelatory findings in this very specific environment. With this in mind the aims create analytical generalization typing back to existing theories instead of relying purely on statistical generalizations. As case studies are generalizable to theories and not to populations as a whole, it is important to compare the results to previously theories. This can be done in different ways in search for patterns and insights. While in this study explanation building will mainly be used there are alternative ways to going about this such as, logic models, pattern matching, time-series analysis, and cross-case synthesis. The method of choice is dependent on both the goal of the study and the available data (Yin, 2014).

In explanation building an initial theoretical statement is hypothesized toward which the initial findings are compared. Through this process, revisions to the initial hypothesis can be done to better represent the findings and compare to the rest of the environmental

factors. The desired end-state which in this case is increased motivation can be reached in through different paths with all the variables involved, as such the solution proposed must be considered as only one path(Mahoney & Goerts, 2006).

Although it is not possible to revisit the questionnaire after a few results as Yin (2014) suggests, by conducting a test collection the process can in a way guide itself. In choosing a specific type of case study design the researcher will need to go back to the research question and figure out the correct method from explanatory, exploratory or descriptive (Yin, 2014).

In this case I am aiming to prove through abductive means that certain factors influence the motivation of individuals, in this case that means we are going for a descriptive case study. The descriptive case study will base its insights on established research found above in chapter three and combine these with the findings in chapter five. In this way the case study serves its purpose in allowing us to understand the phenomena that affect motivation in a very specific environment.

To get more transferable findings one would ideally use multiple organisations or a triangulation method with other data sources, such as qualitative data for deeper insight (de Massis et al., 2014).

3.4.1 Case presentation

The case study is conducted a one corporation with two different manufacturing locations in Finland, these manufacturing assets are located in different regions of Finland, Finland proper and Ostrobothnia. The company is mainly focused on the first stage of manufacturing, being a subcontractor to a wide variety of industries in Finland. The organization is classified as a SME and within this categorization falls in the “small” end with total revenues of under 10 million annually.

The organization had a need to understand the motivational drivers within their increasingly large workforce. With a larger number of employees and no signs of slowing growth processes had to be implemented, for managers to know every employee on a personal level was no longer an option. Hence this study was started to get an understanding of what motivational drivers could be found on a general level, so that changes could be implemented to foster this.

These changes were intended to increase the productivity of the workforce through changes that the majority of individuals felt were important. This was aimed to support

not just the motivation but also the recruiting efforts through creating a hospitable work environment for both industry professionals and employees switching industries.

The intended effect of this case study was to create actionable insight that the organization could build on through further study on a more personal level. As the quantitative aspects of this study do not cater to individual insights these were to be undertaken by the company based on the general insight supplied by this case.

3.5 Data collection method

As the purpose of this study is to understand the motivational factors on a high level a questionnaire method was chosen. This was done to get comparable and generalizable that could be used across the different sites. Further study can then deep dive into the subject after any problem areas have been identified.

In using a survey method, the researcher is able to eliminate any interview effects that might arise from questions coming in a different order or being discussed with a different tone (Bryman & Bell, 2015). In this particular instance it will be essential that interaction between the individual collecting the data and the respondent will be minimized.

With this method of a survey delivered to the individual personally, there are several advantages and disadvantages that need to be consider. Key issue may include restricted sample to those on site, reluctant respondents make for extreme responses and organizational approval is hard to get (Anderson et al., 2020). In this situation the main issue is regarding extreme responses that this collection method might entail, as every employee in the sample size works on site and organizational authorization has already been approved. The anonymity of the respondents also needs to be ensured as the according to Anderson et al (2020) in studies where the collection method involves face to face communication the “Anonymity is visible” by the collector.

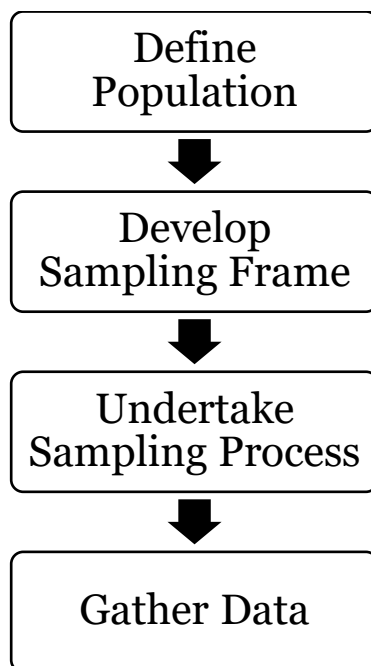
Advantages with this method include a good response rate, more involved respondents that don't quickly skim through the survey and any clarification is possible (Anderson et al., 2020). These benefits far outweigh any disadvantages such as travel time and extreme answers, which is why the in-person method of collection will be used.

3.6 Population

In selecting the population for this research, the choice was simple. The choice was made to survey all workers currently working in any capacity for the company or its co-

operation partners with the exclusion of upper management. By upper management it has been decided that this includes anyone included in deciding about the strategic role of the company, e.g., C-level executives and factory managers. The total population size was deemed to be 70 individuals at the time of conducting the survey.

Figure 9 **Sampling Process**



(Anderson et al., 2020)

In following with the sample selection process the whole population will be approached, but to get a representative sample size, at least 59 answers should be collected. The sampling frame was created by defining the population to individuals working below management, and to keep the anonymity no list was printed. The sample consisted of two factories which meant that a geographical identifier was added but the sample will be of the whole company (Anderson et al., 2020).

3.7 Survey Design

In the creation of a good survey, one has to take into consideration a multiple of different factors. During the creation of this thesis the survey creation took considerable time as the survey was iterated multiple times both by feedback of my supervisor and through testing on individuals at the firm.

As this survey will minimize interaction that could affect the results, the importance of good questions cannot be understated. In designing the survey questions, one must first and foremost keep in mind the research questions, because these should be intertwined from the start (Bryman et al., 2015). In addition, as general rules Bryman & Bell (2015) recommend using a bit of common sense in thinking, what do you want to know and how you would answer the question yourself.

When you've applied these rules of common sense it is also important to remember that the questions should be as simple and clear as possible, there chance for different interpretations should be as small as possible. This is because both interpretation and difficult language can cause the respondent to not take the time required to understand the question before answering (Lenzner, 2012).

During the creation of the survey, multiple previous published papers and theses were used to find similarities and create the questions that would match up to the research being conducted in this survey. There were no exact matches to the types of questions that were of interest. Many published articles did not include their questionnaires which did not help in the designing of questions. Three different theses (Alemnew, 2014; Malm, 2015; Piilola, 2020) were used to create a combination of questions that would be suitable to the objectives of this study, both culturally and industrially. All three theses were used to assist in the creation of the questions, in addition to the theoretical framework above.

In creating the survey, a 5-point Likert scale was used. The Likert scale is a frequently used psychometric tool used in social sciences research. It has also been determined that the Likert scale is one of the most effective methods for analyzing human behaviour (Joshi et al., 2015). The Likert method can be combined with different scales depending on the researcher's goals; this combination will also determine the type of tests that will yield the best results. In creating a composite score, an interval scale should be used. This interval scale will enable statistical testing with tests such as Pearson's correlation, ANOVA, and regression (Joshi et al., 2015).

In concluding the survey, it has been highlighted that the questions should still be as easy as possible to answer because the less cognitive effort it takes to fill out the form, the fewer errors the data will contain (Lenzner, 2012).

After multiple iterations with the knowledge gained from above, the survey took its final form, which can be seen in Appendix 1 below. This survey aims to support the research questions while being as simple and short as possible to get correct answers

3.8 Measures and variables

The empirical data for this thesis is based on data collected from workers currently in blue-collar work engagements through a questionnaire. The questionnaire and its questions are based on existing literature on motivation research, workplace motivation and human psychology. Due to the existing GDPR Laws, to protect privacy and ensure honest answers, the survey has no factors that can be directly tied to any individual. However, the respondents are aware of the study and its purpose in building a better workplace for all individuals involved. The study will be pilot tested on several participants that will not be taking part in the study population.

3.8.1 Dependent variables

The respondents are asked at the end of the questionnaire how motivated they feel at their current place of work, and this will serve as a base and a guide for the analysis.

3.8.2 Independent variables

The second part of the questionnaire contains questions regarding how the individual currently feels about their motivation levels, and their employer. These questions are designed to gauge individuals' motivational drivers independent of each other. Independent variables that are being investigated in this study are listed below.

- Performance score (perceived and self-evaluated)
- Commitment*
- Job satisfaction*
- Work interest*
- Pay & benefits satisfaction*
- Perceived equity
- Perceived opportunities*
- Workplace enjoyment*
- Feedback quality
- Co-worker relations
- Working time arrangements
- Work related knowledge

**used in regression*

3.8.3 Control variables

At the beginning of the questionnaire, the respondents are asked to fill out general demographic information such as age, gender, and education. The demographic characteristics have been selected to control for differences in subsets of the pool of applicants. In addition, tenure at the corporation has also been included as a control variable to understand if tenure, regardless of position, has an effect.

The control variables have been made into nominal variables where possible, such as gender has been coded to male “1” and female “2”. Other variables have been made into scale variables to ensure grouping into subsets. Tenure has been scaled in months or years to cater to both short- and long-term employees. (The intervals will be outlined in the questionnaire in the appendix)

3.9 Data collection execution

The data collections for this study took place during two weeks in May 2022. During this period, I toured the production facilities of the company with a tablet. While the survey was delivered in a method akin to face-to-face, the results were recorded by the subjects themselves. No answers or deeper discussions surrounding the questions were conducted during the time when the survey was being filled. Participants were free to discuss any matter that was not covered by the survey at the end of the interaction. When relevant, these “additional” results will be presented later in the study. This discussion was always conducted after the questionnaire to prevent any interviewer effects on the results.

Every employee that does not work in a management capacity at the company was approached to get the largest pool of answers possible. The only exception was individuals who were on medical leave at the time.

3.10 Data analysis

As the purpose of this thesis is to investigate motivation among blue-collar workers, to fulfil this purpose, multiple independent variables will be used to identify patterns and drivers. The questionnaire contains 33 items, and the scoring is derived from the 5-point Likert scale, which runs from 1 “completely disagree” to 5 “completely agree”. Respondents will be asked how motivated they feel at their current workplace and about multiple factors contributing to this fact.

After the data had been collected and properly prepared, multiple analyses were conducted to test the constructs' reliability and facilitate a result. The following tests will be conducted and are described in more detail below: Descriptive statistics, Reliability analysis, Pearson correlation and univariate data analyses.

3.10.1 Reliability Analysis

The internal consistency will be measured in conducting a reliability analysis on the questionnaire. In essence this means that a statistical test will be run to measure how closely related a set of items are, in this case answers to the questionnaire questions. Again, this is done to quantify the reliability on a scale.

When conducting a reliability analysis, it is essential to quantify which coefficient has been used in testing, as this is something that scholars have found is often left out. It is also advisable to not only rely on Cronbach's alpha in testing as it has been shown not to be the only viable option, although it is the most common one (Cho, 2016).

As scoring goes, the generally accepted rule is that an α between 0.6-0.7 indicates acceptable reliability. Anything over 0.8 is considered excellent reliability in terms of testing. In order to also avoid redundancy in one survey it is advisable that the score not exceed 0.95 (Ursachi et al., 2015)

$$a = \frac{k}{k-1} \left(1 - \frac{\sum V_i}{V_t}\right)$$

3.10.2 Pearson Correlation

A bivariate Pearson correlation analysis will be run on the data to explore the strength of relationships between variables. In a Pearson correlation the resulting coefficient is going to be between -1 and 1 depending on the strength of the relationship and whether the relationship is positive or negative. The closer the resulting coefficient is to 1, the stronger the positive correlation of the variables. The same applies to negative correlation, where the closer the coefficient is to -1 the more inverse correlation the variables have.

A positive linear correlation means that a high value of variable "α" correlates with a high value of a variable "β". Conversely, in the case of a negative correlation the variable "α" will have a positive value that will correlate negatively with the value of "β".

In testing the values from the Pearson correlation, the following formula is used to test for statistical significance.

$$t = \frac{r_{xy}\sqrt{n-2}}{\sqrt{1-r_{xy}^2}}$$

3.10.3 ANOVA analysis

A Factorial ANOVA analysis will be conducted to test the independent variables defined above. A one-way test will be used in this thesis. This will be done to find if there are any statistical differences between independent groups (age & gender) in the sample. In this way we will be able to investigate if there is a significant difference in motivation between these groups.

$$F = \frac{MST}{MSE}$$

$$MST = \frac{\sum_{i=1}^k \left(\frac{T_i^2}{n_i}\right) - \frac{G^2}{n}}{k-1}$$

$$MSE = \frac{\sum_{i=1}^k \sum_{j=1}^{n_i} - \sum_{i=1}^k \left(\frac{T_i^2}{n_i}\right)}{n-k}$$

3.10.4 Paired sample T-test

A statistical paired T-test aims to analyse the differences between values, where one is deducted from the other. In this sense we are able to determine how much the mean difference between two sets deviates from zero.

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2) - (\sum d)^2}{n-1}}}$$

3.10.5 Linear regression

Linear regression will be used to test the predictive value of different factors on overall motivation of employees, a linear regression will do this. The aim of this is to predict the dependent variable which in this case is motivation, by finding and using independent

variables that are able to predict this value. In this sense we will be using a linear approach to model a relationship between variables. The following regression model will be used in this thesis to understand motivational factors

$$\begin{aligned} MOTIVATION = & \beta_0 + \beta_1 Satisfaction + \beta_2 Interest + \beta_3 Pay\ Satisfaction \\ & + \beta_4 Performance\ Score + \beta_5 Commitment + \beta_6 Benefits\ satisfaction \\ & + \beta_7 Pay\ Perception + \beta_8 Improve\ and\ advance + \beta_9 Enjoy\ Workplace \\ & + \beta_{10} Work\ time\ arrangement + \beta_{11} Motivation\ to\ exert\ more + \varepsilon \end{aligned}$$

3.11 Research Ethic

Research ethics is essential when conducting research to ensure that the results are both scientifically valid and trustworthy. Research ethics as a whole is up for debate, as is the whole field of ethics. There are numerous published works on what good scientific praxis is and what it should be. As we are focusing on a Finnish company with Finnish employees this study will follow the guidelines set out by the relevant European authority.

The principles laid out in the European code of conduct for research integrity are as follows: reliability, honesty, respect and accountability. In being reliable the research needs to stand up to a certain level of quality that is consistent throughout the work and the methods used. In being honest the researcher is instructed to be transparent, fair and unbiased to try and create the most realistic and unbiased view of what is being researched. With respect the guidelines refer to that of all individuals involved from fellow researchers to culture. As a natural part of the research, the accountability of the researcher is also key in publishing works. Being able to stand behind your research proudly is key for future researchers that might use the material or any societal impacts that result from the research (The European Code of Conduct for Research Integrity, 2017).

Recent legislative developments have also imposed a significant burden on data practices and management. These are no different regarding research, especially if it contains sensitive material that can be linked to the participants. Specific conditions need to be met in this case as the organization sponsors the data collection. While the organization is a part of the collection, the raw data is missing identifiers, which would make drawing a connection between individual answers and employees hard. Although this is the case the decision was also made not to hand over the raw data to the organization. Instead,

the insights gathered from the statistical analysis can be handed over for further processing. In this way no individual will feel that there are any risks of identification.

4 RESULTS

In this chapter the results and analysis of the empirical study will be presented. The chapter will start with descriptive statistics of the population and further on the results from the statistical test and analysis will be presented. In conducting the data analysis multiple tools have been used, including Excel for data clean-up and with the addition of XLSTATS to conduct the independence and homoscedasticity tests. SPSS (version 28) was used to conduct the correlation and ANOVA analysis. Finally, RStudio with the lavaan package was used to conduct the regressions and path analysis presented at the end of the chapter.

4.1 Descriptive statistics

The questionnaire used to collect the data was shown physically with a tablet to all the individuals chosen to participate. The survey population was 62 where four individuals declined to answer the survey, which means that the answer percentage of the survey was an impressive 94,4%. This high percentage of answers can largely be attributed to the in-person collection. Individuals that answered the survey were also allowed to refer to the survey if all the planned tasks for the day could not be completed.

In table 2 below the gender distribution of the respondents can be seen. There is a good distribution between male and female respondents, but as the male population is almost double that of the female population this needs to be kept in mind during the analysis as not to unnecessarily skew the results.

Table 2 Survey respondents gender distribution

Gender	Frequency	Percent	Cumulative Percent
Female	20	34.5	34.5
Male	36	62.1	96.6
N/A	2	3.4	100.0
Total	58	100.0	

The age distribution, as seen in table 3 is not as well distributed. The majority of respondents (65,5%) are in the age bracket 26-40, with the next biggest population in the bracket 41-55. The underrepresentation in the brackets of 18-25 and 55+ cannot be drawn from the survey results. In discussion with participants, the highly physical nature of the work on the factory floor can be a reason as to why there are few 55+ individuals still able to perform the work. The underrepresentation of 18-25 was not due to any

specific reason as the work conducted at the surveyed company did not require any formal education.

Table 3 Survey respondents age distribution

Age	Frequency	Percent	Cumulative Percent
18-25	4	6.9	6.9
26-40	38	65.5	72.4
41-55	14	24.1	96.6
55+	2	3.4	100.0
Total	58	100.0	

The majority of employees surveyed have completed vocational education or the upper secondary stage according to the data. This reflects that there are no general requirements for educational background when applying to the surveyed blue-collar jobs. While education in fabrication or technical fields can ease the work, the majority of the knowledge is gained through experience in the workplace.

Firms in manufacturing also have established training programs in place to educate and ease individuals into the job. The higher education in the sample can be correlated to staff working in more senior positions such as order processing or planning where degrees in engineering or business are more common. These insights can be corroborated from table 4 below.

Table 4 Survey respondents' education

Education	Frequency	Percent
Basic comprehensive education	6	10.3
Upper secondary or vocational education	34	58.6
Bachelor (university or university of applied sciences)	12	20.7
Master's degree	4	6.9
Other	2	3.4
Total	58	100.0

When delving deeper into organizational facts in table 5, the tenure of individuals are evenly distributed across the range, with the individuals over ten years being the smallest surveyed group. This spread of employee tenure can be attributed to several factors, such as the high growth the industry and its organization have enjoyed during the last economic cycle. This has led to an influx of individuals during the last years.

Table 5 Survey respondents Tenure at employer

Tenure	Frequency	Percent	Cumulative Percent
Under a year	18	31.0	31.0
1-4	14	24.1	55.2
5-10	18	31.0	86.2
Over 10	8	13.8	100.0
Total	58	100.0	

From the question descriptive in table 6 we can clearly see that the workforce at this organization clearly is motivated (4,10) and committed (4,14). The low standard deviation of 0,48 and 0,57 respectively corroborate the fact that this is true across the population. In addition, job satisfaction (4,14), workplace enjoyment (4,24) and work interest (4,00) similarly all have a mean above 4.

The highest marks in the questionnaire can be seen with the two questions relating to co-workers, which have got a median of 4,52 for enjoying time with co-workers and 4,72 for getting help from co-workers

On the other end of the spectrum, we can see that satisfaction with benefits and pay are above the median of 2.5 for the answers but not by much. This would entail that the population is neither dissatisfied nor satisfied with their remuneration. We are able to see a larger standard deviation for these two factors which entails a more extensive spread of the answers.

Table 6 Question descriptive statistics

Question	Mean	SD	Term
I feel motivated at work	4,10	0,48	Motivation
I am committed to my current work and employer	4,14	0,57	Commitment
I'm satisfied in my job	4,14	0,51	Job satisfaction
My work is interesting	4,00	0,74	Interest
I am satisfied with the amount of pay I receive	2,93	1,08	Pay satisfaction
I am satisfied with the other benefits I receive	2,72	0,74	Benefits satisfaction
I perceive the pay I receive as fair & equitable	3,00	0,91	Pay equity
I am satisfied with the opportunities for promotion	3,00	0,74	Promotion
I have the possibility to improve and advance in my job	3,93	0,78	Improve
I enjoy my workplace	4,24	0,50	Enjoyment
My supervisor outlines the goals and expectations of my work clearly	2,90	1,09	Goal setting
I receive enough feedback from my supervisor	2,86	1,04	Feedback
I enjoy my time with my co-workers	4,52	0,50	Co-worker enjoyment
I get help from my co-workers	4,72	0,45	Co-worker enjoyment
Working time arrangements (e.g., Shift and holiday wishes) are working	3,86	0,94	Work Arrangements
The company leadership outlines the goals and expectations of my work clearly	3,07	0,94	Goal setting
I receive enough feedback from the company leadership	2,72	0,94	Feedback
I know what our company strategy is	3,31	0,75	Strategy

4.2 Reliability Analysis

In a reliability analysis on the questionnaire, two different coefficients were used to test the reliability. The most used one, Cronbach's alpha, showed reliability of 0.830 which can be considered in the sweet spot according to Ursachi et al., (2015).

Another coefficient used in testing was McDonald's omega to ensure reliability showed 0,798, which can also be considered acceptable for this survey.

4.3 Data Normality

In checking for the data set's normality, one tests if it is normally distributed. If the data at hand is not normally distributed, it can lessen the predictive power of the regression. When a sample is normally distributed, it means that the sample is symmetrically distributed around the sample's mean (Krithikadatta, 2014). In this thesis a one-sample Kolmogorov-Smirnov test was conducted to ensure the distribution of the sample. As the Kolmogorov-Smirnov test has as its null hypothesis that the sample is normally distributed and opposing hypothesis is that the sample is not normally distributed.

In testing the normal distribution of this sample, the Kolmogorov-Smirnov test showed that all factors exhibit normal distribution, and the significance is $<0,001$. This means that in further analysis we do not need to worry about the normal distribution of the sample.

4.4 Data Independence

To test the data used in the regression for correlation between consecutive residuals the Durbin-Watson test was conducted. The Durbin-Watson test is the standard when testing for residual correlation to ensure linear regression validity (Tillman, 1975). According to the Durbin-Watson table, the regression containing a sample size of 57 and 8 independent variables the result should fall between 1.25 and 1.96. The results from the analysis show that the data possess a high enough independence level of 1,87, which falls within the acceptable range for this regression.

4.5 Homoscedasticity

Another assumption in conducting linear regressions is that all residuals have a constant variance at every level, if this is the case it can be considered homoscedastic. The opposite of this is called heteroscedasticity. In a regression model homoscedasticity is preferred as homoscedastic can increase the number of errors that can cause a false positive (Jarque & Bera, 1980). In testing for homoscedasticity in table 7, we can see that as the computed p-value is greater than the alpha (0,05) significance level. This means that we cannot reject the H_0 hypothesis which entails that the results are homoscedastic.

Table 7 Homoscedasticity tests

White test	
LM (Observed value)	1,196
LM (Critical value)	5,991
DF	2
p-value (Two-tailed)	0,550
alpha	0,05

Ho: Residuals are homoscedastic, Ha: Residuals are heteroscedastic

4.6 Pearson Correlations

The hypotheses that will be tested by using the Pearson correlation method will be presented below. Any additional insight that has been gained in addition to the outlined hypothesis tests will also be covered. Results that are significant on both the 0.05 and

0.01 will be presented in the results. If a correlation is significant on the 0.05 level, there is a 95% chance of the assumption being true, the same holds for 0.01 which entails a 99% chance of the assumption being true.

4.6.1 *Satisfaction with future opportunities increases motivation*

In testing the hypothesis *H1* that satisfaction with one's future opportunities at the current organization increases motivation as per Vroom (1964), three factors were chosen for the correlation test. 1. How motivated the individual feels, 2. How satisfied the individual is with opportunities for promotion and 3. If the individual feels they have the possibility to improve and advance in their current job.

As can be seen from table 8 below, there is a correlation of 0,293 at the 0.05 level between the individual feeling motivated and having the possibility to improve and advance. This entails that there is a weak positive connection between the two variables. We can then confirm the hypothesis that satisfaction with future opportunities impacts work motivation, although the connection is not strong.

This correlation test means that individuals in this sample do not feel more motivated if they are satisfied with the opportunities for purely a promotion. Instead, there has to be an additional component in actually improving in the job to increase motivation as can be seen from table 8.

Table 8 Pearson correlation: Motivation and future opportunities

Variable		1.	2.	3.
1.I feel motivated at work	Pearson Correlation	1	0,193	,293*
	Sig. (2-tailed)		(0,146)	(0,025)
2.I am satisfied with the opportunities for promotion	Pearson Correlation	0,193	1	,532**
	Sig. (2-tailed)	(0,146)		(0,000)
3.I have the possibility to improve and advance in my job	Pearson Correlation	,293*	,532**	1
	Sig. (2-tailed)	(0,025)	(0,000)	

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

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

4.6.2 *Positive interactions with co-worker's increase motivation*

In testing *H2* how co-worker relations impact workplace enjoyment and motivation as per Maslow (1943) and Alderfer (1972) A four-way correlation was conducted with the following variables 1. I get help from my co-workers, 2. I enjoy time with my co-workers, 3. I enjoy my workplace and 4. I feel motivated at work.

From this correlation matrix several connections can be found, on the 0.01 level we can see that there is a strong significant correlation between feeling motivated and enjoying time with co-workers (0,495). The correlation is even larger between enjoying time with one's co-workers and enjoying the workplace (0,602). Finally, enjoying the workplace positively correlates with feeling motivated at 0,754. All these figures can be seen in table 9 below.

Going to the correlations on a 0.05 level we can see that getting help from co-workers impacts enjoyment in the workplace (0,297) but ultimately not overall motivation.

The results we can draw from these are that 1. The hypothesis can be confirmed that co-workers have a significant impact on both workplace enjoyment and motivation. The most important being that an individual likes spending time with his/her colleagues.

Table 9 Pearson correlation: Co-workers, enjoyment and motivation

Variable		1.	2.	3.	4.
1.I get help from my co-workers	Pearson Correlation	1	,484**	,297*	0,133
	Sig. (2-tailed)		(0,000)	(0,024)	(0,320)
2.I enjoy my time with my co-workers	Pearson Correlation	,484**	1	,602**	,495**
	Sig. (2-tailed)	(0,000)		(0,000)	(0,000)
3.I enjoy my workplace	Pearson Correlation	,297*	,602**	1	,754**
	Sig. (2-tailed)	(0,024)	(0,000)		(0,000)
4.I feel motivated at work	Pearson Correlation	0,133	,495**	,754**	1
	Sig. (2-tailed)	(0,320)	(0,000)	(0,000)	

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

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

4.6.3 Perceived equity in financial rewards (pay) increases motivation

In understanding whether perceived equity in rewards impacts individuals' motivation as per the equity theory by Adams (1976), another Pearson correlation was run to find if the relationship is negatively or positively correlated. As can be seen from table 10 below, there is a significant result of 0,316 on the 0.05 level.

This would entail that the hypothesis *H2a* is confirmed and there is a positive relationship between perceiving your pay as fair and feeling motivated.

Table 10 Pearson correlation: Perceived equity and motivation

Variable		1.	2.
1.I feel motivated at work	Pearson Correlation Sig. (2-tailed)	1	,316* (0,016)
2.I perceive my pay as fair	Pearson Correlation Sig. (2-tailed)	,316* (0,016)	1

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

4.6.4 Organizational commitment increases work motivation

Table 11 below alludes to a correlation between organizational commitment and work motivation. A correlation of 0,325 at the 0.05 level tells that there is an interplay between the factors, but there is no clarity as to which causes the other. So, in theory yes, we can confirm the hypothesis that an individual who is committed to the organization has more motivation. However, we cannot grasp if the relationship is the other way around. i.e., a more motivated worker is also more committed to the organization. Hence, it can be argued that hypothesis h_4 cannot be confirmed as such.

Variable		1.	2.
1.I feel motivated at work	Pearson Correlation Sig. (2-tailed)	1	,325* (0,013)
2.I feel committed to my current employer	Pearson Correlation Sig. (2-tailed)	,325* (0,013)	1

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

Table 11 Pearson correlation: Commitment and motivation

4.6.5 Performance score increases motivation

In rating themselves the employees on average felt that they would give themselves a number that is 0,3793 higher than their supervisors would, on a scale of 4-10. This shows that there is a difference in how employees feel they are performing and how their supervisors register their performance. Although this difference is low, shown by the standard deviation (0,6442) and mean of difference (0,3793) in table 12 below.

Table 12 Paired sample T test: Performance score

Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df
			Low	High		
0,3793	0,6442	0,0846	0,2099	0,5487	4,484	57

Own performance score - Perceived performance score

Looking further at whether either their own or their perceived supervisor score ultimately impacts motivation, we have a look at table 13 below. From the table we can see that there is a negative correlation (-0,300) at the 0.05 level between “own performance score” and motivation. This result points to the fact that employees who rate themselves higher, suffer from lower motivation. This means our hypothesis is not true. While the score affects motivation it does decrease overall motivation.

This result does not carry over to the perceived performance score. Even though there is no correlation between perceived score and motivation we can conclude that the perceived performance score is closer to the truth of a “real” score possibly correlated with actual job performance.

Table 13 Pearson correlation: Performance scores and motivation

Variable		1.	2.	3.
1. Own performance score	Pearson Correlation	1	,569**	-,300*
	Sig. (2-tailed)		(0,000)	(0,022)
2. Perceived performance score	Pearson Correlation	,569**	1	0,141
	Sig. (2-tailed)	(0,000)		(0,290)
3. I feel motivated at work	Pearson Correlation	-,300*	0,141	1
	Sig. (2-tailed)	(0,022)	(0,290)	

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

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

4.7 ANOVA

This subchapter will present the results from hypothesis tests requiring ANOVA tests. For the purpose of this study an analysis of variance has been conducted on the dependent motivation with two different Factors: Age and Gender. These statistical tests have been conducted to check if there are differences between age and gender groups regarding motivational factors. In addition, a Tukey’s range test has also been conducted to find differences between specific groups.

Understanding if there are differences in motivation between both age and gender groups is essential in creating a workplace that is motivating for all participants (Sigmundsson et al., 2020). Hence through these tests we can find out if there are any significant differences in this organization and conduct further tests.

4.7.1 Motivation and Gender

By running an ANOVA test on the respondents’ answers for motivation and age group, we will try and establish if there are any differences in the mean value for each of the age

groups. As can be seen from table 14 below, there is no significant relationship to be found as the sig. is 0,952 which means that we can conclude that all the gender groups are equally motivated. A Tukey's range test also reiterated this fact.

Table 14 ANOVA: Motivation & Gender

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0,024	2	0,012	0,049	0,952
Within Groups	13,356	55	0,243		
Total	13,379	57			

4.7.2 Motivation and Age

In testing for differences in motivation between different age groups we can determine if further tests such as a multiple analysis of variance tests should be conducted to understand the underlying factors.

As we can see in table 15 below, even though the results are closer to being significant. These differences are not significant which means we can assume that the population in the different age brackets is equally motivated.

Table 15 ANOVA: Motivation & Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0,800	3	0,267	1,145	0,339
Within Groups	12,579	54	0,233		
Total	13,379	57			

4.8 Regressions

Through a regression analysis we'll be analysing which factors could be considered as predictors for motivation. In successfully predicting if variables are able to predict motivation, these variables can be prioritized for further investigation

By first looking at the model summary, we can see that R-squared is 0.947 which means that the factors can explain 94,7% of the variance in motivation in the regression model. Furthermore, the error estimate is also very low which leads to the conclusion that the model is very predictive of motivation.

Table 16 Regression Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,973 ^a	0,947	0,935	0,12397

a. Predictors: (Constant), i_have_motivation_to_exert_more_effort, Commitment, satisfied_with_possibility_to_improve_and_advance, Satisfied_with_pay, Working_time_arrangements_work, Own_performance_score, Satisfied_with_benefits, Like_work, Percieve_pay_fair, Enjoy_workplace, Find_work_interesting

b. Dependent Variable: Motivation

Looking at the independent variables we can see that job satisfaction has a high score (0,580) and a significance below $<0,001$ which means this variable is highly effective in predicting overall motivation. This would sound very obvious but hard to prove, an individual that is satisfied in their job is on average more motivated. The next variable we can see having a significant effect is satisfaction with pay (0,205) at a significance level of 0,003. A clear connection between satisfaction with financial rewards and motivation leads us to conclude that individuals in this sample are very motivated by pay. This fact can be good or bad in terms of how the organization is able to cater to these financial needs. Another significant variable in this regression is commitment (0,170) with a significance of $<0,001$. If an individual is committed to the organization, this will directly lead to increased motivation. This puts us in a catch twenty-two as the organisation's goal is to commit people, and motivation is seen as a key component of employee retention(Ramlall, 2004).

Other less significant but still predictive factors in this analysis are perceiving pay fair (-0,164) and enjoying the workplace (0,178). This would mean that individuals that perceive their pay as fair are negative predictors of motivation, while being satisfied with pay is a positive predictor. This relationship will be further analysed in the following path analysis. Enjoying the workplace also is a part of an individual's overall motivation which seems to corroborate that enjoyment plays an important part just as interest.

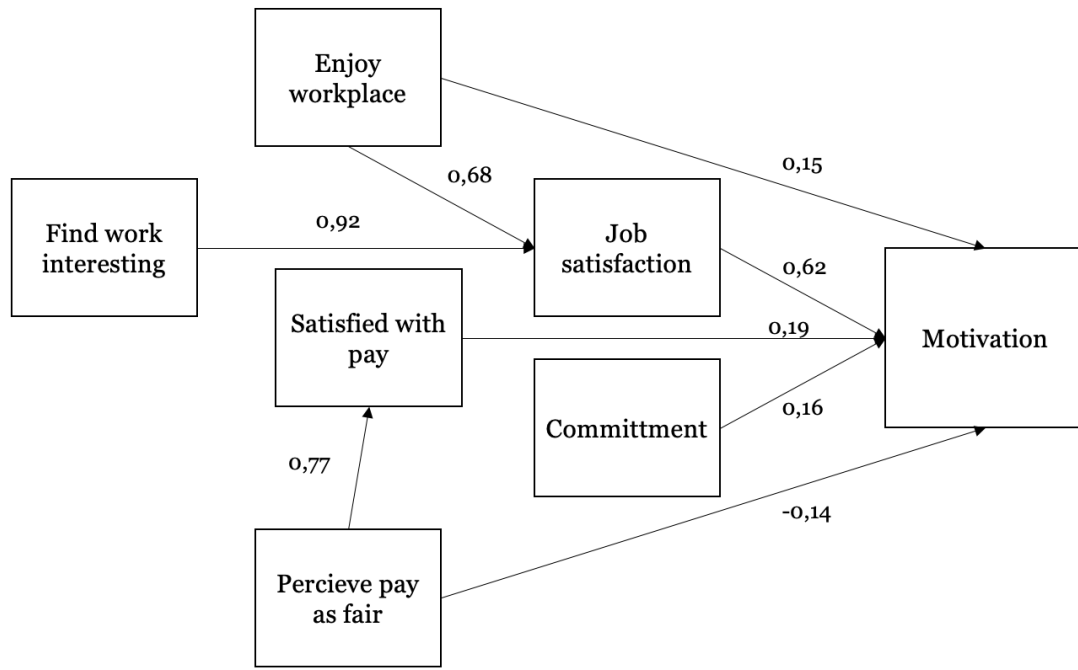
Table 17 Regression 1: Motivation

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0,392	0,357		1,098	0,278
Job Satisfaction	0,549	0,097	0,580	5,682	0,001**
Find work interesting	0,078	0,061	0,120	1,268	0,211
Satisfied with pay	0,091	0,029	0,205	3,179	0,003**
Own performance score	-0,032	0,031	-0,044	-1,046	0,301
Commitment	0,143	0,031	0,170	4,646	0,001**
Satisfied with benefits	-0,022	0,027	-0,034	-0,795	0,431
Perceive pay fair	-0,087	0,030	-0,164	-2,856	0,006**
Satisfied with possibility to improve and advance	0,008	0,025	0,013	0,328	0,744
Enjoy workplace	0,170	0,060	0,178	2,860	0,006**
Working time arrangements work	-0,021	0,020	-0,041	-1,031	0,308
I have motivation to exert more effort	0,198	0,078	0,126	2,526	0,015*

a. Dependent Variable: Motivation

Now that the regression model for motivation has been analysed it is prudent that we understand how the factors are built up, as many of these categories are intertwined and predictive models can be built by pathing.

As seen below in figure 10 and table 17 we find interesting relationships that give more depth to the analysis. Looking beyond the first level, we can see that perceiving pay as fair is a strong positive predictor of being satisfied with pay (0.77), while being a negative predictor of overall motivation (-0,14). Enjoying the workplace impacts job satisfaction (0.68) as does finding work interesting (0,92). This entail that job satisfaction is built up of a combination of parameters that ultimately result in motivation. None of the tested variables had any significant relationship in shaping commitment which points to the fact that this research did not cover commitment factors to a satisfactory degree.

Figure 10 Motivation path analysis**Table 18** Path analysis: Motivation

Construct	Coefficient	
	Std. Beta	Sig.
Job satisfaction -> Motivation	0,62	0,001**
Commitment -> Motivation	0,16	0,001**
Satisfied with pay -> Motivation	0,19	0,003**
Enjoy workplace -> Motivation	0,15	0,006**
Perceive pay as fair -> Motivation	-0,14	0,006**
Perceive pay as fair-> Satisfied with pay	0,77	0,001**
Enjoy workplace -> Job satisfaction	0,68	0,001**
Find work interesting -> Job satisfaction	0,92	0,001**

The findings from all the hypotheses tested can be found in table 18 below. In testing the first few hypotheses the Pearson correlation was used to understand the correlation between variables (if any). This led to several significant relationships being confirmed such as positive interactions with co-workers increasing individual motivation and perceived equity in financial rewards increasing motivation. These results served as a base for further investigation, as correlation does not equal causation and a correlation test does not show us the proper relationship.

ANOVA tests were conducted to find differences in the population and motivation between both age and gender groups, as theorised earlier in chapter 2. However, no significant differences between the motivation of different genders or age groups could be found. The only variation that could be found was between the age group 55+, but this was excluded due to the small sample (2) which means no conclusion can be drawn from the difference, even though it was significant.

Lastly a path analysis was run to understand the factors that influence motivation. This led to the discovery of both first and second order factors and their effects on each other. These impacts can then create a more holistic view of what makes up the motivational landscape. These impacts can be seen above in table 18 and figure 10 in a visualization. As for the original hypothesized relationships, both were confirmed, and the results can be seen in table 19. The next chapter will cover findings that were not initially hypothesized but found during the testing.

Table 19 Summary findings

Hypothesis	Pearson correlation	ANOVA	Regression	Result
H1: Satisfaction with future opportunities increases motivation H1₀: Satisfaction with future opportunities decreases motivation	0,293*	-	-	H1 Unclear
H2: Positive interactions with co-worker's increase motivation H2₀: Positive interactions with co-worker's decreases motivation	0,495**	-	-	H2 Unclear
H3: Perceived equity in financial rewards (pay) increases motivation H3₀: Perceived equity in financial rewards (pay) decreases motivation	0,316*	-	0,205**	H3 Confirmed
H4: Organizational commitment increases motivation H4₀: Organizational commitment decreases motivation	0,325*	-	0,170**	H4 Confirmed
H5: Evaluation scores increase motivation H5₀: Evaluation scores decrease motivation	-0,300*	-	-	H5 Unclear
H6: Age impacts Motivation H6₀: Age does not impact Motivation	-	0,339	-	H6₀ Confirmed
H7: Gender impacts Motivation H7₀: Gender does not impact Motivation	-	0,952	-	H7₀ Confirmed
H8: Job satisfaction increases Motivation H8₀: Job satisfaction decreases Motivation	-	-	0,580**	H8 Confirmed
H9: Satisfaction with pay increases workplace motivation H9₀: Satisfaction with pay decreases workplace motivation	-	-	0,205**	H9 Confirmed

*=95%, **=99%

5 DISCUSSION

In this chapter the results from the above chapter will be discussed and connected to the existing theory. A discussion will also be had as to divergence or connectedness between existing theory and findings. Throughout this chapter the aim is to present what motivates blue-collar workers in the case organization and create actionable insights for further investigations of specific case organizations.

As the objectives of this thesis are to understand the motivational drivers of employees in the case organization with the help of both the theoretical framework and survey results, this last chapter serves to bind together all the findings.

Based on the existing literature, the majority of theories are well established and have been thoroughly vetted over the years. The findings from this literature point to the following, that individuals are motivated by both intrinsic and extrinsic factors and that demography can play an important role in what motivates a particular individual. When delving deeper into these categories of motivation, we find that there are different approaches to cater to individual needs from a collective organizational perspective.

5.1 Descriptive findings

From the descriptive statistics we are able to understand the background in which this study is being conducted. Overall, we can see that the organization has successfully managed to create an environment where the majority of employees are motivated and committed. This substantiates the claim made by Viitala (2004), whereby interested employees are more receptive to external incentives and ultimately resulting in better performance. Job satisfaction also plays a pivotal role in the ultimate enjoyment of the individual according to (Herzberg et al., 1959). In this instance this also substantiates that there are multiple motivational and hygiene factors at play to increase both job satisfaction and workplace enjoyment.

Having multiple factors well above four on the scale of 1-5 points to several of the basal need having been filled for individuals. These can be fulfilled only if the individual feels their existence is not threatened and that they are able to focus on more fulfilling tasks in their daily work lives. This psychological safety is laid out as existence in Alderfer's (1972) modified behavioural pyramid that is based on Maslow (1943).

Translating the results from the descriptive statistics through the lens of Alderfer's (1972) pyramid we can conclude that the results point toward the existential needs being

fulfilled as individuals feel both content and committed to their job and are able to focus on other questions such as pay equity. Moving up the pyramid into the second box “relatedness” we find that individuals working at this organization highly value their co-workers both in terms of time and skill. Upon these facts we can conclude that the social aspects of Maslow’s (1943) pyramid are fulfilled, and individuals are able to focus on internal self-esteem in their job.

The results found also point to an acceptable level of pay equity among the population as the mean of 3 is slightly above the middle point on the scale. According to the framework adapted by Miner (2005) from Adams (1976) we can theorize that there exists some inequity in the firm but are close to equilibrium. To further understand the relationship that exists within the firm more independent tests would have to be conducted to directly be able to compare one’s own performance score to the score that one would give co-workers.

In a small organization of under 100 people and contractors, the hierarchical structure can easily become blurred, and the layers of middle managers don’t exist. Especially with owners involved in management, these types of individuals can often be seen as leaders, managers, and everything else. To test the goal setting and dynamics between workers/managers/leaders two different questions were asked, namely if company leadership and managers outline goals and expectations clearly. These findings tie into the goal-setting theory of Locke and Latham (1990). From the results we gather that the goal-setting by both managers and leaders is suboptimal, with an ok median but large standard deviation for both. In seeking motivating factors according to Locke & Latham (1990) the organization is working in a suboptimal capacity when it comes to either setting goals or translating them to individual workers.

5.2 Individual fit

Every individual brings with them their own values and knowledge to the workplace. Hence having a good fit between individuals and the job that they are expected to do is important.

As was found in the regression job satisfaction is by far the best predictor of overall motivation. While job satisfaction is not something we are able to gasp it is something made up of a plethora of factors. This fact can already be seen in the pathing done were finding the work interesting is the largest predictor while enjoying the workplace also

serves to predict job satisfaction. From this we can gather that the individual ultimately needs to find the work interesting.

Diving into work interests, this is made up of individual wants and needs as to what actually interests them, the organization then needs to try and cater to these wants through job characteristics (Latham & Pinder, 2005). Because if the characteristics of the job do not match up to the individual's wants negative consequences are inevitable. To get a full picture of this we need to look back at the tenure that individuals have at the organization, because when an employee stays for a longer time, the organization plays a key role in developing the characteristics for the individual to develop. (Perry et al., 1982)

We can also see that satisfaction with pay plays an important role in motivation, which is something that is created by a multitude of factors, but firstly their own perception of what is right. This is iterated by Vroom (1964) where an individual's effort is a direct response to the expected reward or result that they are going to get. This is created by the workplace that is responsible for creating and keeping in check these expectations to maintain an acceptable level of work effort. No individual will keep on working hard if they feel their compensation is not reflecting the input that is put into the work.

Secondly this phenomenon can be amplified by Adams (1976) theory where an individual compares themselves to someone they feel is in a similar position. This choice is not always made rationally and thus can also become something that is outside the control of the organization. However, if an individual feels that they are getting the result that matches their effort, but their object of comparison is getting a better reward bad things happen. This leads to negative effects on productivity because of perceived inequities inside (or outside) the firm.

Commitment can also be argued to be an internal factor, as this is a consequence of individual traits such as loyalty. During this study no correlations could be found that had any significant relationship with commitment. Similarly, during multiple regressions no factors had a significant effect on commitment. This then leads to hypothesising as to what ultimately may cause an individual to be committed to an organization. The only reasoning to be found in theory is that of Adams (1976) where motivational factors are key to keeping an individual committed to an organization and the importance of extrinsic motivators in the process (Burke, 2002)

This then leads to the hypothesis that there is a significant relationship between commitment and motivation, both in terms of correlation and predictive power in the regression model. Are the two concepts two sides to the same coin, i.e., a motivated individual is a committed one and vice versa?

Interestingly perceiving pay as fair is a negative predictor in the regression test, while being a strong predictor of satisfaction to pay. This leads to more questions about the validity of the question and underlying data than it answers, as this relationship would entail an inverse relationship between motivation and perceiving pay as fair. Which goes against the existing literature on equity by Adams (1976). While this brings the validity of the regression model into question the validity of the concept needs to be considered when going against an established and tested concepts such as equity/inequity and its effect on motivation.

5.3 Environmental factors

In creating a supportive workplace, the groundwork is set by policies and the organizational culture but ultimately it is created by the individuals who live it. Therefore, recruitment is one of the tools in creating a good workplace through the choice of individuals that will fit the environment. The fact that the questionnaire gives us a very high score for co-workers in this organization is only a testament to this fact. The strong correlation between enjoying time with co-workers and motivation only serves this purpose. In theory this will then serve to create a more hospitable workplace and ultimately drive motivation (Herzberg 1952). In further testing this variable did not in fact play a role in any regression relation to motivation. Hence while there might be correlation and theory to back this up, in this instance the model that was used did not find this predictive. This leaves the question as to why this is the case. Is it because of the low sample size or any other factor that has not been accounted for. It could be theorized that while individuals do enjoy the time with each other, and these are correlated they ultimately are derailed by the belief of inequity that has a negative effect on motivation. Because when individuals feel that their perceived workload and rewards do not match up to that exerted and achieved by others, an imbalance will occur. (Adams, 1976)

What these facts do tell us is that there is a strong want to belong, and the group of co-workers serves an important function in fulfilling the achievement dimension of an individual's wants (McClelland, 1985). This fact can give us a glimpse into the types of individuals that work and thrive at the organization and that the individuals surveyed

are more strongly driven by affiliation than power. An attribute that can play a role in both the longevity and the commitment of working relationships. These loyal individuals do not strive for power and are hence content to serve out their working careers in an environment that fulfils their need for belonging while not forcing promotions and power upon them.

5.4 Demographic factors

When testing related to demographics the data set seemed to have the perfect set-up with an even spread of gender answers and an equally diverse spread in the age brackets. These tests would then aim to build upon the findings of Sigmundsson et al., (2022) as the tests were conducted in a similar environment such as Norway. During the testing no significant differences were found in any of the ANOVA tests that were conducted, with the exception of one between the highest age group and the others. This was however disqualified because of the low observation (2) count which could not be indicative of any findings.

This means that in this population the employees regardless of age or gender are equally motivated and feel that the same factors make up their workplace.

6 CONCLUSION

The purpose of this study is to assess which factors impact the motivation of blue-collar workers in one specific organization. This empirical study thus aims together with an extensive literature review to create understanding for leaders and organizations in what factors will influence ordinary workers' lives and motivation. Taking into account the unprecedented current economic environment and changing employee preferences it is crucial that organizations are able to understand what motivates on the grassroots level. These results will only guide the modification of one workplace environment but can serve as a guideline to other organizations embarking on similar projects.

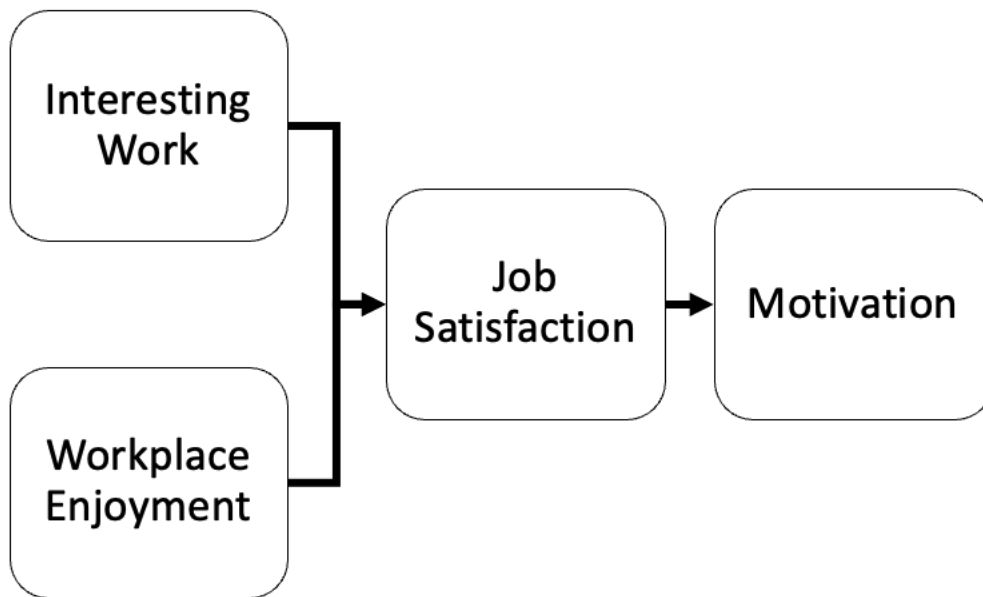
To create insight and ultimately reach the aim of this study, the following questions were focused on during the whole process and ultimately answered.

1. *“Which factors contribute the most to an employee’s workplace motivation.”*
2. *“Which factors make up a holistic view of workplace motivation”*

The process started with a deep dive into classical motivational literature to create a base for the whole study on which more modern findings were gradually incorporated. While the majority of research can be classified as “old”, one would still argue that the seminal works on which the whole field of motivational research is built are important to consider before making any “new” findings.

What could be found from the theoretical framework was in essence, that motivation is not one-sided or even two-sided but a complex individual process where individuals are only forced to adapt to a certain extent. In reality, the organization is the actor that has to be flexible to the individual's needs to maintain a good working relationship.

Significant factors that were found to be predictive of motivation were in the first order, job satisfaction, commitment, satisfaction with pay and workplace enjoyment. Therefore, through the study of these factors’ organizations should be able to understand how motivated individuals are and which parts of the motivational lifecycle are lacking. These can be counted to be the findings from this study. Ultimately the biggest driver was found to be Job satisfaction and it’s two precursors, interesting work, and workplace enjoyment. These factors impact the majority of a worker’s motivation and should be prioritized before other factors are considered.

Figure 11 **Motivational Framework**

Following this, real-world implications in the organization, limitations and how any potential further research should be conducted.

6.1 Implications

The implications of this study are that based on the collected data we can find a clear link between factors that make up motivation. This relationship was also expanded on to create a larger path model for how the motivational factors included in the model impact each other or impact second order factors.

We can therefore claim to have created a general understanding of motivation within the researched organization, at this specific time when the project was conducted. This will lead to clear implications within the organization in how the work and incentives are designed.

The implications for the field of motivational research remain limited as the studied organization can only serve as a basis for that organization, and the insight can inspire ideas in other organizational research of a similar style and scope. Building upon the existing theories has ultimately been beneficial as a majority of the hypothesised factors that were put forth by authors such as Maslow and Herzberg among others were proven to be correct. While this did not lead to any “new” insight within the field it can serve as

another proof that these theories are sound and will work in the Finnish industrial SME segment.

6.2 Limitations

There are several limitations in this study based on both the methodology and analysis itself, in aiming to follow good research ethic these will be highlighted to instruct the reader of these shortcomings.

The choice of theories in a field of motivation can ultimately impact the results that are gathered, as the theories serve as a base upon which the initial understanding is built. The motivational field of research is vast and has multiple different branches depending on which academic branch has investigated the phenomena, such as organizational, social or psychological study.

A case study aims to create generalizable insight around the subject, in this case the insight that has been found through the analysis is only applicable to a very specific subset of organizations. As the investigation was only done on one organization the results are only applicable to that organization in this timeframe, while the general insights gathered can be used in further study of organizations. This key limitation is important to remember in the transferability of the results to other organizations or fields.

The gathered data sample is small for a study of this magnitude and through a quantitative lens, although the data quality has been deemed sound through various means. This fact alone is important to bring up as the data is only from one source as opposed to the recommendation to use multiple sources of data in a extensive case study. Continuing on the quantitative method, the analysis results have been created in a robust manner, but the choice of regression factors is a product of the authors interpretation of theory and the interpretation of the data. Hence this brings in personal bias that is created by the author, this bias can also impact the ultimate results and the validity of the regression results.

Despite the limitations with such a small data sample and a quantitative method the research is ultimately only indicative of the relationship between variables that make up motivation. This is due to the fact that motivation is ultimately made up of variables that are individual to the subject being researched, these insights have therefor been

generalized to create a “big picture” understand while not delving deeper into the individual motivational factors.

6.3 Further Research

It is clear that motivation is a complicated concepts and that no two organizations are the same, with this in mind the method and findings in this study can serve to help in designing similar research. While the research conducted here is simplistic and general in its nature, to delve deeper into the factors that make up motivation a more in-depth case study is to be recommended. A multimethod study combining both quantitative insight and qualitative understand would serve the ultimate goal of understanding motivation on a deeper level. In addition to this the quantitative measures used could be designed to better capture the nuance of the individual responses through the possible use of a 7-point Rikert scale.

To control for time and effectivity of motivational efforts it would be good if the organization in question has established ways of working to increase motivation in which case the data could be gathered during different times throughout the year. This would also give a view into which factors evolve and which programs at the organization are working to better the working environment. This of course would require a very compliant and invested organizational partner.

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ATTACHMENT 1 SURVEY**Section 1 Background Information**

Choose your Age group	Selection: 18-25, 26-40, 41-54, 55+
Gender:	Selection: Male, Female, I prefer not to answer
Highest Education	Selection: Basic comprehensive education, Upper secondary or vocational education, Bachelor's degree (University or University of applied science), Master's degree
I've worked at my current employer for:	Selection: Under a year, 1-4 years, 5-10 years, over 10 years
How long have you worked in your current assignment?	Selection: Under a year, 1-4 years, 5-10 years, over 10 years
Wage type:	Selection: Hourly wage/ Monthly wage

Section 2 Performance score

What performance evaluation score would you give yourself?	Slider: 4-10
What performance evaluation score do you think your supervisor would give you?	Slider: 4-10

Section 3 Motivation

I feel committed to my current work and my employer	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I'm satisfied with my job	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I feel motivated at work	Likert Scale 1-5 (Strongly disagree- Strongly agree)
My work is interesting	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I am satisfied with the amount of pay I receive	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I am satisfied with the other benefits I receive	Likert Scale 1-5 (Strongly disagree- Strongly agree)

I perceive the pay I receive as fair & equitable	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I am satisfied with the opportunities for promotion	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I have the possibility to improve and advance in my job	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I enjoy my workplace	Likert Scale 1-5 (Strongly disagree- Strongly agree)
My supervisor outlines the goals and expectations of my work clearly	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I receive enough feedback from my supervisor	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I enjoy my time with my co-workers	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I get help from my co-workers	Likert Scale 1-5 (Strongly disagree- Strongly agree)
Working time arrangements (e.g., Shift and holiday wishes) are working	Likert Scale 1-5 (Strongly disagree- Strongly agree)
The company leadership outlines the goals and expectations of my work clearly	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I receive enough feedback from the company leadership	Likert Scale 1-5 (Strongly disagree- Strongly agree)
I know what our company strategy is	Likert Scale 1-5 (Strongly disagree- Strongly agree)
Are there things in your work that you are extremely satisfied or dissatisfied with?	Open question

Section 3 Performance score

I have the necessary factual knowledge for my job	Selection: Yes/No
I have the procedural knowledge for my job	Selection: Yes/No

I have the motivation to exert more effort in my current job	Selection: Yes/No
Do you believe your job satisfaction impacts your job performance?	Selection: Yes/No
Are there tasks in your work to which you would need more guidance? If so, which tasks?	Open question