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The relationship between personality and motivation

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TABLE OF CONTENTS:

LIST OF FIGURES 5
LIST OF TABLES 5
ABSTRACT 7

1. INTRODUCTION 9

2. PERSONALITY 12
   2.1 Freud’s theory 13
   2.2 Jung’s theory 14
   2.3 The Big Five 15
   2.4 The Myers-Briggs Type Indicator 16
      2.4.1 Favorite world 18
      2.4.2 Gathering information 18
      2.4.3 Decision-making 19
      2.4.4 Structure of the outer life 20

3. MOTIVATION 22
   3.1 Maslow’s need theory 23
   3.2 McClelland’s need theory 25
   3.3 Equity theory 27
   3.4 Goal-setting theory 28
   3.5 Expectancy theory 29
   3.6 Self-Efficacy theory 30
3.7 Two-Factor theory  
3.8 Motivation Sources Inventory  

4. RESEARCHES  
4.1 Personality, motivation and performance in the work  
4.2 Personality, motivation and performance in the academic world  
4.3 Personality, motivation, and satisfaction  
4.4 The MBTI and motivation  

5. RESEARCH DESIGN  
5.1 Methodology  
5.2 Data  
5.3 Validity and reliability  

6. RESULTS  
6.1 Intrinsic and instrumental motivation  
6.2 External self-concept and internal self-concept  
6.3 Goal internalization  

7. DISCUSSION  
7.1 Delimitations  

REFERENCES  

APPENDIX  

Appendix 1. The interview questions in Finnish  
Appendix 2. The interview questions in English  
Appendix 3. The MBTI types
LIST OF FIGURES

Figure 1. Freud’s conception of human psyche 14
Figure 2. Four dimension of the MBTI-types 17
Figure 3. Needs of the Maslow’s theory 24
Figure 4. Combined McClelland’s and Malow’s need theory 26
Figure 5. The summary of Herzberg’s theory 32

LIST OF TABLES

Table 1. Personality theories 21
Table 2. Motivation theories 35
Table 3. Motivation and the MBTI-studies 45
Table 4. Results: intrinsic process motivation 61
Table 5. Results: instrumental motivation 62
Table 6. Results: self-concept-external motivation 63
Table 7. Results: self-concept-internal motivation 64
Table 8. Results: goal internalization motivation 65
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Abstract:

Despite motivation’s crucial role in every human’s action, the relationship between personality and motivation has been little researched in the science world. It has suggested that individual differences may play an important role in the success of motivation theories. Therefore, this study investigates whether there is a relationship between motivation and personality.

The most influential and best-known personality theories are Freud’s, Jung’s and the Big Five theory. The Myers-Brigg Indicator has also gained popularity as a personality tool for organizational development and management. Fundamental theories in the motivation field are Maslow’s and McClelland’s need theories, Equity, Expectancy and Self-Efficacy theories. Also Two-Factor theory and Motivation Sources Inventory are widely recognized. Theoretical base for this study is formed from the Myers-Briggs Indicator and Motivation Sources Inventory.

The empirical analysis was made with qualitative research. Six participants representing distinct MBTI personality types completed a questionnaire based on Motivation Sources Inventory. The questionnaire included 16 semi-structured questions. The responses were analyzed by seeking typical expressions, which could be done by each MBTI preference.

Only a few significant relations were found between MBTI preferences and motivation. The conclusion of the study is that motivation and personality appear to be distinct concepts. The study confirms the similar results of the previous studies done in the field. Therefore, motivation sources can not be reliably predicted from the MBTI- preferences.

KEYWORDS: Personality, Motivation, MBTI, Motivation Sources Inventory
1. INTRODUCTION

"The motivations are myriad”  Glass (2013)

“Treat people differently, because they are different”  (Sagnes 2013)

“Big Revolution happens, when it has been understood, what motivates individuals and when leaders start to discuss about what increases individuals’ performance”  (Rock 2012)

Glass, Sagnes, and Rock’s comments echoed the importance of motivation in a human’s life. Motivation is also a complex issue because every human being’s motivation is distinct. The motivations are indeed myriad. Despite motivation's crucial role in every human’s action, the relationship between personality and motivation has been little researched in the science world (Furnham 1992; Barbuto, Fritz, Lim and Xu 2008; Furnham, Eracleous & Chamorro-Premuzic 2009; Jang 2012).

Motivation has been described by Naylor, Pritchard, and Ilgen’s (1980) so that the aim of motivated behavior is the maximization of the expected effect. Hammarsten (2010) argued that one of the organizations’ success factors is motivation. Psychologists have described the word personality as the private structure and the dynamic inner process. Furnham (1992: 15) stated “personality refers to stylistic consistencies in social behavior, which are a reflection of an inner structure and process”. In the scientific world, there are several personality concepts. They are psychodynamic, trait, phenomenological and behavioral concept. Motivation has also been categorized by different concepts. They are need, equity and expectancy theories, goal-setting theory and work-related locus of control theories. (Furnham 1992: 128, 138-139, 148, 152-153, 205)
Furnham (1992: 164-165, 152) argued that regardless of the amount of theories in a motivational field, there are few studies, which are focused on individuals’ differences in motivation. He asserted that the reason for this may be that there are not so many empirical researchers in the motivation field, and many motivational theorists have rather concentrated in the universal picture than in the individuals’ differences. He also suggested that personality researchers might not have been so impressed about the personality theories in the motivation field. Furthermore, Furnham argued that individual differences can still be a very important factor to the success of motivation theories. For example, in the goal-setting theory goals are critical to the success of the theory. Individual differences always affect the quality, quantity and difficulty of attaining goals. Despite that fact, the goal-setting theory still ignores individual differences. Therefore, it is important to gain knowledge about individual differences in motivation. The relationship between personality and motivation has been studied, for example, in performance, job satisfaction and attitudes towards work (Staw & Ross 1985; Judge & Illies 2002; Furnahm, Eracleous & Chamorro-Premuzic 2009). In addition, Jang (2012: 726-727) stated that

“numerous researchers have indicated that personality is one of the most important determinants of human behavior and work motivation. However, few studies have been carried out to investigate this effect”.

Moreover, Furnham, Eracleous & Chamorro-Premuzic (2009: 765-766) argued “whilst theorists have offered many explanations for the sources of both work motivation and job satisfaction, relatively few individual difference factors have been considered”. Furthermore, Furnham et al. stated (2009: 765-766) “most job satisfaction and motivation research literature is concerned with organizational or situational predictors (such as pay and supervision), while neglecting individual differences”.

Hence, the links between personality and motivation have gained a little attention. A personality theory The Myers-Briggs Indicator (the MBTI) is used even less by researchers. Barbuto, Fritz, Lim and Xu (2008: 140) stated “the MBTI instrument’s relationship with motivation has received little attention in the cognitive style literature”. However, Nash (2011), Barbuto, Fritz, Lim and Xu (2008), Helton (2007),
Garden (1997) and Valkealahti (2002) are examples of these few researchers, who have studied the relationship between motivation and personality with the MBTI. This thesis will contribute to the large research gap of investigating motivation and the MBTI. Therefore, a research question in the thesis is, whether motivating differs between the MBTI types. Hence, this thesis will answer the questions:

- is there a connection between personality and motivation.
- do personalities motivate themselves differently accordingly Motivation Sources Inventory and the MBTI.
2. PERSONALITY

Traditionally much attention has been addressed to theories about human nature. Theories diverge in their degree of emphasis on the past and present, the conscious and the unconscious and the directly observable and the relatively unobservable. The core of the scientific approach to the personality is to test various ideas, evaluate the evidence supporting them and search for better ones. Dissimilar approaches favor different methods, and each approach has distinct ways of obtaining particular kind of information. Major personality theories give strategies for seeking information about personalities and changing maladaptive behavior in a constructive way. The successes accomplished by these applications reflect the value and limitations of the theories that direct them. (Mischel 1986: 23-24.)

Personality theories presented in this study begin from Sigmund Freud’s theory. Sigmund Freud’s personality theory was very different from the formulations of early behaviorists, who emphasized learned habits. Freud underlined unconscious motives in his theory. The Freud’s theory is one of the most influential psychodynamic theories. A developer of analytical psychology, Carl Jung was a disciple and a friend of Sigmund Freud, but later their ways parted because of their different viewpoints. Jung’s approach retains Freud’s unconscious process, but it claims that there is collective unconscious, which is an inherited foundation of personality. Since ancient times, people have labeled and classified each other according to their psychological characteristics. These traits are continuous dimensions on which individuals differ. The Myers-Briggs Type Indicator (MBTI) measures individuals’ six dimensions, whereas the Big Five theory labels five individuals’ traits. (Mischel 1986: 7, 46, 54, 135; Routamaa & Hautala 2012: 14, 20)
### 2.1 Freud’s theory

Sigmund Freud was a creator of psychoanalyze. He was known as a spiritual life’s developer and its structure’s interpreter. His ideas were widely criticized because he suggested that a human being is not his own life’s master but is ruled by the process of the unconscious spiritual life (Roos 1993: 7).

Sigmund Freud divided psyche into unconscious, preconscious and conscious, which is the base assumption in psychoanalyze. Memories or images may be rejected and thus, they can be kept in the unconscious. This rejection is called as a defense. There are also two different kinds of unconscious; the unconscious, which can come to conscious, and unconscious, which can not come to conscious by itself. Freud argued that a difference between unconscious and conscious is a question of observation. Observations are always made by conscious. Freud called ego as the unit, which process the psyche of the human being. Ego also rejects memories. (Freud 1993: 124 - 134)

Moreover, Freud categorized personality into the id, ego, and superego. The id is divided into unconscious and unknown. Ego is on the surface, and it is not strictly separated from the id but is in connection with the id. Ego’s function is also to transmit the outside world to the id. Ego includes all senses and consideration, and the id has passions. Ego transfers id’s will to action. Superego is a separate part from the ego, and it has a less close relationship with conscious. The superego is representing individual’s relationship with the parents. Parents’ and other authorities’ orders and prohibitions stay in the superego and act as a conscience and a moral sensor (Freud 1993: 135-148). Freud’s conception of the human psyche is presented in figure 1.
Jung’s opinion was that the division of different personality types is universal, and its base is in biology. It is also independent of the gender. Jung’s personal types were an introvert and an extrovert. (Jung 1921).

Introvert’s attitude to the object is an abstracting one, whereas extravert’s attitude is related to the object. The extroverts determine essential decisions and actions by objective relations. The extroverts do not expect to find any absolute factors in their inner life because the only factors they know are outside them. The extroverts’ moral laws coincide with the corresponding demands of the society, so the universally valid moral point is ruling extraverts’ life. (Jung 1921)
Subjective factors govern the introverts. The introverts observe external conditions, but they select the subjective determinants as the decisive ones. The characteristic peculiarity of the introverts is much about keeping their inclinations with the general biases. The subjective judgments of the introverts are very decisive and inflexible. The introverts usually lack the right argument in their prejudice, and they may just be unaware of them. (Jung 1921)

McCrae & Costa (1989) argued that Jung’s descriptions of attitudes and functions might seem to overlap with each other. McCrae et al. also suggested that Jung’s classifications are complicated by the intrusion of unconscious elements of the opposing function. Jung’s description about the extroverts as open, sociable and jovial, friendly and approachable persons is not true proved by decades of research. All these traits do not cohere in one single factor. (McCrae & Costa 1989: 19)

2.3 The Big Five

“The big five provides a well-accepted taxonomy that enhances understanding of the relation between personality constructs and important organizational criteria. The construct labels and representative traits of the big five are:

1) Extraversion (sociable, talkative, active, and ambitious);
2) Agreeableness (sympathetic, warm, kind, cooperative);
3) Conscientious (dependable, organized, and persistent);
4) Emotional stability/ Neuroticism (calm, unemotional, secure, and not angry); and
5) Openness to experience (imaginative, cultured, broad-minded, and flexible” (Robie, Brown & Bly 2005: 721)

McCrae (2001) argued that personality traits seem to be universal in many ways, and traits show that the same structure and the adult development exist in widely different cultures. He asserted that the Big Five traits are a part of human nature, and their dimensions find somehow expressions in every culture.
There have been criticisms of the five-factor model. Block (1995) has argued that the algorithmic methods adopted in the model may not provide dimensions that are incisive. Moreover, the discovery of the five factors can be influenced by unrecognized constraints on the analyzed variable sets. Lexical analyses have also been based on questionable conceptual and methodical assumptions, and, therefore, the analyses have achieved uncertain results. Serious uncertainties have been found regarding the claimed five-factor structure and essential meanings of the factors. Boyle, Stankov & Cattell (1995) claimed that the five factors may account less than 60% of the known personality trait variance.

2.4 The Myers- Briggs Type Indicator

The Myers-Briggs Type Indicator (MBTI) is based on the psychological types described by C. Jung. The developers Katharine Briggs and Isabel Briggs Myers addressed one goal in the development and application of the MBTI instrument; identification of the basic preferences of the four dichotomies specified in Jung’s theory (The Myers & Briggs Foundation 2015). Accordingly the MBTI, an individual pays attention particularly either in the external environment (extroversion) or the inner world (introversion). A person also gathers information from the physical reality (sensing) or impression or meanings (intuition), and deduces the observations for either logical reasoning (thinking) or feelings based appreciation (feeling). Every person has these same traits, but the order and emphasis of the traits differ. These personality dimensions are called preferences. The preference order address, which preferences are the most developed or the weakest. The preferences are illustrated as antithesis, where each preference is the opposite side of its pair. The individual is always using one preference better than another preference. The MBTI type consists of four letters from each dominant dimension, and it indicates the individual’s personality type. The indicator includes 16 personality types. Each type’s descriptions can be found from the appendix.
(Routamaa & Hautala 2012: 20; The Myers & Briggs Foundation 2015; Myers-Briggs & McCaulley 1990: 20). Figure 2 illustrates the four dimensions of the MBTI.

![Four MBTI Dichotomies](image)

**Figure 2.** Four dimension of the MBTI- types.

Scholars have debated the validity of the MBTI. They have reached somewhat divergent conclusions about its external validity (its ability to predict behavior) and its construct validity (its authenticity as a measure of personality). The critics have remarked that most of the studies concerning the MBTI have been published in journals, which are associated with the Center for the Study of Psychological type. These journals have been claimed to have vested interest in the MTBI. The construct validity of the MBTI is much debated. These doubts have a center in the claim that the MBTI is not only a descriptive typology, but a true personality theory based on Jung’s theory. By some
critics, Jung’s theory is seriously flawed. The dichotomy scaling of the MBTI is also criticized. Critics argued that the MBTI does not differentiate between people, who favor thinking over feeling 90% of the time, and others, who favor thinking only 51% of the time. These both are typed as thinkers. The source of criticism is also that the MBTI does not include factor “neuroticism”, which some scholars have seen as an important part of the personality. (Lyons 1997: 795-796; Stricker & Ross 1964; McCrae & Costa 1989)

2.4.1 Favorite world

Extroverts (E) prefer to concentrate on humans and things in the environment. They also get energy from being around other people. They feel comfortable in the external world rather than in their internal world. The extroverts are also seeking support from the others. They also act and think fast. They prefer action and changes in their life. (Routamaa & Hautala 2012: 22, 24-25)

Introverts (I) prefer to focus on thoughts, feelings, and impressions. They are more comfortable in their internal world than in the external world. They get energy from being alone. However, the introverts may be very talkative when they are around few, familiar persons. The introverts seek support from their inner world. They think ideas through before they express them, and they prefer to think solutions to the problems alone. (Routamaa et al. 2012: 22, 25-26)

2.4.2. Gathering information

Sensing (S) individuals focus on the present and the information observed by their senses. They prefer everything concrete and practical. They are also good at focusing on details and facts. The sensing individuals observe the environment through their five senses. They prefer to work with concrete things, but they are not so interested in theories. The sensing individuals rather concentrate on the facts than imagination, and
they may not be so good at using intuition. They understand the realities well and remember facts. (Routamaa et al. 2012: 22, 34)

Intuition (I) individuals focus on possibilities and links. They gather the information by their five senses and intuition. They also concentrate on the future and try to create an overall picture. The intuition individuals focus on the future and its opportunities sometimes so much that they forget to live at the moment. They also prefer more imagination and fantasies than realities and facts. They are interested in the idea of the matter. (Routamaa et al. 2012: 22, 35)

2.4.3 Decision-making

Thinking (T) individuals’ estimations are based on logic and objective analysis. They emphasize logic, sense and facts. Their decisions are based on the cause and effect-philosophy. They are not concerned how the consequences of the decision affect other people, but they are focusing on the fairness and content of the decision. The thinking individuals experience things as if they are outside so that they can easily block distracting matters. They may try to be too logical and impersonal, and forget the feelings. (Routamaa et al. 2012: 22, 42)

Feeling (F) individuals’ estimations are based on their personal evaluations and feelings. They make decisions with their heart and tend to focus on people. In decision-making, they take into consideration people and the consequences of the decisions to others. They make the decisions by their values and prefer the harmony. The feeling individuals experience the matters by their feelings and hearts. They care about people and are interested in the relationships. (Routamaa et al. 2012: 22, 43-44)
2.4.4. Structure of the outer life

Judging (J) individuals prefer a systematic and organized lifestyle. They want to get things solved and done. They plan so that they can control their life and avoid stress. They prefer to make decisions early since they have a great need to get things done. They favor clear limits, precise order and structure in the life. They take deadlines seriously and get disturbed if they need to interrupt the current work for doing something more urgent. (Routamaa et al. 2012: 22, 50)

Perceiving (P) individuals prefer a flexible and spontaneous lifestyle. They want to keep their minds open to new experiences and avoid precise planning. They need a little pressure and stress for getting things done. Decision-making may be sometimes difficult because the perceiving individuals think that they can never have too much information for the decision-making and keep seeking new information. They do not take deadlines too seriously and are stimulated by the approaching deadline. Unpleasant tasks they rather do as late as possible. (Routamaa et al. 2012: 22, 50-51)

The personality theories are presented in table 1.
Table 1. Personality theories.

<table>
<thead>
<tr>
<th>Personality theories</th>
<th>The main concept.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freud’s personality theory.</td>
<td>The human psyche is divided into conscious, preconscious and unconscious parts. Then psyche is divided into ego, superego, and the id. Unconscious drives and desires determine people’s actions and behavior.</td>
</tr>
<tr>
<td>Jung’s personality theory.</td>
<td>It proposed that the division of different types is universal and independent of the gender. Jung’s personal types were an introvert and extrovert.</td>
</tr>
<tr>
<td>The Big Five.</td>
<td>It proposed that personality can be divided into five traits: Extraversion, Agreeableness, Conscientious, Neuroticism and Openness to Experience.</td>
</tr>
<tr>
<td>The MBTI.</td>
<td>It determined six preferences of personality: extraversion, introversion, sensing, intuition, thinking, feeling, judging and perceiving.</td>
</tr>
</tbody>
</table>
3. MOTIVATION

McClelland (1987: 5) defined motivation so that it refers to conscious intents such as ‘I want to be a doctor’. Motivation also refers to inferences of conscious intents that a person makes from observed behavior. Thus, motivation is about the why of the behavior. Furthermore, every behavioral outcome is a function of both factors: the person and the environment. Steers and Porter (1991: 5-6) described motivation so that it has three common denominators. Firstly; it energizes human behavior, secondly; it directs or channels that behavior, and thirdly; it tells how that behavior is maintained or sustained. Moreover, distinct motivation theories have been developed. Some theories illustrate motivation through a human being’s needs such as Maslow’s theory. These theories are called content theories. Other theories illustrate motivation by goals as goal-setting theory while others base their assumptions about motivation on the fairness of equitable of individuals’ expectations such as expectancy theory. Theories as goal-setting theory and expectancy theory are called process theories. Because satisfaction has been studied significantly predicting the intrinsic and extrinsic motivation, it is also an area of interest. Motivation theories based on the satisfaction have also been developed such as the two-factor theory. (Karada, Ackigoz, Alparslan, Unsal, Kosgeroglu, Kaua, Guven & Yilmaz 2012).

Maslow’s (1970) theory is the first motivation theory presented in this study. He is the creator of the one of the most well-known motivation theories. His theory classified human needs in the hierarchy, which run from basic physiological needs to self-actualization needs. Another motivation need theory was created by McClelland (1976, 1987). He concluded that humans are motivated by the achievement motive, the affiliation motive, and the power motive. Most people possess and exhibit a combination of these three needs (Moore, Grabsch, & Rotter 2010: 25). Adams created Equity theory in the 1960s. He was a behavioral psychologist and his theory illustrated the relationship between the perception of fairness and worker’s motivation. Expectancy theory was created by Victor Vroom. It differs from some other theories because it does not specify what motivates organization members. However, it illustrates a process of
cognitive variables that reflects people’s differences in work motivation (Lunenburg 2011: 1). The goal-setting theory was developed by Locke and Latham (1990). It underlines the importance of the relationship between goals and the performance. Locke and Latham argued that the goals should also be specific and challenging for achieving the best and the most effective results (Lunenburg 2011: 1). Herzberg developed the two-factory theory in 1959. It explains factors that employees find satisfying or dissatisfying in their jobs. Herzberg labeled them as motivators and hygiene factors. His theory was extraordinarily influential, and it still is the foundation of good motivational practices in organizations even today (Dartey-Baah & Amoako 2011: 1-2).

3.1 Maslow’s need theory

Maslow proposed that human needs can be classified into several categories. He also suggested that these categories are structured in the hierarchy of prepotency and probability of appearance. Hence, the higher-level need can not be satisfied if the lower-level need in the structure is not met. Maslow also argued that his needs are universal for all cultures. (Wahba & Bridwell 1976: 213)

Maslow asserted that needs can be seen as physiological drivers. Physiological needs-category includes all fundamental physiological needs, which are actual needs of the body, like hunger. The safety need includes needs such as security, dependency and a need for law and limits. The belongingness and love need (the social need) is the next one in the structure. The love need contains giving and receiving affection. Hence, an individual is hungry for relations with people in general. The belongingness need is a need to belong to somewhere or somebody such as being a part of the family or feeling that one belongs to some place or territory. The esteem need indicates that every person has a need for stable, normally high evaluation of oneself, self-respect, self-esteem, and esteem of others. The esteem need can be classified into two categories. The first category contains, for example, a desire for strength, achievement, mastery,
independence, and freedom. The second one involves, for example, a desire for reputation or status, prestige, recognition, dignity and appreciation. The fulfillment of the self-esteem need results in feeling of self-confidence, worth, capability and being useful and necessary. The self-actualization need means that individuals have a need to do what they are fitted. For instance, musicians have to make music and artists have to paint. (Maslow 1970: 15-22)

Numbers of studies have examined an individual’s needs. They have not found solid evidence that human needs are classified into five separate categories or that these needs are structured in the special hierarchy. Maslow’s proposition that unfulfilled needs lead people to focus exclusively on them has not received full support. Some studies have found evidence of it, and some have not. The suggestion that the lower-level needs have to be fulfilled before higher-level needs can be activated has not gotten support from the studies (Cherrington 1991: 38). Needs of the Maslow’s theory are illustrated in figure 3.

Figure 3. Needs of the Maslow’s theory.
3.2 McClelland’s need theory

McClelland argued that achievement motivation is a part of responsible economic growth. McClelland also stated that the best way to find the achievement motive is from a sample of an individual’s spontaneous thoughts under minimum external restraints. McClelland argued that high score achievement leads a person to perform better. He also asserted that individuals, who set achievement standards for themselves, will try harder and more successfully to reach the standards they have set for themselves. (McClelland 1976: 42-45)

McClelland quoted many studies that proved power score measures motivation of the individuals. He also argued that people with high power score try to get attention on themselves in groups. These kinds of individuals also seem to surround themselves with people, whom they can lead. They are also judged to be more influential by others in the group, but they appear to be too assertive for being good at bringing other people out. Thus, other characteristics in combination with high power are needed to make a good leader. (McClelland 1987: 284-287, 288-289, Fersch 1971; McClelland & Watson 1973; Winter 1973; Fodor and Farrow 1979; Fodor & Smith 1982)

People have a need to interact with other people, and some have a stronger need for it than others. This need is called the affiliation need or the need to be with people. Individuals with high affiliation build the network of social relationships faster than the others with a low affiliation score. People with high affiliation also value others and are better at maintaining relationships. They do not tend to be successful in management. For example, small manufacturing firms or R&D firms, which have been led by high affiliation males, tended to be less high-flying. Nevertheless, it has studied that people with high affiliation were more effective integrators than others. (McClelland 1987: 347-355; Atkinson & Raphelson 1956; French 1958; McKeachie 1961; Byrne 1962; Lawrence & Lorsch 1967; Terhune 1968; McClelland, Constantian, Pilon & Stone 1982). Figure 4 combines McClelland’s and Maslow’s need theory.
Barbuto, Fritz & Mark (2002) stated that McClelland’s theory was originally measured with the Thematic Apperception Test (TAT). However, later researchers have argued that the TAT is invalid and unreliable (Clarke 1972; Fineman 1977). Entwisle (1972) stated that recent studies have found only a few relations between TAT-measured need achievement and other variables.

Figure 4.

Combined McClelland’s and Maslow’s need theory.
3.3 Equity theory

"Equity Theory suggests an orientation toward distributive justice based on proportions. Equity Theory predicts that people will be uncomfortable in relationships in which their own ratio of inputs to outcomes is not equivalent to the other party’s ratio of inputs to outcomes. Thus, the definition of inequity involves the perception of imbalance by either a participant in the relationship or an outside observer.” (Westerman, Park & Lee 2007: 577; Walster, Berscheid & Walster 1973)

Adams argued that it seems that dissatisfaction and other behaviors are responses to felt injustice. Adams stated that felt injustice is a response to a discrepancy between what is perceived to be and what is perceived to should be. Inputs are what a man brings to exchange such as skills and education in the working life, and these inputs are perceived by their contributor. Individual’s receipts are called outcomes e.g. satisfying supervision and fringe benefits. There exist normative expectations of what constitute fair correlations between inputs and outcomes. These expectations are based on the observation of the correlations, which are obtained for a reference person or group. When the normative expectations of the individual are violated so that the individual finds the outcomes and the inputs are not in balance to those of others, the individual feels inequity. There are several demographic factors, which affects the perception of equity. Individuals’ subjects of perceptions of equitable reward allocation were related to their intelligence level, quantitative aptitude and social and religious values. The consequences of inequity create usually tension in the individuals, and the tension will motivate them to eliminate or reduce it. (Adams 1965: 268-272, 277-280, 292-293, 296; Bass 1968).

Equity theory has been criticized. It presents that equity norms and expectations of fair exchange is learned through socialization and comparing outputs and inputs of other people. However, the derivation of this norm and its pervasiveness remain quite unclear. It has also argued that equity theory can be incorporated into the expectancy theory because of their quite similar predictions. (Steer & Porter 1991: 121, 126-127; Lawler 1968)
3.4 Goal-setting theory

“Goal-setting theory states that the expectancy, instrumentality, and valence of outcomes will be high if goals are difficult (challenging), as well as specific and attainable. Specifically, there is the assumption that behavior reflects conscious goals and intentions”. (Fried & Slowik 2002: 406; Locke & Latham 1990; Austin & Klein 1996; Locke & Latham 2002)

Locke & Latham (1990) argued that assigned goals make performance easier because they affect both self-efficacy and personal goals. Locke et al. found that subjective measures of goal difficulty do not work as well as objective measures because subjective measures are confounded. Harder goals are often regarded as more instrumental attaining valued outcomes than easier goals, although harder goals require the better performance so that attaining a sense of self-satisfaction is possible. Locke et al. stated that challenging goals lead to higher performance than other types of goals. That is the result because specific and hard goals are associated with higher self-efficacy. Harder goals also require higher performance so that the individual can feel self-satisfaction. They also have less ambiguity about what constitutes high or good performance. Goal choice is a function of what the individuals think they can achieve and would like to achieve, or what they should achieve. (Locke & Latham 1990: 9, 27, 85)

The results with respect to goals and performance are quite clear: given goal commitment, self-efficacy, feedback, and suitable strategies are essential. The higher, the harder or more difficult the goal is the better performance. However, the more difficult the goal is, the less likely it is to be achieved and, thus, the less likely it is to produce satisfaction. Failure is more likely to happen with hard goals. One solution is to form goals moderately difficult; making goals challenging, but ultimately reachable. The moderate goal would not only maximize the outcome, but it would also maximize satisfaction. (Locke et al. 1990: 246-247)
Miles (2012) argued

“critics have complained that goal setting theory has been overprescribed. Goal setting has been described as being effective for any type of task in any type of setting, but this may not actually be the case in organizations. The theory has been criticized for advocating goals that are too specific or too narrow. Specific goals can cause individuals to spend too much time focusing on them to the detriment of other important organizational behaviors, such as innovation, creativity, and flexibility”. (Miles 2012; Ordoñez, Schweitzer, Galinsky & Bazerman 2009)

3.5 Expectancy theory

“Vroom’s theory provides a process of cognitive variables that reflects individual differences in work motivation. It identifies several important things that can be done to motivate employees by altering the person’s effort-to-performance expectancy, performance-to-reward expectancy, and reward valences” (Lunenberg 2011).

Vroom argued that the important trait of his model is its view of behavior as subjectively rational and directed toward the achievement of desired outcomes and away from unpleasant outcomes. Vroom stated that the probability that a person will work depends both on the availability of work and his preference between working and not working. (Vroom 1967: 43, 276)

Vroom argued that workers perform most effectively, when the purpose of the performance is to attain extrinsic goals. The level of performance of workers is associated with the extent, which performance is instrumental to the attainment of higher wages, promotions, and acceptance by co-workers. Levels of performance vary directly in respect of the strength of individuals’ needs for achievement, and it does so particularly when the task is difficult and challenging. People, who are given an opportunity to participate in decision-making which will affect to them, perform at a higher level than those, who are not given such the opportunity. (Vroom 1967: 266-267)
The expectancy theory illustrates that behavior is the result of the value/utility maximization selection process. The maximization view of rationality is criticized, because it requires almost limitless information processing capacity by the individuals. The theory has been condemned for its lack of incorporation of the social influence component, especially since other instrumental theories have developed that factor. (Snead & Harrel 1994: 502; Simon 1957)

3.6 Self- Efficacy theory

“Self-efficacy is an individual-level, domain-specific construct that has been shown to explain significant variance in students’ performance, decision-making and effort and persistence in completing academic tasks. Self-efficacy beliefs are argued to mediate the links between knowledge, skills and action, where individuals are unlikely to perform an action if they do not believe that they can achieve a desired outcome.” (Ogilvie & Stewart 2010: 135)

Self-efficacy is also determined by the personal judgment of how well the person can do courses of action, which are needed to deal with prospective situations. Expectations of personal efficacy define whether person’s coping behavior will be inaugurated. They also define how much task-related effort will be done and how long that effort will be maintained regardless of the disconfirming evidence. The effort of individuals, who see themselves so highly efficacious that they activate sufficient effort, will result in successful outcomes. In last decades, it has been produced a number of empirical studies, which prove that there is a positive relationship between self-efficacy and different motivational and behavioral outcomes. Although there is the regulative potential of self-efficacy for the successful performance, the relative contribution of the complexity of the task to be conduct must also be thought. Related to self-efficacy, an important viewpoint of the analysis of task complexity is to acknowledge that complex tasks typically are diverse, and they require different implications from the task

3.7 Two-Factor theory

“The two-factor theory of motivation explains the factors that employees find satisfying and dissatisfying about their jobs. These factors are the hygiene factors and motivators” (Darte- Baah & Amoako 2011).

Herzberg, Mausner and Bloch (1967) argued that when the respondents reported feeling happy with their jobs, they frequently described factors related to their task and events that implied they were successfully performing in the job and having the possibility of professional growth. Whereas respondents reported unhappiness, it was not associated with the work itself, but to conditions that surrounded doing the work. Those kinds of occasions suggest to the individuals that the context in which they perform the work is disorganized or unfair. Thus, it represents the harmful psychological work environment to them. Herzberg et al. called these factors as hygiene factors. Improvements in these hygiene factors will contribute to removing barriers from positive job attitudes. (Herzberg, Mausner & Bloch 1967: 133- 114, 116) Figure 5 illustrates the summary of Herzberg’s theory.
The factors of hygiene include supervision, interpersonal relations, physical working conditions, salary, company policies and administrative practices, benefits and job security. Job dissatisfaction results, when these factors degenerate below a level, which the employee considers acceptable. Although the job context can be characterized as optimal, it is not dissatisfaction, but neither is it much in the way of positive satisfaction. Factors that lead to positive job attitudes do so because they satisfy the individuals’ needs for self-actualization. The job context can not give them that satisfaction because it does not have the potential for it. Factors in the job context meet the needs of the individual for evading unpleasant situations. (Herzberg et al. 1967: 133-114, 116)

Herzberg et al. designed the job factors as motivators as opposed to the extra-job factors, which they called the hygiene factors. The motivators are these factors, what the individuals want from their job. The motivators are, for example, these things, which one can use as a source of personal growth in the job. The fewer opportunities there are

**Figure 5.** The summary of Herzberg’s theory.
in the job for the motivators, the greater must be the hygiene factors in order to make the work tolerable. Herzberg et al. also listed a salary to the hygiene factors. They argued that if incentive systems do not include any of the motivators, then any increase in performance or apparent job satisfaction is misleading. (Herzberg et al. 1967: 113-116, 118)

The Herzberg’s theory has been criticized on different grounds. Vroom (1966) criticized “people tend to take the credit, when things go well and enhance their feelings of self-worth, but protect their self-concept, when things go poorly by blaming their failure on the environment”. Thus, persons’ answers and storytelling are not probably objective, but they were used in the Herzberg’s study as a source of information. The second critique has its base on the faulty research. Herzberg et al.’s study has said to be fraught with procedural deficiencies. The third source of criticism is the research’s inconsistency with the past evidence, which concerns satisfaction and motivation. If the two-factor theory were right, it should be expected that highly satisfied people are highly motivated and produce more. Herzberg et al. cited in their research that there were 27 studies, where the quantitative relationship between job attitude and productivity were noticed. In 14 of these studies were a positive relationship and in 13 studies job attitudes and productivity were not related. (House & Wigdor 2006: 371-375)

### 3.8 Motivation Sources Inventory

Motivation sources inventory consist of intrinsic process, instrumental, self-concept-external, self-concept-internal, and goal internalization motivation. Intrinsic process motivation is argued to occur when a person is motivated to participate in the certain type of behavior or do certain kind of work for the fun of it. Therefore, in this source of motivation, the work itself serves as the incentive. Intrinsic process motivation emphasizes the pleasure or immediate enjoyment during the activity. Instrumental
motivation manifests that instrumental rewards motivate individuals when they realize that their behavior will result in certain extrinsic tangible outcomes. These outcomes can be promotions, pay, and bonuses. Individuals high in instrumental motivation participate in tangible exchange relationships. Self-concept-external motivation is externally based when individuals seek support from others for their attributes, values, and competencies. The ideal selves are determined by role expectations of reference groups. People behave in ways that please reference group members in order to gain acceptance. After getting acceptance, the individuals aim to achieve status by their behavior. Self-concept-internal motivation is internally based when a person is inner-directed. In this motivation, the person sets internal standards of competencies, traits, and values that become the base for the ideal self (Leonard, Beauvais & Scholl 1999). The person is then motivated to participate in behavior that emphasize these standards and later gaining higher levels of competency. Goal internalization motivation appears when a person adopts behavior and attitudes because their content is congruent with person’s personal value system. Strong ideals and beliefs are the fundamental components in this motivational source. Therefore, the person “believes in the cause, has developed a strong sense of duty, and is motivated to work toward the goal of the collective” (Barbuto, Fritz, Lim & Xu 2008: 141). Moreover, goal internalization lacks self-interest (Barbuto et al. 2008: 140, Barbuto, Fritz & Mark 2002: 603; Barbuto & Scholl 1998; Barbuto 2000).

Hence, in intrinsic process motivation the individuals have to take pleasure in the work being performed. In instrumental motivation, a person has a contingent reward or an incentive to perform the work. In self-concept-external motivation, persons have to believe that their image or reputation will be reinforced, if they obey. Moreover, in self-concept-internal motivation the individuals have to have a personal challenge to obey. However, with goal internalization the persons do not expect any strong incentives beyond a belief that goals of the class can be obtained with their support. (Barbuto et al. 2008: 140-142; Barbuto & Scholl 1998).

Below in table 2 are presented the motivation theories.
Table 2. Motivation theories.

<table>
<thead>
<tr>
<th>Motivation theories</th>
<th>The main concept.</th>
</tr>
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<tbody>
<tr>
<td>Maslow’s need theory.</td>
<td>The theory suggests that people are motivated to fulfill needs from basic needs to more advanced needs in hierarchy order.</td>
</tr>
<tr>
<td>McClelland’s need theory.</td>
<td>It proposed that people are motivated by three needs (a need for power, achievement, and affiliation).</td>
</tr>
<tr>
<td>Equity theory.</td>
<td>It asserted that people are motivated by the principle of equity. People are motivated when they feel fairly treated, whereas they are unmotivated when they feel unfairness.</td>
</tr>
<tr>
<td>Goal-setting theory.</td>
<td>It suggested that people are the best motivated by specific and difficult goals than easy and vague goals.</td>
</tr>
<tr>
<td>Expectancy theory.</td>
<td>It proposed that people are motivated by their expectations of outcomes of their action.</td>
</tr>
<tr>
<td>Self-efficacy.</td>
<td>Self-efficacy is one’s belief in one’s ability to be successful in a certain situation.</td>
</tr>
<tr>
<td>Two-factor theory.</td>
<td>The theory is based on the two factors involved in the work: motivator and hygiene factors. The motivator factors lead to the job satisfaction, and the hygiene factors often lead to the job dissatisfaction. The motivator factors are related to the job contents and the hygiene factors to the job context.</td>
</tr>
<tr>
<td>Motivation Sources Inventory.</td>
<td>It includes five motivation categories: intrinsic process, instrumental, self-concept-external, self- concept-internal and goal internalization.</td>
</tr>
</tbody>
</table>
4. RESEARCHES

Personality and motivation together are little researched (Furnham 1992; Barbuto, Fritz, Lim and Xu 2008; Furnham, Eracleous & Chamorro-Premuzic 2009; Jang 2012). However, few studies have done in the field. Therefore, several studies are reviewed next regarding personality and motivation, work performance, academic performance, and satisfaction.

4.1 Personality, motivation and performance in the work.

Judge and Ilies (2002) studied the relationship between the five-factor model of personality and theories of performance motivation (goal-setting, self-efficacy and expectancy motivation). They made a conclusion that conscientiousness and neuroticism were the strongest and also the most consistent correlates of performance motivation. Furthermore, they found that extraversion correlates with self-efficacy. In addition, they discovered that Openness to Experience correlates little with goal-setting and self-efficacy motivation. Agreeableness correlates relatively weak, but positively with the expectancy and self-efficacy motivation theories. Moreover, Barrick, Stewart & Piotrowski (2002) studied a model of the job performance, and they investigated the mediating effects of motivation on the relationship between personality traits and the performance in a sales job. Their study revealed that motivational variables are significant mechanisms through which personality traits influence the job performance. Barrick et al. especially noted that striving for the accomplishment and status mediated the effects of Conscientiousness and Extraversion on ratings of the sales performance. Agreeableness or communion striving was not linked to the success in this sales job, even though Agreeableness was linked to striving for the communion. The suitable personalities of the salespersons have also been studied by Chang (2013). The author stated that there were not standardized sales personnel recruiting procedures in medium
and small firms in China, which results ignoring the critical psychological evaluation factors in recruitment. A consequence of that ignorance is to employ unsuitable staffs, which results in the inefficient recruitment cycle. The sample of the personality types in Chang’s research consisted of STJ and ESFJ types. The author argued that the study’s results revealed that “setting the sales backbone’s personality datum as a paradigm, applying it to the recruitment of sales staffs and pro-job trainings, can improve new employees’ organizational adaptability, and their performance, increase organizational cohesive force, besides reduce turnover rates” (Chang 2013).

Lijun, Chieh, Wanchun, Hongjuan & Sengui (2014) studied hairdresser entrepreneurs and how their work performance, motivation, and the Big Five personality were related. They had a sample size of 150 valid questionnaires. The results indicated that the more extraversion and friendly hairdresser were, the better business performance they obtained. Moreover, achievement-money of entrepreneurial achievement motivation influenced the business performance considerably. Finally, the business performance was positively affected by the mutual influence of extraversion-friendly and achievement-money. Furthermore, Chien & Lee (2014: 38, 49) studied the weight values of key factors in managers’ personality traits that influenced on the job performance in company IC design houses in Taiwan. They adopted Analytic Network Process (ANP) in their study to analyze the relevance of each criterion. The authors also used ANP to identify significant factors of each criterion and the priority ranking of criterion weights. Their study indicated that in sub-dimensions of personality traits, what influenced the managerial job performance, both the weights from academic scholars' viewpoint and industry operators' viewpoint were over 0.1. Therefore, the result suggested that both scholars and operators think that Emotional Stability, Conscientiousness and Openness to Experience are the most significant indicators influencing personality traits. Although industry operators' perspectives on the weights of Emotional Stability, Conscientiousness and Openness to Experience were different from the scholars' point of view, the difference arises due to scholars’ theoretical viewpoint. However, academic scholars believe that Conscientiousness affect the personality traits the most while business operators believe that Openness to Experience is the most influencing trait and, therefore, influences the job performance. The authors
argued that managers can use their analytical findings as a reference in IC design houses for using in talent selection.

4.2 Personality, motivation and performance in the academic world.

Hautala & Routamaa (2007: 64, 72) researched the relationship between students’ personality (MBTI), their studying activities and the success in studies. The students’ success and study times were monitored for three years. The results suggested that there were significant differences caused by personality in the success of studies. They found that introverted succeeded to get better grades. Moreover, there also was the difference between the preference pair judging and spontaneous. Students with judging preference achieved more studies, better grades and were more active in the class participation than students with spontaneous preference. The authors argued that their results backed earlier studies made by Myers & McCaulley (1990), where introverts, judging and intuitives students were found to study faster than others. Hautala et al. (2007) also argued that the results illustrated that the school and university system may support certain kind of learning. Lawrence (1979) found similar results than Hautala et al. regarding the structure of the school system. Lawrence argued that typical instructional practices usually favors introversion and intuition type and are against extraversion and sensing type. Furthermore, Schurr and Ruble (1986: 36) studied the personality types and academic performance at Ball State University. They found that extraverts do not perform as well academically as introverts. Moreover, individuals, who prefer sensing function, do not perform as well as intuitives in the academic world. The authors also found that students, who prefer intuition and introversion, achieve best results academically, whereas students, who prefer the sensing and extraversion, perform least well.

Entwistle and Entwistle (1970: 132) studied the relationship between personality, study methods including motivation, and the academic performance. They stated that
regarding the academic performance, the result showed the superiority of students with good study methods and introverts at the end of the first year. They argued that introverts usually had better study methods, but it only partially explicated their high academic performance. The authors found no relationship between neuroticism and attainment. They also identified characteristics of successful students, and results indicated that stability and introversion were related succeeding in the studies. Poropat (2009: 322) also studied the relationship of personality–academic performance based on the Big Five- model. In the study cumulative sample sizes of Big Five ranged to over 70,000. The author found that the academic performance correlated significantly with Conscientiousness, Agreeableness, and Openness. Poropat discovered that correlations between Conscientiousness and the academic performance were significantly independent of intelligence. He also found that Conscientiousness added as much to the prediction of the tertiary academic performance as did the factor intelligence when the secondary academic performance was controlled. The author found strong evidence for moderators of correlations. Thus, the average age of the participants, the academic level and the interaction between academic level considerably moderated correlations with the academic performance. Rosander & Bäckström (2014: 611) also studied the ability of personality to predict the academic performance in a longitudinal study of an upper secondary school sample. The academic performance was evaluated during a three-year period via final grades at the compulsory school and upper secondary school. The Big Five personality factors and especially Neuroticism and Conscientiousness were found to predict the academic performance after general intelligence was controlled. Their results indicated that Conscientiousness, when measured at the age of 16, can predict a change in academic performance at the age of 19. The effect of Neuroticism on Conscientiousness suggests that it is better to be a little more neurotic than stable for achieving good grades. The authors asserted that the results dispensed educator avenues for ameliorate educational achievement.
4.3 Personality, motivation, and satisfaction

Freyedon, Taebeh & Golamhosain (2011) made a survey of the relationship between personality and motivation as well as the job satisfaction in inspection organizations in Iran. They found that personality and demographic variables account 9-15, 2% per variance and these factors accounted between 10.5 and 12.7% of the variance of overall (intrinsic and extrinsic job satisfaction). Conscientiousness was also a significant correlate of the job satisfaction. Hygiene issues were positively associated with Agreeableness. Furnham, Forde & Ferrari (1999) also studied personality and motivation with the Big Five theory and Herzberg’s motivation theory. They concluded that extroverts were motivated more by motivator factors in the workplace and neurotics seem to be more motivated by hygiene factors. Furthermore, Furnham, Eracleous & Chamorro-Premuzic (2009) studied motivation and personality with Herzberg and the Big Five. They found that the Big Five traits predict only about 10% of satisfaction. Conscientiousness was the most powerful trait predictor of the job satisfaction. Moreover, Agreeableness was associated with the hygiene factors like physical conditions of the workplace. Judge, Heller & Mount (2002) studied whether Big Five and overall job satisfaction were linked. They found positive correlations between the job satisfaction and Openness to Experience, Agreeableness, and Conscientiousness. Extraversion was also linked positively to the job satisfaction, but the correlation was very small. They argued that their results illustrated that the relations of Neuroticism and Extraversion with the job satisfaction were the only relations, which were generalized across studies. Judge et al. (2002: 530) stated “as a set, the Big Five traits had a multiple correlation of .41 with job satisfaction, indicating support for the validity of the dispositional source of job satisfaction when traits are organized according to the 5-factor model”. Furnham, Petrides, Jackson, & Cotter (2002) also studied, whether personality factors could predict the job satisfaction. The authors used the Big Five theory. They concluded that Conscientiousness and Openness were connected both with the hygiene/extrinsic and the motivator/intrinsic composites, but neither was Extraversion nor Neuroticism. Conscientiousness was a consistent positive predictor of
the global actual job satisfaction. The Big Five accounted about 10% of the variance in the hygiene/extrinsic composite and 7% in the motivator/intrinsic composite.

The relationship between the job satisfaction and the MBTI were studied by Hardigan, Cohen & Carvajal (2001: 30). They also studied the career choices of pharmacists in the same study. They designed a mail questionnaire after the causal model of the job satisfaction for assessing the job satisfaction of pharmacists. The authors made a statistical analysis of 216 questionnaires. Their study revealed that personality types are connected to the career choice in pharmacy practice, but the authors did not find the relationship between personality and the job satisfaction. Scarbrough (1993: 3-4, 9) studied the psychological type distribution of accountants at an international accounting firm in the U.S. He also investigated the effects of gender differences in the job satisfaction of the MBTI preferences. In the study sample, the most of professionals were thinking and judging types. Subjects with STJ type represented about 35% of the whole sample in the study. The results indicated that male Js and Ps had the same level of the job satisfaction, whereas female Js were considerably more satisfied than male Js and female Ps. The author argued that the considerable difference between all Js and Ps was completely caused by the very strong difference between female Ps and Js. Scarbrough (1993: 10) stated that possible reasons for the divergence are different capabilities to accommodate to the production-oriented (J) situation and thus, different approaches to the situation by males and females, “or greater sanctions for P behavior on the part of female Ps than on the part of male Ps due to the male STJ culture of the organization”. However, for the E-I scale the result was almost opposite. Male Es were more satisfied than female Es, whereas female Es were not more satisfied than Is. However, the researcher did not find the overall difference between E-I preferences. The reason for it could be that, because studied mid-level accountants were in the middle of a transition from technical accounting to people skills (marketing and supervisory skills), Es type is more comfortable in the transition situation. Scarbrough stated that it was puzzling that females had reversed results. A possible explanation was that in the male STJ environment, the female employee's MBTI preference works in a different way and makes the unanticipated preference (I) more adaptive. In the study male Is, Ts and Js were not that satisfied than their female
counterparts. The results suggested that I and J females are the most satisfied. However, Scarbrough (1993: 10) argued that

“the small number of MBTI types with sufficient observations to justify statistical comparison is an indication of some of the difficulty of type and gender research. Even with a fairly large total sample size (N = 255), only five types were testable using the minimum acceptable cell size”.

Buie (1988: 50, 53) studied the job satisfaction and the MBTI and had a sample of 47 computer professionals. The most frequent types in the study were ISTJs, INTPs, and INTJs, and together with INs these types were considerably overrepresented in comparison to Myers' norms. Moreover, ESFJs, Es, ESs, and SFs were especially underrepresented in the study. Regarding the job satisfaction, significant results appeared. Es preferred competition more than Is, and Ss preferred competition and details more than Ns. Moreover, Ns wanted more creativity, and they felt more satisfied than Ss. Fs preferred accomplishment, variety, creativity and cooperation more than Ts. Furthermore, Ps wanted more spontaneity and variety than Js.

### 4.4 The MBTI and motivation

Garden (1997: 4) argued that motivation profiles of the different MBTI types can also be operationalized as the reasons for working. Myers and McCaulley (1985) studied what the different MBTI types are looking for their jobs. They suggested that Es preferences prefer to work interactively with a series of people. However, Is- types prefer work that allows some solitude. Ns are looking for a job, where is possible to work on a succession of new problems, and Ss are seeking to work with details. Ts prefer to have a work that demands logical order and analysis, whereas Fs prefer a work that offers a possibility to serve people. Js want to have a work that requires a need for system and order, whereas Ps want a job that demands adapting to changing situations. Garden (1997: 5) stated “criterion-validity studies have correlated the MBTI scales with other measures that reveal relationships that may be of relevance to the motivational profiles of the different psychological types”. Myers et al. studied that this order is
considerably related to Ss, Ts, and Js. Moreover, Thorne and Gough (1991: 42) studied that E was considerably correlated with assessor ratings of being sociable, energetic and gregarious. The Thome et al. also studied N to be significantly correlated with ratings of being imaginative and unconventional. F was correlated with ratings of being affectionate and warm, and P with ratings of being "informal and resistant to precise planning" (Thorne et al. 1991: 42). However, J was linked to consistency and, on an ACL checklist, was more related with being deliberate and conservative.

Barbuto, Fritz, Lim & Xu (2008: 139, 145) studied the relationship between the Myers-Briggs Type Indicator (MBTI) and the five sources of work motivation. The motivation sources are measured on the Motivation Sources Inventory. The result exposed several relationships, and most of them had a small effect. The authors argued that motivation and psychological type seemed to be two distinct dimensions of the human psyche. The authors stated that extraversion-introversion is significantly related to internalization and intrinsic process. Extroverts are argued to require more likely an instant gratification and also derive energy from the external environment. Thus, extroverts are less likely motivated by internalized goals or values. Nevertheless, the relationship described had an only small impact on the result, so it should be interpreted cautiously. The authors also found that sensing-intuition was significantly related to instrumental motivation. It suggests that sensing individuals are more likely motivated by concrete, tangible rewards for their efforts. Moreover, thinking- feeling was significantly associated with instrumental motivation. This result suggests that thinking type is also more likely to be motivated by tangible and clear rewards. Judging- Perceiving was significantly related to intrinsic process motivation. It indicates that a person, who prefers to keep options open and avoids structure, is likely to be motivated by instant pleasure and enjoyment. Garden (1997: 8-9, 12) also studied the relationship between the MBTI types and motivation profiles. Garden (1997: 8) argued that regarding the motivational profiles, “only a few results were statistically significant, and only some of the expected type-based differences occurred”. There were no significant differences in the different reasons for working by Es and Is. Ss rated structure and security higher, but autonomy lower than Ns. Friendship was rated moderately less by Ss. Money and comfort were ranked more by Ts than Fs. Ts ranked power and responsibility more, but
friendship less than Fs. Moreover, Js ranked structure and security more, but autonomy less than Ps, although Js and Ps rated power and responsibility in a similar manner. Nevertheless, Garden argued that each preference demonstrated a similar relative ordering (motivation profile). Money and comfort were ranked highest, whereas autonomy and recognition were rated either second or third by each type. Structure and security, power and responsibility were rated the lowest in the ranking by each type. The author made a conclusion that motivation and personality appear to be unique constructs. Hence, psychological types and motives have only a few relationships.

Rytting, Ware, Prince, File, & Yokomoto (1994) made a cluster analysis of data from major philanthropic donors, which were categorized by seven motives (altruists, communitarians, investors, repayers, the devout, dynasts and socialites). Their research concentrated only on the reasons for giving. They concluded that the T–F dichotomy was the most important MBTI- factor in predicting philanthropic behavior motives. They argued that dichotomy F seemed to give more internal and personal reasons for giving, whereas T appeared to respond to more external and pragmatic factors for giving. However, the researchers stated that there was little relationship between patterns of philanthropic behavior and the MBTI types.

Researches of motivation and the MBTI are presented in table 3.
<table>
<thead>
<tr>
<th>A study.</th>
<th>Results.</th>
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<tbody>
<tr>
<td>Myers &amp; McCaulley (1985): <em>Manual: A guide to the development and use of the Myers-Briggs Type Indicator.</em></td>
<td>Es prefer to work interactively with a series of people; Is- types prefer some solitude. Ns prefer to work on a succession of new problems; Ss prefer a work with the detail. Ts prefer a work that demands logical order and analysis; Fs prefer a work that allows serving people. Js prefer a work that requires system and order; Ps want a job that demands adapting to changing situations.</td>
</tr>
<tr>
<td>Thorne and Gough (1991): <em>Portraits of type.</em></td>
<td>E was correlated with being sociable, energetic and gregarious. N was correlated with being imaginative and unconventional. F was correlated with being affectionate and warm and P with being informal and not eager to plan precisely. J was linked to consistency and related with being deliberate and conservative.</td>
</tr>
<tr>
<td>Barbuto, Fritz, Lim &amp; Xu (2008): <em>Using the MBTI instrument and the Motivation Sources Inventory to test the relationships between Jung’s psychological types and sources of work motivation.</em></td>
<td>Motivation and psychological type seemed to be two distinct dimensions of the human psyche. Extraversion-introversion is significantly related to internalization and intrinsic process. Sensing-intuition was significantly related to instrumental motivation. Judging- perceiving was significantly related to intrinsic process motivation.</td>
</tr>
<tr>
<td>Garden (1997): <em>The relationships between the MBTI profiles, motivation profiles, and career paths.</em></td>
<td>Motivation and personality appear to be unique constructs. Psychological types and motives have only a few relationships.</td>
</tr>
<tr>
<td>Rytting, Ware, Prince, File, &amp; Yokomoto (1994): <em>Psychological type and philanthropic styles.</em></td>
<td>The T–F dichotomy was the most important MBTI factor in predicting philanthropic behavior motives. Dichotomy F seemed to give more internal and personal reasons for giving, whereas T appeared to respond to more external and pragmatic factors for giving. There was little relationship between patterns of philanthropic behavior and the MBTI types.</td>
</tr>
</tbody>
</table>
5. RESEARCH DESIGN

The theoretical approach of the thesis is qualitative research. Cronbach (1975) argued that a statistical research is not suitable for taking into account effects of the many interactions of the social settings. Hoepfl (1997) argued that the qualitative method can also be used to get more in-depth information, which can be challenging to convey quantitatively. Moreover, Cronbach (1975) argued that the problem in quantitative research is that it can ignore important effects, which are not statistically significant. Strauss and Corbin (1990) argued that the qualitative method is a good approach to gain knowledge about a little-known phenomenon. Therefore, the qualitative research has chosen to the thesis because it can describe complex social settings and has an ability to bring all the important arguments to the surface. Furthermore, the motivation and personality field is little researched. Hence, it also validates the use of the qualitative approach since qualitative research enables the gain of in-depth information.

Bogdan and Biklen (1982) has defined qualitative data analysis as "working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others". The idea of qualitative analysis is the place the raw data into logical, meaningful categories. The data should be examined in a holistic fashion. Moreover, the way should be defined to communicate this interpretation to others.

5.1 Methodology

Motivation Sources Inventory (Barbuto & Scholl 1998) was used as an interview base. Motivation Sources Inventory was translated into Finnish, and the overlapping questions were removed. The aim was to make the interview shorter and easier to
handle. The accuracy of the translated version was inspected by two persons, who did not participate in the making of the thesis. A semi-structure questionnaire was used in the interview. The interview had 16 questions. The last question was an open question, where participants were able to share their viewpoints on the matter. Each of the categories (intrinsic, instrumental, external self-concept, internal self-concept motivation and goal internalization) included three questions.

The analysis was made as a discourse analysis. The first step in the analysis was to group answers into bigger themes emerged from the responses. It supported forming of coherent themes, which illustrated the investigated matter. That was the second step. Thirdly, the answers were analyzed by the MBTI preferences. The aim was to seek such expressions and issues, which each preference could be expressing by the descriptions of the preferences by the Myers-Briggs Foundation (2015). An extrovert was thought to mention issues, which were related to the external world and other people such as the importance of having a number of friends, being with other people, and avoiding being alone. An introvert was anticipated to be more concerned about the inner world and having solitude, and mentioning things such as self-development, being alone, and knowing only a few people. A thinking preference was expected to raise matters related to being rational and indifferent such as the importance of logic and analysis, being fair and truthful, and not letting personal and other people’s wishes influence on oneself. A feeling preference was anticipated to care about other people’s viewpoints, seeking what is important to others, aiming at maintaining harmony, and mentioning things associated with making decisions by heart, and being tactful and idealistic. A judging preference was predicted to express a desire to be task-oriented and organized, and mentioning things such as being in control, working before playing, and avoiding the rush. A perceiving preference was thought to communicate being spontaneous and flexible, stimulating by an imminent deadline, and remarking matters such as staying open to possibilities, being casual and loose. A sensing preference was anticipated to describe subjects of physical reality, and experiences, and mentioning issues relating to details, facts, practical use of matters and everything current, real and present. An intuition preference was anticipated to express meanings and patterns, symbols, and abstract
theories or impressions. The intuition preference was also thought to mention things such as trying everything new and different, and being hands-on.

5.2 Data

Participants were selected for the study due to their similar background; university education and the age under 30 years. All the participants were Finnish nationals and business major students at the University of Vaasa. The number of total participants was 19. Five of the participants were males, and 14 were females. In the first phase, the participants completed the Myers-Briggs Indicator (MBTI). Two participants failed to complete the MBTI test. Interviewees to the second phase were selected among those 17 participants, who completed the MBTI test. Eight participants were chosen for the interviews, and they were chosen by their personality type. However, the error was made in the MBTI personality testing of the study participants, and it was not discovered until the analysis of the interviews was already partly done. Therefore, the author needed to drop two participants from the analysis as a result of the same personality type of the participants. Moreover, total three of the interviewees’ personality types changed due to the error. Hence, six participants’ answers were eventually analyzed. One of the interviewees was a male, and five were females. The study was conducted by email interviews due to distant locations of the interviewees and the interviewer. The interviewees had two weeks to complete the questionnaire in the place and time chosen by them. Personality types of the interviewees were ESTJ, ISTJ, ISFJ, INFP, INFJ, and ENTP. Therefore, two of the interviewees were E preferences. Four were I preferences, three were S and N preferences, three T and F preferences, and four J and two P preferences.
5.3 Validity and reliability

The reliability of the study is traditionally evaluated by validity and reliability. Reliability is defined as repeatability of the results of the study. Validity is determined by how well, and reliable the results of the study illustrate the measured phenomenon. (Eriksson & Kovalainen 2008: 291-292)

There are few issues, which affect the validity of the study. Firstly, not every MBTI type was represented in the study. Therefore, the study has only limited ability to illustrate the investigated issue. The distribution of the MBTI types has been studied in Finland (Rissanen 2003). The most frequent types have been ESTJ (21%), ENTJ (13%) and ISTJ (12%). The least frequent types have been INFJ (1%) and INFP (1%). Therefore, three personality types (ESTJ, ENTP, and ISTJ) represented in this study are also the most frequent types in Finland. The two of the least frequent types (INFP and INFJ) are also included in this study. ISFJ is also represented in this study, and it has 5% distribution in Finland. Therefore, the type distribution in this study was diverse and quite even since few the most frequent types were included along with some of the least frequent types. However, in the interview sample of the study were fewer extroverts than introverts; only two extroverts compared to the four introverts. By the Finnish MBTI distribution, there were more extroverts (71%) than introverts (29%) (Rissanen 2003). Thinking and feeling preferences were evenly represented as were sensing and intuition preferences in this study. Perceiving preferences were underrepresented with two interviewees compared to four judging preferences. In Finland, there were 70% judging preferences and 30% perceiving preferences (Rissanen 2003). Hence, the distribution of the preferences may have affected the validity of the study. The loss of participants has also influenced to the study. The results are affected the most of the loss of two interviewees due to personality measurement error. Moreover, the personality type of the three of the remaining interviewees changed, and that affected the distribution of the types of the study and, therefore, the validity negatively. The loss of two interviewees also weakened the internal validity of the study due to the smaller participation rate. Moreover, the interviewees answered the questionnaire at the time
and place chosen by them. Therefore, the circumstances were not controlled by the author. Hence, the respondents might have changed their answers as desired before sending them for the analysis. They might have also asked support from others, who did not participate in the interview, while completing the questionnaire. Predictive validity of the study may not be significant since the study has been made with qualitative analysis and a small sample. Hence, that reduces the predictive ability of the study. However, the validity of the study has been enhanced by using well-known and reliable Motivation Sources Inventory questionnaire as a base for the interview. Barbuto & Trout (2004: 16) argued that Motivation Sources Inventory “has shown to be both reliable and valid -- in a wide range of populations, (i.e., urban business, health care and social service workers, education professionals and college students)”. The logical validity has been ensured in comparing the results of the study for the findings of the previous studies done in the field.

Regarding the reliability of this study, it is made with the qualitative method by the author. Therefore, the interpretations are subjective choices made by the author, and other researchers could have made distinct choices. Hence, the results of this study may not be easily repeated. However, the reliability of the study has been improved by describing the study methods and steps made in the research so that the process can be easily followed. The respondents’ quotes used in the study also enhance the transparency of the study.
6. RESULTS

6.1 Intrinsic and instrumental motivation

Motivation Sources Inventory by Barbuto & Scholl (1998) included three questions in the category of intrinsic motivation. The first question was “do you like to do only things, which are fun”. All the respondents answered that they also do things they do not necessarily enjoy. However, some differences were found between respondents’ answers and their preferences. INFJ argued that “depending on the situation, I also do things, which are not the most pleasant to me for challenging myself”. Therefore, her answer can be linked to the introvert preference since it describes her inner world. Regarding judging and perceiving pair, ENTP & INFP as perceiving preferences stated that they do not do uncomfortable things unless they have an enough high incentive for doing them. However, ENTP and INFP also said that they also do uncomfortable things if it is absolutely necessarily. Related to thinking and feeling preferences, ISFJ mentioned “if I do unpleasant things, they are easier to do when it is known that they have some kinds of benefits to either myself or some other party such as a society”. This remark indicates the feeling preference since such actions can be seen idealistic. No differences were found between sensing and intuitive preferences.

The second question was “if you did not enjoy doing the job at your work, would you leave”. All the respondents answered that they would leave, but ISTJ, ISFJ, ESTJ, and INFJ had reservations concerning the likelihood to find another job or their current financial situation. ISTJ as the introvert preference stated “my work’s enjoyableness is not necessarily that significant factor, but other benefits the job brings are (e.g. salary and work community)”. Therefore, it was quite a contradictory finding since the answer would fit better into extrovert’s preference due to its reference to the external world and other people. Perceiving preferences ENTP and INFP were quicker to say that they will
leave the job, if they do not enjoy it, and had very little consideration whether to say in the job or not. It indicates the perceiving preference due to its spontaneous nature. The thinking preferences, ISTJ and ESTJ, argued that they would stay in the job if there are little possibilities to get another job. This mention indicates the thinking preference since thinking individuals prefer not let their feelings, such as enjoying the job, interfere with logic and analysis. Few differences were found between sensing and intuitive preferences. ESTJ, ISFJ, and ISTJ referred to the physical reality and spoke about issues such as getting other job, work colleagues, risking income and personal financial situation. They can be linked to the sensing preference, where physical reality and facts play an important role.

The third question in the intrinsic motivation category was “do you choose people you spend your time with depending on how fun they are”. The respondents argued that being funny is usually a trait of a good friend, but it is not the reason, why they became friends. Few differences were found between thinking and feeling preferences. ENTP as the thinking preference mentioned “the friends are those, who say things respectfully as they are without hedging”. Therefore, he referred to being forthright, which can be linked to the thinking preference and its tendency to be fair and tell the truth. ISFJ and INFP as the feeling preferences referred to trustworthy being an important quality of a friend, what thinking respondents did not do. No significant difference was found between introvert and extrovert, judging and perceiving or sensing and intuitive preferences.

In the instrumental motivation category, the first question was “do job requirements dictate, how much effort you exert during work”. ESTJ answered “yes. The harder work, the more things I am ready to sacrifice for the work such as my spare time”. INFP answered that the job requirements do not necessarily affect the effort, whereas other respondents argued that the job requirements have no effect. Concerning differences between introvert and extrovert preferences, ISTJ referred to her internal standards, which she has for the work and she obeys, even if the actual standards of the work would be lower than her own. Furthermore, INFJ, ISFJ, and INFP mentioned that they
will do their work as well as possible regardless of the external standards of the work. This remark indicates the internal standards of the introvert. Concerning thinking and feeling preferences, ISFJ stated "especially if I care my workplace, I strive more in the work". This remark can be associated with the feeling preference because the respondent described a tendency to be caring and compassionate. That kind of tendency was guiding her decisions as the feeling preference can be seen indicating. Moreover, ENTP as the thinking preference stated

"if the work has no significant effect on anything and there is no reward associated with it (monetary or hierarchical), the work is pointless in my opinion and the opportunity cost of that time is very high. The time can be used wiser too."

Therefore, ENTP expressed logical and analytical thinking, which can be seen as typical behavior for the thinking preference. There was no difference between judging and perceiving or sensing and intuitive preferences.

The second question was “would you work harder if you knew your effort would lead higher pay”. Every respondent was ready to work harder, but with some reservations. ENTP said that he could work harder, but the effect would not last more than couple years. ESTJ also said that she would be ready to work harder, if “the salary rise affected my quality of life positively, and I felt that I have the capability to work harder”. Regarding introvert and extrovert preferences, ISTJ referred to her own standards, which required her to work harder in order to earn a higher salary. It can be seen as an indicator of the introverts’ inner world and standards, which are set by themselves. Concerning sensing and intuitive preferences, ISTJ argued that she needs to work harder if she gets more salary so that she concretely earns her salary. She also mentioned that salary is one of her critical motivation factors. All of the mentioned subjects are connected to the physical reality and, therefore, to the sensing preference. ISFJ stated

"pure monetary incentive does not work in the long-term. So the work has to be meaningful otherwise too”.

This kind of statement implies the intuitive preference since it refers to the abstract meaning. Therefore, it was quite a contradictory finding because ISFJ is the sensing preference. However, also ENTP as the intuitive type made broader, but the similar expression that only the money is not enough as the incentive. No differences were found between judging and perceiving types or feeling and thinking types.
A third question was “should eyes and ears always be kept open for better job opportunities”. INFP argued “no, if one is satisfied with the current situation, so why one should be looking for new job opportunities all the time”. However, all the other respondents stated that it is good to be looking for new opportunities regardless of the satisfaction. Concerning introvert and extrovert preferences, ISTJ mentioned that the individual’s own desire for the development affects the willingness to seek other jobs. The reference to the person’s development and the inner world can be considered to be typical for the introvert preference. Regarding judging and perceiving preferences, ENTP as the perceiving preference stated that he would change his job immediately if he gets a better job opportunity from another employer. Therefore, this comment indicates the perceiving preference, since staying open to possibilities, and spontaneous mindset are traits of the perceiving preference. In the sensing and intuitive category, ENTP mentioned ”in my opinion, people should always have the courage to try different things”. This remark can be linked to the intuitive preference since the intuitive is always interested in trying new and different things. No difference was found between feeling and thinking preferences.

6.2. External self-concept and internal self-concept

In the external self-concept based motivation category, the first question was “is it important to you that others approve your behavior”. All the respondents answered that it does matter, whether others approve their behavior at some extent. ISTJ stated ”I feel it is important in the work, but not in the spare time”. INFJ also argued that she is not afraid of behaving differently than others in some situations. Regarding sensing and intuitive preferences, ISTJ mentioned a very concrete law and order and that she needs to stay inside that frame, although otherwise she does what she likes without thinking others’ opinion of her behavior. This remark is a reference to the physical reality and is, therefore, linked to the sensing preference. Related to thinking and feeling preferences, ISFJ stated “ I think that as long as one does not do bad to others by one’s behavior, it
does not matter what others think”. INFP also stated that she does not care much about others’ opinion, but she still takes others into consideration in her behavior. These statements can be linked to the feeling preference since they are aimed at maintaining harmony among people and caring of the viewpoints of other people. ENTP stated ”if I feel my behavior does not need to be accepted by others, I do not change my behavior at all”. This statement can be associated with the thinking preference since it describes being indifferent to others’ feelings. However, ENTP also mentioned that he will avoid conflicts in the situations he feels it is needed. Therefore, the pattern was not very strong. No significant differences were found between judging and perceiving preferences or extraversion and introversion.

The second question was “do you work harder if public recognition is attached to the work”. ISTJ, ENTP, and INFP stated that publicity makes them work harder. However, INFJ, ESTJ, and ISFJ argued that it does not affect significantly or directly their motivation. ISFJ stated “the supervisor’s satisfaction and praises are more important, and the rest of the team’s”. This kind of statement can be connected to the extrovert’s preference, where other people are important. However, this was quite a contradictory finding since ISFJ has the introvert preference. Related to thinking and feeling preferences, ENTP stated that he will highlight his role in the work if it gets publicity. This remark can be related to the thinking preference because he does not think others’ possible negative feelings or disapproval due to his behavior. Regarding intuitive and sensing preferences, ISTJ mentioned that if she knows that her work will be acknowledged, she will do additional checks and be more careful. Therefore, the comment implies the sensing preference since it focused on detailed and concrete work, what can be considered to be typical to the sensing preference. There were no differences found between judging and perceiving preferences.

The third question was “do you think that these people, who make most friends, have lived the fullest life”. All the respondents argued that the number of the friends does not matter. INFJ stated that “in my opinion, it is not about the number of the friends, but the quality of the friendship” summarizing well the thoughts of the respondents. Regarding introvert and extrovert preferences, ISTJ suggested that fulfillment of the life comes
from other sources, such as well-being of that person and how the individual is able to
live as one wishes, and not from the number of the friends. This statement indicates the
introvert preference since the person’s inner world is more important than the external
world in that preference. No significant differences were found between feeling and
thinking, sensing and intuitive nor judging and perceiving preferences.

In the internal self-concept motivation category, the first question was “do decisions
you make reflect the highest standards that you have set for yourself”. All the
respondents answered that the decisions reflect their standards. However, INFP and
ISFJ admitted that it is not always the case. INFP stated that her decisions reflect her
standards “to some extent, but mostly I do the decisions accordingly my state of the
mind at that moment”. Regarding introvert and extrovert preferences, there were several
references made by introverts ISTJ and INFJ to their inner world, such as self-
development and challenging themselves, what can be considered to be typical to the
introverts. Regarding judging and perceiving preferences, three judging preference
respondents (ISFJ, ESTJ, and INFJ) referred to the milestones and decisions they make
for achieving their goals. These expressions can be associated with the judging
preference, since judging personalities are organized and task-oriented. INFP answered
that she usually does the decisions based on her current feelings. This expression can be
related to the perceiving preference, where individuals stay open to everything that
happens and appear to be spontaneous and loose. Regarding sensing and intuitive
preferences, ISTJ referred to doing concrete work for a report with a meticulous attitude
and striving for the correctness. ISFJ also stated ”in everyday decisions it does not
necessarily go so that, I do not always, for example, buy local products from the store,
even though I believe it should be done”. This remark indicates the sensing preference
since it is connected to the physical reality, details and concreteness as sensing
preferences usually favor to do.

The second question was “is it important to you that you work for the company that
allows you to use your skills and talents”. All the respondents except ESTJ said that it is
important to be able to use their skills in the work. ESTJ argued that if she can use her
skills in the spare time, then the job does not necessarily have to be very challenging.
She continued that then the other aspects of the job such as work environment and usefulness of the work may weight more. ISTJ argued

“I feel that the job does not provide enough challenge and enable my self-development if I can not use my skills and talents”.

Regarding the introvert and extrovert preferences, ISTJ and INFJ referred to their need to use their skills and have an opportunity to self-development in the work. These comments indicate the introvert preference and the importance of the inner world. ESTJ referred to other aspects of the external work life such as work environment and usefulness of the work. Therefore, she referred to the external world and other people as the extrovert preference implies. No differences were found between thinking and feeling, judging and perceiving or sensing and intuitive preferences.

The third question was “do you consider to be able to motivate yourself”. All the respondents answered that they have the ability to motivate themselves in the most of the situations. ISFJ mentioned

“it depends on the matter I need to be able to motivate myself. I am not good at motivating myself in personal well-being and development”.

Concerning judging and perceiving dichotomy, INFJ as the judging preference mentioned “I do not like to leave things undone at all”. INFJ and ISTJ stated that they like to reward themselves for achieving their goals. ISTJ also argued that she tries to achieve her goals as efficient as possible. These mentions imply the judging tendency since they refer to being goal-oriented, organized and working before playing. Regarding the thinking and feeling preferences, ISTJ mentioned that one of her motivators is competitiveness. It indicates the thinking preference since the thinking personality does not try to maintain harmony among people as the feeling personality does and, therefore, competitiveness is a natural part of the impersonal thinking preference. Related to sensing and intuitive preferences, ESTJ mentioned that one way to motivate herself is to find nice and interesting details in matters. Her answer indicates the sensing preference since the sensing preferences have an interest in details and facts. No differences were found between introvert or extrovert preferences.
6.3 Goal internalization

In the goal internalization motivation category, the first question was “would you work for the company if you didn’t agree with its mission”. All the respondents said that they could not likely work for such company except ENTP stated that he could. ENTP argued

“the company and how it does business does not define me as a person. – The decisions I make in the work does not affect the other aspect of my life because they belong to the different sphere of the life.”

Regarding thinking and feeling preferences, ENTP’s comment about being able to work for the company regardless of its mission indicates the thinking preference since the thinking personalities can be regarded as indifferent. Furthermore, similarly associated with the thinking preference, ISTJ stated that she could work for the company although she does not agree completely with the company’s mission, if her job is not directly related to its mission. However, as a little contradictory discovery to the previous findings of the thinking preferences, ESTJ stated “I can not motivate myself enough, if I know that my work contribution leads to something, which I can not entirely support”. Moreover, ISTJ also mentioned that she can not work for the company, which mission is totally against her values. Therefore, there was no consistent pattern. The feeling preferences, INFP and ISFJ, mentioned that they can not work for the company, which values are against their values. That is consistent with their feeling preferences and, hence, maintaining harmony and being idealistic. Regarding sensing and intuitive preferences, ISTJ gave examples of very concrete things for actions of totally unethical companies such as polluting nature and degrading the human dignity. Moreover, ISFJ mentioned that the environment and people should not be harmed. All these things can be linked to the sensing preference since being connected to the actual, and real subjects are typical for that preference. No differences were found between extroverts and introverts nor judging and perceiving preferences.

The second question was “do you have to believe in the cause before you will work hard at achieving its ends”. ISTJ, INFJ, and ENTP argued that it does not matter, but INFP, ISFJ, and ESTJ said that it matters to some extent. As the sensing preference,
ISTJ admitted that the concrete meaning of the job helps to keep her motivation higher so that she works harder. That indicates the sensing preference and the importance of everything actual and real. INFJ argued that the concrete meaning of her work is not essential, which can be seen as a typical answer from the intuitive preference and thus, concerning more abstract issues. However, otherwise respondents said that the meaning of the work is an important motivator regardless the respondents’ preferences and hence, no consistent pattern was found. Regarding thinking and feeling preferences, ENTP argued

“If I promise something, I keep my word. No matter how uncomfortable it is. If I promise to work as best I can, then I will do it. Otherwise, I am lying to myself”.

Therefore, ENTP referred being indifferent to his feelings, what indicates the thinking preference. Concerning extrovert and introvert preferences, INFJ argued that every job is a possibility to learn and, therefore, an important one. Learning was a reference to her inner world, which is an indicator of the introvert preference. No difference was found between judging and perceiving preferences.

The third question was “if an organization is accomplishing a mission that you agree with, does it matter whether you were responsible for its success”. ISTJ, ISFJ, and INFJ stated that they do not need recognition from the success. INFJ argued ”I would like that the company’s management know that it was my merit, but yes, in some situations it is not necessarily so important to get the credit”. ESTJ stated that she wants to have recognition if there is a risk that somebody else would get the credit, when she has been solely responsible for the achievement. However, she stated “if the recognition goes to my colleagues, who have worked as hard as I did for the accomplishment, I do not necessarily mind if I do not get the merit”. ENTP stated that he wants to have the credit, if he is responsible for the success. Regarding thinking and feeling preferences, ENTP argued “credit where is due”. That implies the thinking preference since it may indicate being indifferent from other team members’ feelings and approval if they consider his behavior arrogant and that he is diminishing other team members. Related to introvert and extrovert preferences, INFJ stated “I do not need the credit”. This remark can be seen as an indicator of the introvert preference and the lesser importance
of the external world and its recognitions. No difference was found between sensing and intuitive nor judging and perceiving preferences.

Lastly, the respondents had an opportunity to share their viewpoints on the covered issues. ENTP argued that in his opinion, there is no such thing as motivation. There is only a persons’ character, which determines, whether the individual follows through no matter how uncomfortable it will be. He also used several metaphors in the answer. That indicates the intuition preference since the intuition personality prefers metaphors, impressions and symbols over an actual experience.

Results are presented in tables 4–8.
Table 4. Results: intrinsic process motivation.

<table>
<thead>
<tr>
<th>Intrinsic process motivation.</th>
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| Do you like to do only things, which are fun? | **Introvert**: INFJ had a need for challenging herself.  
| **All the respondents answered that they also do things they do not necessarily enjoy.** | **Feeling**: ISFJ referred to benefits when doing unpleasant things for herself or another party.  
| **Introvert**: ISTJ stated that other benefits of the job are more important than enjoyableness. Hence, contradictory finding due to introvert preference. | **Perceiving**: ENTP & INFP need higher incentives to do uncomfortable things.  
| **Perceiving**: ENTP and INFP quicker to say they will leave the job if they do not enjoy it, and had very little consideration whether to say in the job or not. |  
| If you did not enjoy doing the job at your work, would you leave? | **Introvert**: ISTJ stated that other benefits of the job are more important than enjoyableness. Hence, contradictory finding due to introvert preference.  
| **Perceiving**: ENTP and INFP quicker to say they will leave the job if they do not enjoy it, and had very little consideration whether to say in the job or not. |  
| **Thinking**: ISTJ and ESTJ would stay in the job if there are little possibilities to get another job. |  
| **Sensing**: ESTJ, ISFJ, and ISTJ referred to the physical reality such as getting other job, work colleagues and personal financial situation. |  
| Do you choose people you spend your time with depending on how fun they are? | **Thinking**: ENTP: an important factor of a friend was being straight and saying things as they are.  
| **Feeling**: ISFJ and INFP: trustworthy is an important quality of a friend. |  
| The respondents argued that being funny is usually a trait of a good friend, but it is not the reason, why they became friends. | No significant difference was found between introvert and extrovert, judging and perceiving or sensing and intuitive preferences. |
**Table 5.** Results: instrumental motivation.

<table>
<thead>
<tr>
<th>Instrumental motivation.</th>
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<tbody>
<tr>
<td>Do job requirements dictate how much effort you exert during work?</td>
<td>Introverted: ISTJ, INFJ, ISFJ and INFP do their work as well as possible regardless of the external standards of the work.</td>
</tr>
<tr>
<td><em>It affects to ESTJ, but not necessarily to INFP and has no effect to other respondents.</em></td>
<td>Feeling: ISFJ said that if she cares personally about her employer, she will work harder. Thinking: ENTP illustrated that the opportunity cost is very high for the job without remuneration and, thus, no reason for working.</td>
</tr>
<tr>
<td>Would you work harder if you knew your effort would lead higher pay?</td>
<td>There were no differences between judging and perceiving or sensing and intuitive preferences.</td>
</tr>
<tr>
<td><em>Every respondent was ready to work harder, but with some reservations.</em></td>
<td>Introverted: ISTJ referred to her internal standards, which required her to work harder in order to earn a higher salary.</td>
</tr>
<tr>
<td>Should eyes and ears always be kept open for better job opportunities?</td>
<td>Sensing: ISTJ needs concretely work harder if she gets more salary, and salary is also one of her critical motivation factors.</td>
</tr>
<tr>
<td><em>INFP argued that there is no reason for seeking better opportunities in some situations, but other respondents stated that it should be done.</em></td>
<td>Intuitive: ISFJ said only salary do not act as a sufficient incentive unless the job itself is meaningful. Hence, it was quite a contradictory finding due to the sensing preference of ISFJ.</td>
</tr>
<tr>
<td></td>
<td>No differences were found between judging and perceiving or feeling and thinking preferences.</td>
</tr>
<tr>
<td></td>
<td>Introverted: ISTJ mentioned that human’s own desire for the development affects the willingness to seek other jobs.</td>
</tr>
<tr>
<td></td>
<td>Perceiving: ENTP would change his job immediately, if he gets a better job opportunity from another employer, and stated that the individual should be open to trying different things.</td>
</tr>
<tr>
<td></td>
<td>Intuitive: ENTP mentioned that an individual should always have the courage to try different things.</td>
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<tr>
<td></td>
<td>No differences between thinking and feeling preferences.</td>
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Table 6. Results: self-concept-external motivation.

<table>
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<tr>
<th>Self-concept-external motivation.</th>
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<tbody>
<tr>
<td>Is it important to you that others approve your behavior?</td>
<td><strong>Sensing:</strong> ISTJ mentioned law and order in which frame she needs to stay in terms of her behavior.</td>
</tr>
<tr>
<td><em>All the respondents answered that it does matter whether others approve their behavior at some extent.</em></td>
<td><strong>Feeling:</strong> ISFJ: It does not matter as long as she does not do bad to others. INFP does not care about others’ opinion of her, but she does take others into consideration in her behavior. <strong>Thinking:</strong> ENTP does not change his behavior if he feels that his behavior does not need to be accepted by others. However, ENTP will also avoid conflicts in the situations he feels it is needed. Thus, the pattern was not very strong.</td>
</tr>
<tr>
<td>Do you work harder if public recognition is attached to the work?</td>
<td>No significant differences were found between judging and perceiving preferences or extraversion and introversion. <strong>Introvert:</strong> ISFJ said that the most important thing is not the publicity, but the supervisor’s and team’s opinions. Therefore, this was quite a contradictory finding since ISFJ has the introvert preference. <strong>Thinking:</strong> ENTP will highlight his role in the work if it gets publicity.</td>
</tr>
<tr>
<td><em>ISTJ, ENTP, and INFP stated that publicity makes them work harder. However, INFJ, ESTJ, and ISFJ argued that it does not affect significantly or directly to their motivation.</em></td>
<td></td>
</tr>
<tr>
<td>Do you think that these people, who make most friends, have lived the fullest life?</td>
<td><strong>Sensing:</strong> ISTJ will do additional checks and be more careful if she knows that her work will be acknowledged.</td>
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<tr>
<td><em>All the respondents argued that the number of the friends does not matter.</em></td>
<td>No differences were found between judging and perceiving preferences. <strong>Introvert:</strong> ISTJ suggested that the fulfillment of the life comes from well-being of that person and how the individual is able to live as he/she wishes.</td>
</tr>
<tr>
<td></td>
<td>No significant differences were found between thinking and feeling, sensing and intuitive or judging and perceiving preferences.</td>
</tr>
</tbody>
</table>
Table 7. Results: self-concept-internal motivation.

<table>
<thead>
<tr>
<th>Self-concept-internal motivation</th>
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<tbody>
<tr>
<td><strong>Do decisions you make reflect the highest standards that you have set for yourself?</strong></td>
<td><strong>Introvert:</strong> ISTJ and INFJ referred to self-development and challenging themselves.</td>
</tr>
</tbody>
</table>
| **All the respondents answered that they do, but INFP and ISFJ said that it is not always the case.** | **Judging:** ISFJ, ESTJ, and INFJ referred to their goals, and decisions they make for achieving these goals.  
**Perceiving:** INFP makes the decisions based on her current feelings. |
| **Is it important to you that you work for the company that allows you to use your skills and talents?** | **Sensing:** ISTJ referred to doing concrete work for a report with a meticulous attitude and striving for correctness. ISFJ gave a real life example of her everyday actions of going to the store.  
**Introvert:** ISTJ and INFJ have a need to use their skills, and they also need to have an opportunity to self-development in the work.  
**Extrovert:** ESTJ said that the external factors of the work life (work environment and usefulness of the work for others) can be more important in being satisfied with the work.  
**All the respondents except ESTJ said that it is important to be able to use their skills in the work. ESTJ argued that it depends on the situation in her life.**  
No differences were found between thinking and feeling, judging and perceiving or sensing and intuitive preferences. |
| **Do you consider to be able to motivate yourself?** | **Judging:** INFJ dislikes to leave things undone. INFJ and ISTJ like to reward themselves after achieving their targets. ISTJ tries to achieve her goals as efficient as possible.  
**Thinking:** ISTJ mentioned that one of her motivators is competitiveness.  
**All the respondents answered that they have the ability to motivate themselves in the most of the situations.**  
**Sensing:** ESTJ mentioned that one way to motivate herself was to find nice and interesting details in the matters.  
No differences were found between introvert and extrovert preferences. |
### Table 8. Results: goal internalization motivation.

<table>
<thead>
<tr>
<th>Goal internalization motivation</th>
<th>Thinking: ENTP could work for the company regardless of the fit of his values and the company’s mission. ISTJ could work for the company if her job is not directly related to its mission. However, ISTJ can not work for the company, which mission is totally against her values. ESTJ stated that she can not motivate herself for working the company she can not support. Therefore, there was no totally consistent pattern. Feeling: INFP and ISFJ can not work for the company, which values are against their values.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you work for the company if you didn’t agree with its mission?</td>
<td>Thinking: ENTP could work for the company regardless of the fit of his values and the company’s mission. ISTJ could work for the company if her job is not directly related to its mission. However, ISTJ can not work for the company, which mission is totally against her values. ESTJ stated that she can not motivate herself for working the company she can not support. Therefore, there was no totally consistent pattern. Feeling: INFP and ISFJ can not work for the company, which values are against their values.</td>
</tr>
<tr>
<td>All the respondents said that they could not likely work for such company, except ENTP stated that he could.</td>
<td>Sensing: ISTJ gave examples of actions of totally unethical companies such as polluting nature. ISFJ said that environment and people should not be harmed.</td>
</tr>
<tr>
<td>Do you have to believe in a cause before you will work hard at achieving its ends?</td>
<td>Sensing: ISTJ said that concrete meaning of the job helps to keep her motivation higher so that she works harder. Intuitive: INFJ argued that concrete meaning of her work is not critical to her. However, no consistent pattern was found in this category due to otherwise the unclear distribution of answers between preferences.</td>
</tr>
<tr>
<td>ISTJ, INFJ, and ENTP argued that it does not matter, but INFP, ISFJ, and ESTJ said that it matters to some extent.</td>
<td>Thinking: If ENTP has made a promise, he needs to keep it and follow through, although it would be very uncomfortable. Introvert: INFJ argued that every job is an important one and possibility to learn.</td>
</tr>
<tr>
<td>ISTJ, ISFJ, and INFJ stated that they do not need the recognition. INFJ wants that the company’s management knows her credit, but in some situations it does not matter.</td>
<td>Thinking: ENTP argued that the honor of doing the work should go to the person, whom it belongs. Introvert: INFJ stated that getting the recognition from the work is not important.</td>
</tr>
</tbody>
</table>
No differences were found between sensing and intuitive or judging and perceiving preferences.

| Shared viewpoints. | **Intuitive:** ENTP used a number of metaphors in his answer and argued that motivation does not exist, only the personality of the individual in order to follow through. |
7. DISCUSSION

The aim of this thesis was to research, whether there is a connection between personality and motivation. The study’s results indicate that there are only a few significant differences between personality preferences in terms of motivation. In the intrinsic process motivation- category there were no significant differences between preferences in the initial responses. Perceiving preferences appeared several times as spontaneous; needing higher incentives to do unpleasant things and having little consideration in staying in the undesirable job. Thinking preferences appeared several times in considerations of remaining in the unsatisfactory job. Several sensing personalities referred to the physical reality such as personal financial situation and colleagues. Accordingly this study, perceiving, thinking and sensing preferences appeared to be the strongest preferences in the intrinsic process motivation category. Accordingly Myers-Briggs Foundation (2015), the sensing- intuition pair is related to information gathering, whether an individual does it through five senses (sensing) or through possibilities and patterns in the information (intuition). Thinking-feeling is related to the way individuals make their decisions and whether they weight impersonal facts and objective principles (thinking) or people involved in the situation and personal concerns (feeling) as more important. The sensing- perceiving pair describes, how individuals prefer to live their outer life, i.e. what is the behavior others tend to see; decided and structured (judging) or adaptable and flexible lifestyle (perceiving).

Intrinsic process motivation is related to motivation, what a person gets when the work itself or participating in the behavior for the fun of it act as an incentive (Barbuto & Scholl 1998). This study suggests that the perceiving preferences have a lower threshold to seek more desirable work, if the job does not provide enough enjoyment. Moreover, the study indicates that the thinking preferences are more likely to stay in the unsatisfactory job and cope without motivation from the work itself. Furthermore, the study suggests that the sensing preferences may put more weight to the realities affecting the decisions. These conclusions are coherent with the definitions of each preference by Myers-Briggs Foundation (2015) and, therefore, justified. Furthermore, Buie (1998: 53) found that the perceiving preferences wanted more spontaneity and
variety than the judging preferences. Hence, the findings of this study regarding spontaneity of the perceiving preferences are consistent with Buie’s discovery. However, Barbuto, Fritz, Lim & Xu (2008) found that extraversion-introversion and judging-perceiving are significantly related to the intrinsic process and, therefore, the findings of their study differ from the results of this study. Nevertheless, in their study these relationships had only small significance and thus, they argued that conclusions should be made cautiously.

In the instrumental motivation category, there was some variety in the initial answers. Nevertheless, the difference between preferences was not highly significant. However, the introvert preference emerged several times. Introverts referred to their need for self-development and their internal standards regarding the work. The feeling preference also appeared in terms of caring personally of the employer. Myers-Briggs Foundation (2015) describes introversion-extroversion dichotomy so that it determines where people get their energy and where they put their attention; to their inner world of images and ideas (introversion) or spending time in the outer world of things and people (extraversion). People are rewarded by instrumental motivation when they realize that their actions lead to tangible extrinsic outcomes such as promotion, bonuses and pay (Barbuto & Scholl 1998). This study indicates that the introverts refer more to their inner world and standards than to the external world and its promotions. The results of the study also suggest that the feeling preferences may be motivated by empathizing with the employer. Both of the findings are coherent with the preference descriptions by Myers-Briggs Foundation (2015). However, Barbuto, Fritz, Lim & Xu (2008) found a connection between instrumental motivation and the sensing-intuition preference what this study did not do.

In self-concept-external motivation, the answers divided only regarding the question of working harder if public recognition is attached to the work. However, in that question the answers were not divided in the clear order by the personality preferences. Thus, no remarkably significant differences were found. Nevertheless, the thinking preference emerged few times in being indifferent from one’s or other people’s feelings. In self-concept motivation individuals lean on the external world and seek approval from
others for their competencies, values and traits (Barbuto et al. 2008). Therefore, this study suggests that the thinking preferences may not be easily motivated by the role and expectations set by others. This finding is consistent with the description of the thinking preference being impersonal. Barbuto et al. (2008) did not find a link between self-concept-external motivation and the MBTI preferences.

In self-concept-internal motivation, there was some variation in the answers, but they were not divided by the personality preferences. Nevertheless, the introvert preference appeared several times as remarks to self-development and challenging themselves. Therefore, the remarks referred to the introvert’s world and ideal. The judging preference occurred several times as statements referring to the goals and the decisions for achieving the goals, rewarding after reaching the goals, being efficient and disliking to leaving things unsolved. The sensing preference also appeared as a mention of finding fun and interesting details, which help to motivate a person. Self-concept-internal motivation is inner based, and in that motivation individuals are inner-directed and set themselves a base for ideal self (Leonardo, Beauvais, & Scholl 1999). Therefore, the findings of this study are consistent with self-concept-internal motivation since the inner world is more important to the introverts, and the judging preferences guide themselves in a very task oriented and organized way. The study implies that the introverts may be motivated by self-development and challenging themselves. It also indicates that the judging preferences weight higher importance of having goals, reaching their goals and getting things done. This finding was coherent with the finding of Myers & McCaulley (1985), where they suggested that Js prefer a work that requires system and order. Furthermore, the results of this study suggest that the sensing preferences may be motivated by fun and interesting details. This conclusion is also a consistent observation with the conclusion of Myers & McCaulley (1985), where they suggested that Ss prefer a work with the detail. Moreover, Buie’s (1988) research also confirms the finding of this study, since Buie found that Ss preferred details more than Ns. However, Barbuto et al. (2008) found no relationship between the MBTI-preferences and self-concept-internal motivation.
In goal internalization motivation, there was some variety in the answers, but no highly significant division between preferences was found. However, the thinking preference appeared several times in the answers. Being able to work for the unethical company was mentioned by thinking preferences. Moreover, a remark of following through the task no matter of the feelings was mentioned. These comments are characterized by the thinking preference’s tendency to be indifferent and impersonal. Therefore, the results suggest that the thinking preferences do not necessarily put as much weight to the company’s ethic and are still able to motivate themselves for working the company regardless of its ethical actions. The sensing preference appeared as examples of actions, such as polluting nature, by unethical companies and as a mention of concrete meaning of the work, which help an individual to motivate. Therefore, the results indicate that concrete and clearly visible unethical actions by the company may play higher importance to the sensing preferences. The sensing preferences may also be more motivated by concrete meaning of the work. Barbuto et al. (2008) found that extraversion-introversion is significantly related to goal internalization, even though the significance of the finding was small. Hence, Barbuto et al.’s (2008) conclusions differ the findings of this study. Furthermore, the aim of this thesis was also to answer the question, whether personalities motivate themselves differently. Although the findings of the study had little overall significance and, thus, the results need to be generalized cautiously, the results imply that the personalities motivate themselves in a very similar manner. However, the reasons behind these decisions can be different and may have reflections from the personality preferences.

The results of the study of Barbuto et al. (2008) differed from this thesis. The distinct results of the thesis can be partly explained by differences between study methods of Barbuto et al.’s and this thesis. Barbuto et al. used a Likert-type scale, whereas in this study was used a semi-structured questionnaire. Therefore, in the questionnaire the respondents were able to raise issues, what they desired. Hence, the respondents’ personalities occurred in a distinct way than in the study of Barbuto et al. Therefore, this study was able to focus more on the reasoning behind motivated action due to the qualitative method of the study. The sample of six participants was also considerably smaller than that of Barbuto et al. since Barbuto et al. had the sample of 208 individuals.
Moreover, the number of the extroverts was especially relatively underrepresented in comparison to the introverts in this study. Despite the suggestions by Myers & McCaulley (1985) that different preferences favor to work in different manners, the results of this study confirm the conclusions from the previous studies (Garden 1997; Hardigan, Cohen & Carvajal 2001; Judge & Illies 2002; Furnham, Petrides, Jackson, & Cotter 2002; Barbuto et al. 2008; Furnham, Eracleous & Chamorro-Premuzic 2009; Freyedon, Taebeh & Golamhosain 2011) that motivation and personality appear to be divergent concepts. For example, Garden (1997: 12) stated “the practical implication is that types might want conditions that are more similar than different, which is contrary to a narrow interpretation of type theory”. Implications of this study are that it appears to be best, if companies focus on finding motivation sources separately for each personality regardless of their personality type. Motivation can not be reliably predicted from the MBTI- preferences.

However, it can be beneficial to study further the reasoning behind motivation with the bigger sample. It could help revealing, whether there are consistencies among the personality preferences in the reasons to motivate. For example if introverts frequently tend to raise issues such as a need to challenge and develop themselves, the company would do wisely if it emphasized offerings of such opportunities to introverts. Furthermore, it could be beneficial to execute the research with several researchers for minimizing the interpretations errors. Moreover, the validity of the research could be improved by taking into consideration the weighted value of the preference of the individual. The closer the value is to the determinant limit (50/50), the less weighted that value becomes. For example, if the individual prefers extroversion only 51% of the time and, therefore, the preference is very weak, the answers related to the extroversion preference could be weighted less in the analysis regarding that individual.
7.1 Delimitations

One of the limitations of this study is language. The thesis is written in English, and the interviews were done in Finnish. Furthermore, the Motivation Sources Inventory (Barbuto & Scholl 1998) is originally written in English, and it is used as a base for the interview questionnaire in Finnish. Therefore, there may have been errors in the translation phase. This problem has been taken into account with careful translation and asking several assistants to check the correctness of the translations of the interview questionnaire. Moreover, the interview was made with open questions, so interpretation errors are possible. Hence, the interviewee has meant a certain thing, but the author might have interpreted it differently than what the interviewee originally denoted. Moreover, due to discovered errors of personality type testing in the middle of the analysis, it may have affected the quality of the interview analysis and increased the possibility of the errors. This error has been taken into consideration by several overlapping checks by the author. Furthermore, the distribution of the personality types changed due to the testing error. Therefore, fewer personality types and more introverts were interviewed compared to the extroverts than what was the original intention. The delimitation of the study is also that some answers could be seen indicating several preference categories. Therefore, the same answer may have used as a reference for several preferences. The sample of the study is also small: six participants. Not every personality type is represented in the study. Hence, the results of the study should be generalized cautiously. Moreover, the study is made with the qualitative research method by the author. Therefore, the interpretations are subjective choices made by the author. Thus, other researchers could have made distinct choices. Furthermore, there may also be other factors such as personal values, which affect significantly to the answers of the respondents. However, these factors might not have taken into consideration in the study methodology, questionnaire or theoretical base of motivation or personality of the study.
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APPENDIX

Appendix 1. The interview questions in Finnish.

Vastaa kysymyksiin ja selitä vastaukset. Toivoisin todella, että käyttäisit vastaamiseen sen verran aikaa, jotta kerkeät perustelemaan vastaukset. Se olisi hyvin tärkeää tutkimuksen onnistumisen kannalta. Kiitos hyvin paljon ajastasi!

1. Teetkö mielelläsi ainoastaan asioita, jotka ovat sinulle mieluisia?
2. Jos et nauttisi työsi tekemisestä, lähtisitkö pois?
3. Valitsetko ihmiset, joiden kanssa vietät aikaa, sen mukaan, kuinka houskoja he ovat?
4. Sanelevatko työn vaatimukset sen, kuinka paljon ponnistelet työn tekemiseksi?
5. Työskentelisitkö kovemmin, jos tietäisit, että panoksesi johtaa korkeampaan palkkaan?
6. Oletko sitä mieltä, että ihmisten pitäisi aina pitää silmänsä ja korvansa auki paremmille työtilaisuuksille?
7. Onko sinulle tärkeää, että toiset hyväksyvät käytökset?
8. Työskenteletkö kovemmin projekteissa, joissa on mahdollisuus työsi julkiseen huomioimiseen?
9. Oletko sitä mieltä, että ne ihmiset, joilla on eniten ystäviä, elävät elämää täydemmin?
10. Heijastavatko päätöksesi omia korkeita standardejasi, joita olet asettanut itsellesi?
11. Onko sinulle tärkeää, että työsi yrityksessä antaa sinulle mahdollisuuden käyttää taitojasi ja kykyjäsi?
12. Pystytkö mielestäsi motivoimaan itse itseäsi?

13. Voisitko työskennellä yritykselle, vaikka et olisi samaa mieltä yrityksen missiosta?

14. Täytyykö sinun uskoa työsi merkityksellisyyteen ennen kuin työskentelet kovasti saattaksesi sen loppuun?

15. Voisitko olla ottamatta kunniaa tehdystä työstä, jos olet vastuussa yrityksen menestyksestä sen tavoitteiden saavuttamisessa ja olet tavoitteesta samaa mieltä?

16. Onko vielä jotain muuta, jota haluaisit kertoa omasta motivaatiostasi? Sana on vapaa.
Appendix 2. The interview questions in English.

Please, answer to the questions and explain your answer. Justified answers are really appreciated and very important for the successful research. Thank you so much for your time.

1. Do you like to do only things, which are fun?
2. If you did not enjoy doing job at your work, would you leave?
3. Do you choose people you spend your time with depending on how fun they are?
4. Do job requirements dictate how much effort you exert during work?
5. Would you work harder if you knew your effort would lead higher pay?
6. Should eyes and ears always be kept open for better job opportunities?
7. Is it important to you that others approve your behavior?
8. Do you work harder, if public recognition is attached to the work?
9. Do you think that these people, who make most friends, have lived the fullest life?
10. Do decisions you make reflect the highest standards that you have set for yourself?
11. Is it important to you that you work for the company that allows you to use your skills and talents?
12. Do you consider to be able to motivate yourself?
13. Would you work for the company, if you didn’t agree with its mission?
14. Do you have to believe in cause before you will work hard at achieving its ends?
15. If an organization is accomplishing a mission that you agree with, does it matter whether you were responsible for its success?
16. Is there anything else you would like to tell about motivation? Share your opinion.
Appendix 3. The MBTI types.

**ISTJ** is serious, quiet and earns success by concentration and thoroughness. He is practical, orderly, a matter of fact, logical and dependable. He wants that everything is well organized, and he takes responsibility. He makes up his mind as what should be accomplished and works toward it steadily, regardless of protest or distractions. (Myers-Briggs & McCaulley 1990: 20)

**ISTP** is a cool onlooker. He is quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. He is usually interested in cause and effects and how and why mechanical things work. He is also interesting in organizing facts, where he use logical principles. He also excels at getting to the core of the practical problem and finding the solution. (Myers-Briggs et al.: 20)

**ISFJ** is quiet, friendly, responsible and conscientious. He works devotedly to meet his obligations and lends stability to any project or group. He is thorough, painstaking and accurate. His interests are not usually technical. He can be patient with necessary details. He is also loyal, considerate and perceptive. He is concerned, how other people feel. (Myers-Briggs et al.: 20)

**ISFP** is retiring, quiet and friendly. He is also sensitive, kind and modest about his abilities. He shuns disagreements and do not force his opinions or values to others. He does not usually care to lead but is a loyal follower. He is usually relaxed about getting things done because he enjoys the present moment and does not want to spoil it by undue haste or exertion. (Myers-Briggs et al.: 20)

**INFJ** is succeeding by perseverance, originality and desire to do whatever is needed or wanted. He puts his best efforts into his work. He is quietly forceful, conscientious and
concerning for others. He respects others for their firm principles. He is likely to be honored and followed for his clear vision as to how best to serve common good. (Myers-Briggs et al.: 21)

**INTJ** has an original mind and great drive for his ideas and purposes. He has a long-range vision, and he quickly finds meaningful patterns in external events. In fields that appeal to him, he has a fine power to organize a job and carry it through. He might also be skeptical, critical, independent and determined. He also has high standards of competence and performance. (Myers-Briggs et al.: 21)

**INFP** is a quiet observer, idealistic and loyal. It is important that his outer life is congruent with inner values. He is curious, quick to see possibilities, and he often serves as a catalyst to implement ideas. He is adaptable, flexible and accepting unless his values are threatened. He wants to understand peoples and ways of fulfilling human potential. He is little concern with possessions or surroundings. (Myers-Briggs et al.: 21).

**INTP** is quiet and reserved. He especially enjoys theoretical or scientific pursuit. He likes to solve problems with logic and analysis. He is interested mainly in ideas with a little attraction for parties or small talk. He tends to have sharply defined interest. He needs a career, where some strong interest can be used and is useful. (Myers-Briggs et al.: 21)

**ESTP** is good at on-the-spot problem-solving. He likes action and enjoys whatever comes along. He tends to have mechanical things and sports with friends on the side. He is adaptable, tolerant and pragmatic: he focuses on getting results. He dislikes long explanations. He is the best with real things that can be worked, handled, taken apart or put together. (Myers-Briggs et al.: 20)
**ESFP** is outgoing, accepting and friendly. He also enjoys everything and makes things more fun for others by their enjoyment. He likes action and makes things happen. He knows what is going on and joins it eagerly. He remembers facts easier than master theories. He is the best in situations that needs common sense and practical ability with people. (Myers-Briggs et al.:20)

**ESTJ** is practical, realistic and matter-of-facts with a natural head for business and mechanics. He is not interested in abstract theories, but he wants to have direct and immediate applications when he is learning. He likes to organize and run activities. He is often making a good administrator, because he is deciding, moves quickly to implement decisions and takes care of routine details. (Myers-Briggs et al.: 20)

**ESFJ** is warm-hearted, talkative, popular and conscientious. He is also born as a cooperator and an active committee member. He needs harmony and may be good at creating it. He is always doing something nice for someone. He works best with encouragement and praise. His main interest is in things that directly and visibly affect people’s lives. (Myers-Briggs et al.: 20)

**ENFP** is warmly enthusiastic, high-spirited, ingenious and imaginative. He can do almost anything that interests him. He is quick in finding a solution for any difficulty and ready to help anyone with a problem. He is often relying on his ability to improvise instead of preparing in advance. He can usually find compelling reasons for whatever he wants. (Myers-Briggs et al.: 21)

**ENTP** is quick, ingenious and good at many things. He stimulates his company, and he is also alert and outspoken. He may argue for fun either side of a question. He is resourceful in solving new and challenging problems, but may neglect routine
assignments. He is apt to turn to one new interest after another. He is skillful to find logical reasons for what he wants. (Myers-Briggs et al.: 21)

**ENFJ** is responsive and responsible. He feels concern for what others think or want and try to handle things in regard for the other’s feelings. He can present a proposal or lead a group discussion with ease and tact. He is sociable, popular and sympathetic. He is responsive to praise and criticism. He likes to facilitate others and enable people to achieve their potential. (Myers-Briggs et al.: 21)

**ENTJ** is frank, decisive and a leader in activities. He develops and implements comprehensive systems to solve organizational problems. He is good in anything that requires reasoning and intelligent talk such as public speaking. He is usually well informed and enjoys adding more knowledge to his fund of knowledge. (Myers-Briggs et al.: 21)