

TALLINN UNIVERSITY OF TECHNOLOGY
School of Business and Governance
Department of Business Administration

Parmeet Singh Sawhney

Conative challenges among small business owners in Estonia

Master's thesis

MBA - International Business Administration, Entrepreneurship

Supervisor: Sirje Ustav, PhD

Tallinn 2021

I hereby declare that I have compiled the paper independently and all works, important standpoints and data by other authors has been properly referenced and the same paper has not been previously presented for grading.

The document length is 12,264 words from the abstract to the end of conclusion.

Parmeet Singh Sawhney

.....

(signature, date)

Student code: 194538TVTM

Student email address: parmeet.sawhney90@gmail.com

Supervisor: Sirje Ustav, PhD, Senior Lecturer

The paper conforms to requirements in force

.....

(signature, date)

Chairman of the Defence Committee: / to be added only for graduation theses /

Permitted to the defence

.....

(name, signature, date)

TABLE OF CONTENTS

LIST OF TABLES.....	4
LIST OF FIGURES.....	5
LIST OF ABBREVIATION.....	6
ABSTRACT.....	7
INTRODUCTION.....	8
1. THEORETICAL BACKGROUND.....	10
1.1 ANTECEDENTS OF CONATIVE CONSTRUCTS	10
1.2 CONATION & ITS IMPACT IN ENTREPRENEURSHIP	13
1.3 MOTIVATION & ITS IMPACT IN ENTREPRENEURSHIP.....	16
1.4 VOLITION & ITS IMPACT IN ENTREPRENEURSHIP.....	19
2. RESEARCH METHODOLOGY.....	22
2.1 PARTICIPANTS OF THE STUDY.....	22
2.2 INSTRUMENT OF THE STUDY.....	27
2.3 PROCEDURE.....	29
2.4 METHODS OF DATA ANALYSIS.....	29
3. RESULTS.....	31
3.1 FREQUENCY DISTRIBUTION OF DATA.....	31
3.2 INFERENTIAL ANALYSIS.....	33
3.3 RESEARCH QUESTIONS AND ANSWERS.....	41
4. DISCUSSION AND CONCLUSION.....	43
4.1 DISCUSSIONS.....	43
4.2 CONCLUSION.....	46
4.3 LIMITATIONS AND RECOMMENDATION FOR FUTURE RESEARCH.....	47
LIST OF REFERENCES.....	49
APPENDICES.....	57
APPENDIX 1: RESEARCH QUESTIONNAIRE.....	57
APPENDIX 2: INTERVIEW TRANSCRIPT.....	59
APPENDIX 3 : NON-EXCLUSIVE LICENSE.....	72

LIST OF TABLES

Table 1. The characteristics of the sample.

Table 2. Entrepreneur's company age

Table 3. New entrepreneurs and experienced entrepreneurs.

Table 4. Team size of entrepreneur's company

Table 5. Age distribution among entrepreneurs.

Table 6. Age distribution among employees.

Table 7. Gender distribution among entrepreneurs.

Table 8. Gender distribution among employees.

Table 9. Statements for the questionnaire.

Table 10. Mean and standard deviation among entrepreneurs and employees based on each statement.

Table 11. Mean and standard deviation of group 1 and group 2.

Table 12. Pearson correlation coefficient analysis for autonomous motivation, controlled motivation, and volition.

Table 13. Cluster analysis of conation between entrepreneurs and employees.

Table 14. Cluster analysis of conation between entrepreneurs and employees based on gender.

Table 15. Cluster analysis of conation between entrepreneurs based on entrepreneurship experience.

Table 16. Cluster analysis of conation between entrepreneurs and employees based on age group.

Table 17. K-means cluster analysis

Table 18. Cronbach alpha validation of autonomous motivation aspect in the questionnaire.

Table 19. Cronbach alpha validation of volition aspect in the questionnaire.

Table 20. Cronbach alpha validation of conative aspect in the questionnaire.

LIST OF FIGURES

Figure 1. Rubicon model of action phases (Source: Gollwitzer, 1990).....	13
Figure 2. Cluster comparison of entrepreneurs and employees (Source: Compiled by the author based on the research database).....	36
Figure 3. Cluster comparison of entrepreneurs and employees based on gender (Source: Compiled by the author based on the research database).....	37
Figure 4. Cluster comparison of entrepreneurs based on entrepreneurship experience (Source: Compiled by the author based on the research database).....	38
Figure 5. Cluster comparison of entrepreneurs and employees based on age group (Source: Compiled by the author based on the research database).....	39
Figure 6. K-means cluster analysis.....	40

LIST OF ABBREVIATIONS

- Eg : Example
- Etc. : Etcetera
- &: And
- No. : Number
- STD : Self Determination Theory
- i.e. : that is
- S.D. : Standard Deviation

ABSTRACT

Conation is a significant construct in entrepreneurship. As Estonia has the highest number of entrepreneurs per capita in Europe, the competitive pressure and recent rise in economic growth has brought Estonian entrepreneurs to enhance the role of entrepreneurial competences. Previous research in the entrepreneurship domain has investigated and shown how conative constructs are being reflected among students but no studies on the actual entrepreneurs/ business owners were conducted. In this study, the author has considered the terms 'entrepreneurs' and 'small business owners' as the same. This study is aimed to contribute to studying this construct further and finding the empirical information directly from the entrepreneurs and practitioners. Also to provide an overview of how conative aspects are reflected among Estonian entrepreneurs/ business owners and if the entrepreneurs can be differentiated on the basis of their conation based choice making. As conation is a mix of motivation and volition, therefore in order to carry out the research, the author has included both autonomous motivation and volitional constructs. Hence, a reliable instrument was used to carry out the research. We have used Pearson Correlation Coefficient analysis to analyse the correlation among autonomous motivation and volition constructs, cluster analysis to get the cluster scores of the sample in order to determine entrepreneurs/business owner's decision or choice making strategies with respect to the conative aspects. Also, we have applied Cronbach's alpha validation to analyse the reliability of the research instrument to produce the non-bias results. In order to get more insights, we have conducted a virtual interview with an entrepreneur to understand the reasoning behind his answers to the questions asked in the instrument. The results of study have shown that entrepreneurs/ business owners tend to possess a high level of conation. When comparing the entrepreneurs' group with the group of employees of various companies based in Estonia, we got to know that even employees possess strong conative construct too. Therefore, the research gave us the confidence to claim that it is hard to differentiate Estonian entrepreneurs on their conation based choice-making. The limitation of this study is that it was conducted on the entrepreneurs/ business owners irrespective of their business experience and the nature of their business. Also, employees were not differentiated on their designation, hence the comparison sample includes employees of senior designations like executive or director level who are required to have strong business mindset. **Keywords:** Entrepreneurship, conation, motivation, volition, entrepreneurial challenges.

INTRODUCTION

An entrepreneur takes responsibility for his/her own future in order to create the reality that he/she desires. Socialisation plays a vital role in developing entrepreneurial traits. Due to social encounters in family, school and later on at the workplace, entrepreneurial traits tends to develop in a person from early stages of the life (Kovač, Meško, Bertoncelej 2010). However, it has been seen that some people possess such skill naturally in spite of unfavourable social conditions. These people possess the personal or striving component of motivation (Emmons,1986), the proactive aspect of the behaviour and a free-will to make choices or decisions (Kane, 1985; Mischel, 1996). However, while knowledge and skills are important, they are not sufficient. It can be believed that both motivation and volition are equally significant in entrepreneurship as an entrepreneur's journey is full of conative challenges. In order to execute their ideas entrepreneurs work tirelessly and come across many hurdles throughout their journey but it is their conative construct that either pushes them to keep going or to give up at some point.

Conation is a mix of motivation and volition (Snow, 1996; Pintrich & McKeachie, 2000; Kurczewska 2017), and as Snow et al.(1996) argues that motivation seems to influence volition. It is associated with the knowledge and behaviour with the issue of 'why' (Huitt, 2005). Conation could also be referred to as an intentional motivation of behaviour and possess a huge importance when it comes to human learning issues. It is quite significant for any individual who is engaged in self-direction or self-regulation to carry out self-determined tasks (Huitt,1999).

However, as this concept is relatively understudied as cognition and behaviorism were the centre of modern psychology research in the mid 20th century. Also, probably new for many people to understand, a client's or a coworker's behaviour/action at the workplace towards a goal can easily be misunderstood (Gerdes & Stromwall, 2008). Although various research papers like Kyrö (2008) and Kurczewska (2017) related to conative challenges in entrepreneurship are available, those are mostly related to the students and not the actual entrepreneurs. We would like to understand how particularly small business owners or entrepreneurs in Estonia have managed to overcome the conative challenges and turned their vision into a reality given a relatively small market size. The author himself has been an entrepreneur and also has worked with several startup founders who have experienced and witnessed the conative challenges at the early stages

in the businesses. From being high on self motivation in the beginning to dealing with conative challenges later on, real entrepreneurship is tested on the basis of how entrepreneurs cope with it. The research is aimed to contribute to studying this construct further and finding the empirical information directly from the entrepreneurs and practitioners.

To achieve its main objective, the research is aimed to find the answers to the following questions:

Q1: How are conative aspects reflected among entrepreneurs/small business owners in Estonia?

Q2: Can entrepreneurs/business owners be differentiated based on the conation-based choice making?

For the purpose of this study, a sample of random hundred and five (105) small business owners/entrepreneurs from various fields and employees from various companies based in Estonia is chosen. We have also interviewed an entrepreneur to understand the logic behind his answers to the research instrument statements so as to conclude the results. This research will be helpful for the aspiring entrepreneurs to learn from others' experience and could be equipped well to overcome the possible yet common hardships. The research will be exploring the conative construct of the small business owners that helps to tackle and overcome the above mentioned challenges during the early stage of their entrepreneurial/ business journey. The details of the research and analysis can be found in the second chapter of this paper. We have used in this paper the cluster analysis, pearson correlation coefficient, and cronbach alpha validation to investigate the decision making abilities of different entrepreneurs when facing conative challenges to produce the non-bias results. Google Scholar, Taltech library, ResearchGate databases, and GEM publications were used to support the literature of the paper.

The paper can be divided in four major parts: the first part showcases the theoretical background and literature review of the topic. The second part comprises methodologies used for conducting the research. And, the third part includes detailed data analysis and the result. Finally, the fourth part concludes the theoretical and practical implications of the study.

1. THEORETICAL BACKGROUND

In this chapter, literature review is demonstrated through the research tasks based on the concept, model and, comparative analysis of conative construct among Estonian entrepreneurs.

1.1 ANTECEDENTS OF CONATIVE CONSTRUCTS

Many researchers have studied various aspects of decision making power of the human brain. Some studies have shown that how a wish of doing something evolves in our brain until it is completed. Hence, below are the two famous theories that will help us to understand our decision making abilities. And this could be a significant factor in differentiating successful from unsuccessful entrepreneurs later in this research.

The Rubicon model of action phases

‘Goal setting’ and goal striving’ are two different aspects of goal orientation in entrepreneurship. However, with the assistance of the Rubicon model of action phases both the distinctions could be analysed simultaneously (Heckhausen& Gollwitzer, 1987). According to this model, four phases occur from the time when a person wishes to achieve something before setting the goal until the final thoughts post goal striving ends. The phases are as follows:

- **Predecisional Action Phase** - Different people possess different wishes and thus can be characterised on the basis of their motives. However, it is hard or could be almost impossible at times to act on all the wishes. Therefore, preferences can be made on the basis of feasibility and desirability. (McClelland,1980: Gollwitzer, 1990)Hence, a wish that appears to be important when assessed with another wish might become less desirable. For example: Wish to have an office in the centre business district could be overlooked for a while in comparison to investing in product development for an early stage entrepreneur.
- **Postdecisional Phase** - In this phase the highest preference wish further needs to be converted into an intention to be fulfilled. Therefore, the phenomena of the conversion will be known as determination to fulfil the wish (Gollwitzer, 1990). Once done, it will lead it to the planning stage where questions like *when, where and, how* are encountered.

Alongside, an individual commits himself/ herself to the action plan formed due to behavioral intentions known as volition (Gollwitzer,1990).

- **Actional Phase** - This phase reflects the individual’s volitional strength to implement the action plan in order to achieve the desired goal. Personal efforts to achieve the goal intentions are also directly related to the volition. The efforts may increase if more hindrances occur, resulting in increase in the volitional strength (Gollwitzer,1990).
- **Postactional Phase** - This is also known as goal achievement phase. It helps to analyse if the desired goal has been achieved or not based on the outcomes of the above mentioned phases. In order to analyse it accurately, the individual must check if the intended goal has been achieved and if the goal striving value is similar to the actual value. In general, young entrepreneurs most likely neglect some negative aspects while evaluating during the desirability phase. Hence, the real value might not meet the expected value. However, it will help in the upcoming predecisional phase of the other wishes. At last leading the entrepreneurs to have more realistic deliberation and planning (Gollwitzer, 1990).

However, there is a serious drawback in this model as it heavily focuses on the phenomena of goal-oriented behaviour of an individual instead of outlining the mental efforts required to turn a wish into the desired action (Gollwitzer, 1990). Also, it can lead to misconception as the model does not clarify that if plannings like how, when and where to implement the desired goal will follow the goal intention or not. In depth, this model assumes that different principles rule the various components of goal-oriented behaviour like deliberating, planning, acting, and evaluating.

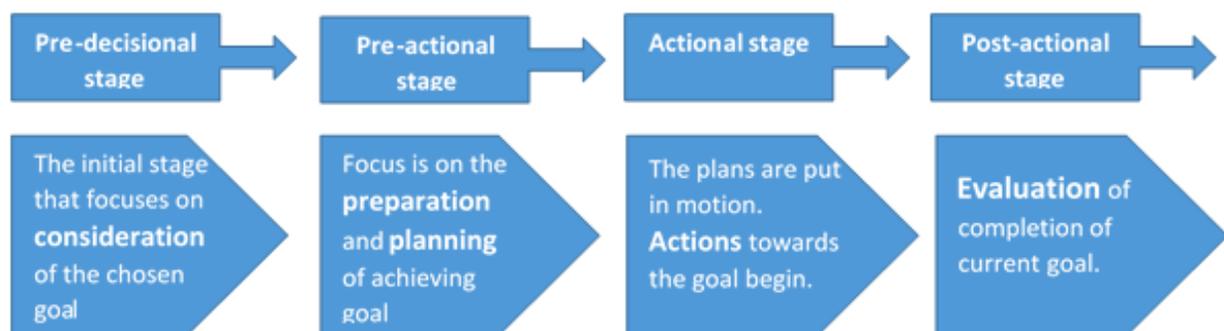


Figure 1. Rubicon model of action phases (Source: Gollwitzer, 1990).

Fixed mindset VS growth mindset

An outcome of any challenge is based on three factors: ability of an individual to perform the task, the efforts an individual puts in and the situation he/she faces. Hence, to tackle any challenge an individual chooses from two kinds of mindsets: fixed mindset and the growth mindset (Dweck, 2017). Growth mindset theory proposed by Dweck (2009) and further supported by Holtey-Weber (2016) was initially tested on students however it can be believed that it applies on all the other aspects of developments like entrepreneurship.

According to the said theory, the ‘fixed mindset’ natural ‘talent’ and ability are constant and stable in an individual to perform and successfully complete a particular task without investing much ‘efforts’. Therefore, individuals with a fixed mindset tend to rely more on their talent or known ability to perform the task. But in case any task that is out of their comfort zone comes, they tend to either not to perform it or again rely heavily on their talent and less on efforts while performing which mostly results in the unsuccessful outcome . As a result of such a mindset let people not overcome their fears and weaken their volition strength (Dweck, 2009). I believe this could further discourage an individual to face the setbacks and to learn from them. Hence, as a result that person would never be able to broaden his/her mental horizon to learn and develop new skills.

Whereas, ‘growth mindset’ focuses more on the efforts and strategies than talent for leading an individual to success. It could be used for understanding and developing various approaches to the challenges (Dweck 2009). Malleability of intelligence can be achieved simply by changing the beliefs of people. Developing the growth mindset in people from early stages of their lives like from schools can result in more successful individuals (Blackwell, Trzeźniewski and Dweck, 2007). People with such mindsets would like to face any sort of challenges, would be prepared to face the setbacks, and willing to learn from them. Growth mindset helps an individual to understand the importance of learning, self-motivation for dedication and practice, and how to learn from their mistakes. Using constructive feedback and criticism is a significant part of the growth mindset which can help an individual to improve his/her strategies for the future.

So, as we now know that mindset does play a vital role in personal development, hence it will be interesting to observe how young entrepreneurs with such mindsets would perform in the real world of entrepreneurship. Generally, entrepreneurs with a fixed mindset would be more likely to be self-obsessed and would consider themselves as the great leaders, however might fail in building up the great teams which is a definite requirement for any startup especially in the early stages. This can also cost a lot to the company indeed. In contrast, entrepreneurs possessing a growth mindset would tend to accept their mistakes in a positive manner and would prefer learning from it. This would also be helpful for them to find a better co-founder or a team member simply by evaluating the candidates on their individual development potential.

1.2 CONATION & ITS IMPACT IN ENTREPRENEURSHIP

What is a conation?

Conation is a mix of motivation and volition (Snow et al., 1996). These both are at the core of conative structure. It is basically the mental process that directs behaviour and action. In other words, conation refers to the connection of knowledge and affect to behavior and is associated with the issue of "why" (Huitt, 2005). It is an intentional, personal and goal-oriented component of motivation and the proactive aspect of behaviour (Baumeister, Bratslavsky, Muraven & Tice 1998). The concept of conation is associated with the concept of autonomous motivation (this we have studied above), volition (this also we have studied above), and self-regulation (Kane 1985; Mischel 1996).

Self-regulation - An important aspect of conation

A few recent studies (Bandura, 1991; Schunk & Zimmerman, 1994) have focused on the 'self-regulation' as an aspect of the conation. It is quite significant for an individual (especially an early stage entrepreneur) to engage himself/herself in self-regulation successfully. Efklides (2008) has suggested that people with low cognitive self-regulation may have problems with risk assessment. Various aspects of self-regulation are:

- **To be aware of human needs:** It is one of the most common and used ways as by knowing what matters the most and what can be overlooked at any given point of time (Maslow, 1954).

- **To be aware of possible-self:** It means to bridge the actions as without considering something possible, an individual will not set the goals (Markus & Nurius, 1986).
- **To exercise the volition:** It means to choose the thoughts and controlling one's own actions called 'Covert' and the environment that impacts one's actions also known as 'Overt' (Corno, 1989; 1993).
- **Setting of goals:** In this step goals are being set. Goals should be difficult yet attainable so it could help in increasing the level of self-efficacy. Goals can be of two types- mastery goals which focuses on the 'learning process' and 'performance goals' that focuses on the outcomes and winning (Dweck, 1991).
- **To develop plans:** It is the final step which involves development of the strong plans to achieve the set goals. The plans should be quite specific with clear explanation and expected results (Herman,1990).

Overview of conative challenges

As we are aware of various entrepreneurial challenges like motivation, social, financial, and cognitive, etc. however, there's one overlooked yet important issue is conative challenges in entrepreneurship. In the beginning of modern psychology, conation was considered to be the centre of the research field, but gradually the interest of various researchers in this topic declined. The conative component of an entrepreneurship competency was not included in the earlier researches as 'cognition' and 'behaviourism' were the key components in the mid-20th century (Kovač, Meško, Bertoncelej, 2010). Also it was hard to separate it from cognition, emotion, and behaviour (Snow, 1989).

A few common conative issues early stage entrepreneurs face are like "what are my intentions and goals?", "on what idea should I focus more?", "what will I be doing?", and "what investments I will be making?". However, like any other challenge, conative challenges can also be overcome. It is significant for the mentors and the other team members that are associated with an early stage entrepreneur to help them enhance the conative components of his/her mind to have a better self-direction, determination, and regulation. As per Covey; Merrill (1994) developing a mission statement helps to think about one's priorities. It provides an opportunity for an individual to consider important values and beliefs which could further lead to the stronger

commitment and persistence towards the set goals. Strong autonomous motivation also helps in overcoming the conative challenges as it encourages the exploration and exposure to various unseen resources that would further develop the sense of self-worth, competence and self-efficacy in an entrepreneur's mind (Lumsden, 1994; Huitt, 1999). As self-efficacy provides mastery in a field, thus it helps in predicting the future success in tasks related to one's specialisation. This could be very helpful especially for early stage entrepreneurs as they have to rely heavily on their specialisation as a resource in the beginning. With the freedom to make their own decisions, self-learning could also be productive as it helps in understanding the rights and wrongs from one's own actions. This could bring intrinsic rewards and assist an entrepreneur to be more self-regulated (Bandura, 1986; 1997).

Conative component of entrepreneurial competences

The science of entrepreneurship can be underlined by the competences of an individual. An entrepreneur may have various reasons for setting up his goal and to achieve those goals conation is required. As we have explained above, both motivation and volition are necessary as a part of an individual's character to ensure his/her commitment and identification with work. The concept of metaconation is significant in entrepreneurship as it requires ethical actions to achieve the highest good and to become the best version of oneself. As per Ustav (2013) in spite of various researchers having shown the common grounds about the metaconation and conation which are the unique parts of the same whole, there is a lack of empirical knowledge about how metaconation develops or can be developed.

The concept of entrepreneurial competences has been previously investigated by many authors (Ellström, 1997; Ulrich, 1998; Mansfield, 1999; Miller et al., 2001; Jacobs and Pons, 1993; Deakins and Freel, 1998). As per Miller et al., (2001) there are two different components of entrepreneurial competences: "soft component" defining the behavioral side such as how people should behave to complete work successfully. And "hard component" stressing on what people should know to complete the work successfully. However, Kovač, Meško¹, Bertoncej (2010) argued that apart from these two components, the conative component should also be included in the field of entrepreneurial competences. As conative component of competences was extracted from cognitive and behavioural concepts, hence it is helpful in explaining the important points like the source of actions in your deep inner nature and also shows you the way on how to build

strength (Kolbe, 1997). This explains that humans have a subjective method of enabling their thoughts into actions known as conative components. It means an entrepreneur possessing the conative component as a part of their nature and also elaborates the process of enhancing this quality. They argued further that the conative component of entrepreneurial competences are inborn and instinctive. It is important for the young entrepreneurs to imagine possibilities, set ambitious yet attainable goals, systematic and consistent actions towards achieving the set goals, and self-observation in the early stages of their entrepreneurial journey. Also an important fact to keep in consideration is to know how to manage your emotions as entrepreneurship can be an emotional roller coaster ride.

1.3 MOTIVATION & ITS IMPACT IN ENTREPRENEURSHIP

It is often said that “a person cannot win a game that they do not play.” With respect to entrepreneurship or running a business, this statement suggests that success depends on people’s willingness to become entrepreneurs. One of the success factors in entrepreneurial journey is a high level of motivation as it compels him/her to strive for the achievement continuously.

What is motivation?

Motivation is a desire or a set of energetic forces that incentivizes someone to do something (Murnieks¹, Klotz¹, Shepherd², 2019). It is generally triggered by an expectation to receive some sort of rewards in return. The incentive theory emphasizes on the motivational pull of incentives like some sort of goal in the end (Carsrud et al., 1989). As per Freud (1915) work “instinct” or “motivation” is a persistent pressure to change an internal state by external activities that influence behaviour on both conscious and unconscious levels. I believe to understand if you are motivated or not, one should ask himself/herself - ‘what’ and ‘why’. It means ‘what I want to do’ and ‘why do I want to do it?’ However motivation can be prone to changes especially when any obstacle arises or more attractive opportunities emerges. Motivation can be shaken up if the desired thoughts or actions don't go as planned. The person can be easily demotivated upon receiving negative feedback from colleagues or a setback or due to a family issue. (Drews, Hart, Stephan, 2015).

Types of Motivation

Motivation has been a crucial part in entrepreneurship and has been the centre of research over a century (Kanfer, Frese, Johnson 2017). It is possible that the motivation may exist in various forms but its source ultimately comes from two spots: inside one's self and from outside the environment. Hence, known as Intrinsic and Extrinsic motivations respectively (Carsrud et al., 1989).

Intrinsic Motivation- It is a desire fueled with internal needs that gives interest and encourages someone to do an action (Carsrud et al., 1989). The four main components needed to fulfil intrinsic motivation are relatedness, competence, purpose, and autonomy (Marczewski 2013; Saputro, Salam, Zakaria 2017). Intrinsic motivation is basically the pursuit of a task that becomes the reward for the person pursuing it. For example- If you are performing a task you are passionate about, you will feel more purposeful while pursuing it. However it can be changed too. I believe it also helps a person to be self-motivated and does not allow the person to give up.

Extrinsic Motivation- It refers to motivation achieved by external factors like interest in receiving a tangible reward upon successful completion or an achievement of a task like monetary or promotional benefits. It makes the person more performance based (Marczewski 2013). Therefore, it can also result in discouraging someone to not participate in tasks which doesn't involve immediate rewards.

While most studies assume that entrepreneurs are primarily motivated by external factors such as money, power, and status (also known as economic view of human motivation), the research of Deci & Moller (2003) and Elfving (2008) has proved that some people engage in entrepreneurial activities as ends in themselves. This could be directly related to the reasoning behind social entrepreneurs starting the social venture even knowing there might not be a grand reward for doing it other than some sort of internal satisfaction.

Self Determination Theory: Autonomous Motivation & Controlled Motivation

It is one of the latest motivation theories proposed by Deci and Ryan (2000) that differentiate motivation as autonomous motivation and controlled motivation. SDT includes autonomy,

competence, and relatedness. This approach makes more sense in understanding and supporting self-direction. As per the said theory, there are two main types of motivation. They are:

Autonomous motivation is a more wider concept that includes intrinsic motivation and certain parts of extrinsic motivation. It includes one's interest, passion, desire to succeed in order to get rewarded, and integrated regulation (Deci & Ryan, 2000). It is internalised to a greater extent. Hence it is more valued by the person as it represents their characteristics. One with autonomous motivation manages his/her time better and is less anxious, thus experiences higher value of satisfaction upon achievements if his/her goals. When it comes to entrepreneurship, autonomous motivation is more commonly involved as initiation and completion of various tasks are needed everyday (Deci & Ryan, 2000: Deci & Gagne, 2005).

Controlled motivation is opposite to autonomous motivation as it compels one to act due to an external pressure like desire of being rewarded or fearing a punishment. This means one would demonstrate the required behaviour that is more internalised, but is not a part of real self (Deci & Ryan, 2000). When an individual's motivation is controlled by external pressure then motivation origins are not self-determined. Also, the results at every stage probably won't be as expected or needed.

Impact of motivation in entrepreneurship/ business

In this section, we would understand how motivation might influence the entrepreneurial process. Entrepreneurship is a creative process as it drives innovation. It helps to convert the new knowledge into products and services (Shane & Venkataraman, 2000). Motivation influences the transition of individuals from one stage of entrepreneurial process to another. An entrepreneur may have necessary skills and even money however if motivation is lacking then nothing happens. Being an entrepreneur or a business owner, intrinsic motivation plays a crucial role as it requires someone being able to act in a self motivated and self-directed way. One has to work on his/her ideas independently and have to make decisions without any external pressure. Entrepreneurship involves human agency because people act to pursue opportunities in order to bring innovative changes, therefore entrepreneurs could differ in their motivational level and willingness to act on various opportunities. Entrepreneurial process is based on the decisions that an entrepreneur makes, hence the attributes of the decision makers also influence the entire

process (Miller, Miller, L.B., 2017). Some well-known concepts related to motivation and its effect in entrepreneurship being explored in earlier research are “need of achievement (nAch)”, “personnel behaviour”, “risk level”, “locus of control”, “self-efficacy”, and “goal-setting” (Shane, Locke, and Collins, 2003).

Entrepreneurs/ business owners high in autonomous motivation tend to voluntarily commit themselves to a task aiming to build the high growth firms by selflessly trying to create an opportunity for himself/herself which might not exist otherwise. However, other common yet motivational factors for most of the entrepreneurs is “situational factor”. As entrepreneurship is a goal-directed activity hence it is critical for entrepreneurs to value the process of pursuing goals. This type of motivation is significantly associated with the choice of entrepreneurial occupation and the success in entrepreneurship (Collins, Hanges, and Locke 2004). Entrepreneurial process sometimes leads to high growth and profitable business models whereas often many new businesses fail completely. The reasons behind the success or failure of any startup is its environment, organisational characteristics, and entrepreneur’s attributes (Baum, Locke, and Smith 2001). Factors like market forces, economic freedom may encourage or discourage an entrepreneurial activity. For example: someone with a limited capital would preferably not start an automobile company.

1.4 VOLITION & ITS IMPACT IN ENTREPRENEURSHIP

Defining Volition

The human brain capacity of goal oriented endogenous action is known as Volition (Haggard, 2019). It is basically the mechanisms used in formation, maintenance, and implementation of intentions or also known as self-regulation (Heckhausen, 2007). When it comes to handling various goals especially, it is important to understand how mechanisms mediate. There could be three possible mechanisms handling multiple goals and maintenance. These are: lateral inhibition, attentional selectivity and orienting, and volitional control (Kuhl & Kazen-Saad, 1989).

Understanding volition mechanisms

Lateral inhibition- It is a low complexity mechanism activated by an external source like eliciting condition. It tends to proceed in the bottom-up way and once gets activated then the competing factor/will possess lower probability of gaining the control (Dörner, Schaub, Stäudel and, Strohschneider, 1987). With respect to the output, it applies basic contention-scheduling principle. This means the action schema possessing the strongest activation would prohibit the activation of the other competing schemas (Norman & Shallice, 1985). Attentional selectivity and orientation is a slightly more complex mechanism which represents the transition between bottom-up and top-down processes. It generally gets activated by an informational aspect of an external or internal schema (Neumann, 1987). It is considered to be a more intelligent and flexible mechanism than lateral inhibition. Volitional control is a unique and sophisticated mechanism related to maintaining the active goals which demonstrates the clear development trend. This mechanism is found only in human beings (Kuhl & Kraska- in press; Mischel & Mischel, 1983). It's direction of control is top-down. It could also be sometimes context-free which is opposite to lateral inhibition and attention selectivity as these are highly dependent on the context.

Volition can be seen in two ways: a 'third person view' or an outside observer which means an unpredictable behaviour from an internally generated will. And a 'first person view' which means a vivid sense of agency which one feels through the intentions. Agency means the feeling one experience due to prior expectations and sensations like selectional fluency or kinesthetic feedback. Volition leads things to happen and one can opt from various actions (Frith, 2013). In other words it can be described as the power of using one's will to make a choice or decision. It is a mechanism that supports and protects the current explicit intentions and resolves the conflict among motivational and cognitive preferences (Kuhl & Kazen-Saad 1988). Metzinger (2006) has explained the act of volition as 'thin and evasive'. The reason behind this is that an individual is unaware of sensory results of his/her own actions. Another critical area of volition is "other-directed orientations". It happens as people are generally prone to external influences by accepting or wishing them completely or upto some extent. It is most likely that they may also be inclined upto an extent to exert their own influence on others. It can also be explained as characteristics like empathy, social ability, and persuasiveness (Frith, 2013).

Impact of volition in entrepreneurship

Our experience teaches us the clear reason why we believe ourselves to be free because we are aware of our actions (Spinoza, 1677). As we have studied that motivation is a desire to do something whereas volition is an absolute commitment of achieving it. In order to activate the volition or will power an entrepreneur has to break the mental barrier (probably by using the Rubicon model). With respect to entrepreneurship, motivation leads to the thought of launching a business whereas volition leads to taking the real actions. Volition is the most powerful asset of any entrepreneur especially in the initial days of the business. It implies an entrepreneur's strong attachment with his/her intention of running the new business. When it is activated with complete force then the company reaps the benefits of strong and meaningful action taking and gets the more projects completed in comparison. Volitional actions are spontaneous in reality that are triggered by the internal events. They are goal directed and sometimes are achievable only in the distant future. As an entrepreneur desires an outcome and chooses an action to achieve it, hence some people assume that it's the experience of an entrepreneur that leads to a belief in a 'free will'. However, various other researches like Hume (1758) to Wegner (2003) have proved that it is not anything more than an illusion. It is the 'sense of responsibility' than the free will which is more significant in the volitional behaviour. A successful entrepreneur mobilizes his/her volitional skills in a successive order throughout. Even a single action in the early stage of entrepreneurship can lead the company to a massive jump in terms of growth and development. Similarly, one action can cause heavy damage and can eventually lead to the closing of the business as well. For example: exchanging a high percentage of stakes with the angel investor in return of a minimum investment to fuel up the scaling of the business. At last we can say that motivation can be crumpled by the negative feedback or any sort of resistance whereas volition inspires the entrepreneur more upon facing the obstacles as abandoning the task is not an option in this stage.

2. RESEARCH METHODOLOGY

In this chapter data analysis is presented. A cross sectional survey is used that allows the research questions from a literature point of review to be developed and answered. We have used both quantitative and qualitative research methodologies to carry out this research. For the purpose of this study, a sample of entrepreneurs/small business owners and employees based in Estonia has been used. The sample includes a group of 54 entrepreneurs/small business owners based in Estonia and 51 working professionals in Estonia to analyse if both research questions can be answered. The questionnaire is developed from the previous research to measure motivation and volition which we can see extensively below in the instrument of the study part. Further a structured interview was conducted with an active entrepreneur who filled the said questionnaire in order to get more insights about the reasoning behind answering the questionnaire so as to discuss and conclude the results. A structured interview approach was chosen to follow the constructs of the questionnaire to understand the real argumentation, behavior, motivational and volitional events behind the scores.

This chapter is further subdivided into various parts like participants of the study, instruments of the study, procedure, and data analysis.

2.1. Participants Of The Study

The research includes statistical analysis in order to achieve its mentioned objectives. An online survey was conducted to gather the data. In order to carry out this research a total number of 105 working professionals participated in the online survey. The empirical evidence from 54 entrepreneurs/small business owners based in Estonia and 51 employees of various companies were included. Demographic factors like gender and age were also included to define the constructs better. The characteristics of samples are presented in Table 1.

Table 1. The characteristics of the sample.

Sample size	105
<i>Employment</i>	
Entrepreneur	54
Entry level working professional	21
Mid level (manager/team lead) working professional	24
Senior level (head of department) working professional	6
<i>How old is your company ? (only for entrepreneurs)</i>	
0-1 year	17
1-2 years	18
2-3 years	14
Over 3 years	5
<i>Is it your first company/ business? (only for entrepreneurs)</i>	
Yes	40
No	14
<i>No. of employees (only for entrepreneurs)</i>	
0-9	27
10-24	12
25-49	11
Over 50	3
<i>Age</i>	
30 years or less	50
Over 30 years	55
<i>Gender</i>	
Female	55
Male	50

Source: Compiled by the author based on the research database.

Table 2. Entrepreneur’s company age

	Company’s age	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Entrepreneurs	0-1 years	17	31.5	31.5	31.5
	1-2 years	13	24.1	24.1	55.6
	2-3 years	12	22.2	22.2	77.8
	More than 3 years	12	22.2	22.2	100
	Total	54	100	100	

Source: Compiled by the author based on the research database.

This table represents the four groups to segregate the early stages in entrepreneurship with respect to the age of an entrepreneur’s company. The first group is of 0-1 years which possess 17 respondents (31.5), the second group is of 1-2 years which possess 13 respondents (24.1%), the third group is of 2-3 years which possess 12 respondents (22.2%), and the fourth group is of more than 3 years which also possess 12 respondents (22.2%).

Table 3. New entrepreneurs and experienced entrepreneurs.

	Is it your first company?	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Entrepreneurs	Yes	34	63	63	63
	No	20	37	37	100
	Total	54	100	100	

Source: Compiled by the author based on the research database.

In this table we have grouped entrepreneurs based on the basis of their entrepreneurship experience. The group ‘yes’ shows that it’s the first ever company entrepreneurs owns and group

‘no’ shows that entrepreneurs have possessed a company or numerous companies in the past, thus demonstrating them as the experienced entrepreneurs. A total of 34 respondents (63%) said ‘yes’ and a total of 20 respondents (37%) said ‘no’. This shows that there are almost double the number of new entrepreneurs who are running the company for the first time ever.

Table 4. Team size of entrepreneur’s company

	No. of team members	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Entrepreneurs	0-9	36	66.7	66.7	66.7
	10-24	13	24.1	24.1	90.7
	25-49	5	7.4	7.4	98.1
	Over 50	1	1.9	1.9	100
	Total	54	100	100	

Source: Compiled by the author based on the research database.

In table 4, entrepreneurs are further divided in three groups based on their team size. The first group shows a total of 36 respondents (66.7) have 0-9 team members, the second group shows a total of 13 respondents (24.1) have 10-24 team members, and the third group shows a total of 5 respondents (7.4) have 25-49 team members. This means that most of the entrepreneurs have a smaller team size, and relatively less entrepreneurs have the bigger team.

Table 5. Age distribution among entrepreneurs.

	Age group	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Entrepreneurs	30 years or less	21	38.9	38.9	38.9
	more than 30 years	33	61.1	61.1	100
	Total	54	100	100	

Source: Compiled by the author based on the research database.

The age distribution in table 5 shows that the entrepreneurs were grouped as 30 years or less and more than 30 years. Within the total of 54 respondents, there were 21 respondents (38.9%) who were in the age group of 30 years or less and a total of 33 respondents (61.1%) were in the age group of more than 30 years.

Table 6. Age distribution among employees.

	Age group	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Employees	30 years or less	29	56.9	56.9	56.9
	more than 30 years	22	43.1	43.1	100
	Total	51	100	100	

Source: Compiled by the author based on the research database.

The age distribution in table 6 shows that the employees were grouped as 30 years or less and more than 30 years. Within the total of 51 respondents, there were 29 respondents (56.9%) who were in the age group of 30 years or less and a total of 22 respondents (43.1%) were in the age group of more than 30 years.

Table 7. Gender distribution among entrepreneurs.

	Gender	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Entrepreneurs	Female	27	50	50	50
	Male	27	50	50	100
	Total	54	100	100	

Source: Compiled by the author based on the research database.

The gender distribution in table 7 shows that the entrepreneurs were differentiated as males and females. Within the total of 54 respondents, there were 27 respondents (50%) were male and equivalent 27 respondents (50%) were females. This shows that there are an equal number of male and female entrepreneurs.

Table 8. Gender distribution among employees.

	Gender	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Employees	Female	28	54.9	54.9	54.9
	Male	23	45.1	45.1	100
	Total	51	100	100	

Source: Compiled by the author based on the research database.

Table 8 shows the gender distribution of the employees. Within the total of 51 respondents, the 23 respondents (45.1%) were male and 28 respondents (54.9%) were females. This shows that there are relatively more female employees in the sample.

2.2. Instruments Of The Study

In order to answer the research questions, a survey instrument first presented by Haynie (2005) and further developed and tested by Ustav (2013) was used. The survey was extended with questions from Weinstein, Przybylski, & Ryan (2012) to involve all the elements of the research questions. As we have studied above that conation is a mix of motivation and volition, hence the questionnaire used comprises both the sub competencies.

This instrument includes 23 statements out of which 6 were demographic to understand the sample, 5 were statements of autonomous motivation, 3 were statements of controlled motivation, and 9 were to state volition. The statements were aimed to focus on the general

tendency of making sense to understand conative aspect of entrepreneurs. The respondents were asked to answer the questionnaire by rating each statement on a Likert scale of 1-5, where:

1 means “totally disagree”.

2 means “rather disagree.

3 means “neutral”.

4 means “rather agree”.

5 means “totally agree”.

The survey instrument is considered to be eligible as the statements were according to the theoretical background. The prime goal of this analysis was to evaluate entrepreneurs' perception of their own personal experiences using the extended instrument and to compare it to the employees. The results will allow us further to confirm how the conative aspects are reflected among Estonian entrepreneurs and if entrepreneurs are differentiated based on conation based choice making. To check if these statements are eligible to answer the research questions Pearson correlation coefficient analysis, cluster analysis, and Cronbach’s alpha validation were conducted (mentioned in data analysis). It involved calculating and analysing the correlation coefficient in order to determine the dependencies among these statements.

Table 9. Statements for the questionnaire.

My decisions represent my most important values and feelings.
My actions are congruent with who I really am.
I do things in order to avoid feeling badly about myself.
I strongly identify with the things that I do.
I set specific goals before I begin a task.
My decisions are steadily informed by things I want or care about.
I often pressure myself.
I try to manipulate myself into doing certain things.
I never persist very long on a difficult job before giving up.
If the task is too difficult, you do not even want to start with it.
I know that I give up when the situation is against me.
I really can’t get much done without the right mood.

It is very difficult to force myself to do something when I am not interested.
I make a conscientious effort to get out the best results.
If there are no procedures given with a task, I create them myself for better performance.
If I want to do something, I do not let others distract me much.
I feel that almost everything can be achieved if one wants.

Source: Compiled by the author based on the research database.

2.3 Procedure

The data was collected in Spring of 2021 in Estonia by using a standard Google questionnaire tool via an online survey. Tools like Facebook, emails to coworking spaces and startup accelerators, and personal connections, etc. were used to collect the responses.

In addition to collecting the demographic data, the respondents rated 18 statements about autonomous motivation and volition on a Likert scale of 1-5. The questionnaire can be found in Appendix 1. The respondents were assured that their responses would be used only for academic research purposes and would be kept highly confidential. The measure is a set of self-assertions where the respondents would rate himself/herself on the scale of 1-5 on the basis of their behaviour and experience. There is no right or wrong answer to the questions and doesn't require any previous experience, instead require some sort of self-analysis readiness.

As mentioned before, constructs (autonomous motivation and volition) are based on the theoretical background given in chapter 1.

2.4 Methods of data analyses

A structured and administered set of questions were asked in a questionnaire to both entrepreneurs and employees of various companies based in Estonia. I have used both descriptive and inferential techniques to analyse the collected data and to answer the research questions with the help of IBM software- SPSS version 25 and Microsoft Office Excel 2016.

Pearson coefficient correlation analysis was being carried out to map the association among both the constructs. We have performed cluster analysis, Pearson correlation coefficient, and Cronbach's alpha validation to analyse the data and to answer the following research questions.

Q1: How are conative aspects reflected among entrepreneurs/small business owners in Estonia?

Q2: Can entrepreneurs/business owners be differentiated based on the conation-based choice making?

3. RESULTS

3.1. Frequency Distribution of Data

Here we can see how the data is distributed and how they deviate from each other. Table 10 shows the results of descriptive analysis for the statements.

Table 10. Mean and standard deviation among entrepreneurs and employees based on each statement.

Statements	Entrepreneurs		Employees	
	Mean	S.D.	Mean	S.D.
My decisions represent my most important values and feelings.	4.33	0.911	4.059	1.028
My actions are in agreement to who I really am.	4.33	1.028	4.118	0.887
I do things in order to avoid feeling badly about myself.	2.96	1.440	3.392	1.218
I strongly identify with the things that I do.	4.31	0.928	4.039	1.038
I set specific goals before I begin a task.	4.20	1.088	3.980	1.140
My decisions are steadily informed by things I want or care about.	4.33	0.890	3.961	0.999
I often pressure myself.	3.52	1.328	3.627	1.166
I try to manipulate myself into doing certain things.	2.85	1.433	3.176	1.212
I never persist very long on a difficult job before giving up.	2.35	1.261	2.294	1.082
If the task is too difficult, you do not even want to start with it.	2.19	1.304	2.510	1.317
I know that I give up when the situation is against me.	2.09	1.248	2.392	1.266
I really can't get much done without the right mood.	3.41	1.408	3.314	1.257
It is very difficult to force myself to do something when I am not interested.	3.67	1.530	3.490	1.155

I make a conscientious effort to get out the best results.	4.33	0.971	4.000	1.020
If there are no procedures given with a task, I create them myself for better performance.	4.41	1.037	3.941	1.085
If I want to do something, I do not let others distract me much.	4.20	0.998	3.882	1.032
I feel that almost everything can be achieved if one wants.	4.39	0.960	4.235	1.012

Source: Compiled by the author based on the research database.

Table 11. Collective mean and standard deviation among entrepreneurs and employees.

Choose what describes you as a professional	Constructs	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Entrepreneurs	Autonomous motivation	54	3.5	1.5	5	4.3287	0.8465	0.717
	Controlled motivation	54	4	1	5	3.1111	1.01354	1.027
	Volition	54	2.22	2.67	4.89	3.7366	0.52971	0.281
	Valid N (listwise)	54						
Employees	Autonomous motivation	51	4	1	5	4.0441	0.83172	0.692
	Controlled motivation	51	3.67	1.33	5	3.3987	0.80283	0.645
	Volition	51	2.78	2	4.78	3.5621	0.62949	0.396
	Valid N (listwise)	51						

Source: Compiled by the author based on the research database.

As the table shows, all the three constructs (autonomous motivation, controlled motivation, and volition) are relatively on the similar scale among entrepreneurs/business owners and the employees.

3.2. Inferential Analysis

Author has used Pearson Correlation Coefficient to analyse and compare the link between the three constructs (autonomous motivation, controlled motivation, and volition). Furthermore, cluster analysis and Cronbach’s alpha validation were used to answer the research questions.

Pearson Correlation Coefficient analysis

Table 12. Pearson correlation coefficient analysis for autonomous motivation, controlled motivation, and volition.

		Autonomous Motivation	Controlled Motivation	Volition
Autonomous Motivation	Pearson Correlation	1	.286**	.557**
	Sig. (2-tailed)		0.003	<0.001
	N	105	105	105
Controlled Motivation	Pearson Correlation	.286**	1	-0.038
	Sig. (2-tailed)	0.003		0.701
	N	105	105	105
Volition	Pearson Correlation	.557**	-0.038	1
	Sig. (2-tailed)	<0.001	0.701	
	N	105	105	105

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

Source: Compiled by the author based on the research database.

As we can see that there is a significant and positive correlation between autonomous motivation and volition at 0.557 ($p < 0.001$). Whereas, correlation between autonomous motivation and controlled motivation is also positive but relatively weaker at 0.286 ($p = 0.003$). And the correlation among controlled motivation and volition is negative and weak at -0.038 ($p = 0.701$). Hence, it is not significant in this case.

Cluster Analysis

We have used two-step cluster analysis as the base method to attain the goal of the research. To develop the results further, K-means cluster analysis was carried out. Also, entrepreneurs and employees have been further subdivided into various clusters on the basis of gender and age. This would help us to understand how conative construct varies among all the clusters.

Two-step cluster analysis

- **Cluster 1**

Question: Choose what defines you as a professional?

Answer options: Entrepreneur / Employee

Table 13. Cluster analysis of conation between entrepreneurs and employees.

Cluster	1	2
Label	Entrepreneur	Employee
Size	54 (51.40%)	51 (48.60%)
Conation	4.03	3.80

Source: Compiled by the author based on the research database.

The following figure constitutes the clustering segregated into Entrepreneur and Employee. Considering the inputs as conation among entrepreneurs and employees, the conation score turns out to be 4.03 for entrepreneurs/small business owners and 3.80 for employees and the clustering size contributes to 54 and 51 respectively. In this cluster, both the groups show the similar

characteristics regarding conation and possess a high level of conative aspect. This means that not only entrepreneurs but even employees are highly self-motivated with a strong will power for undertaking and successfully completing the tasks/projects at work. However, we found entrepreneurs still possessing slightly higher conation as compared to employees.



Figure 2. Cluster comparison of entrepreneurs and employees (Source: Compiled by the author based on the research database).

- **Cluster 2**

Question: Choose what defines you as a professional?

Answer options: Entrepreneur / Employee

and.

Question: Please choose your gender.

Answer options: Male / Female / Others

Table 14. Cluster analysis of conation between entrepreneurs and employees based on gender.

Cluster	2	1	3	4
Label	Employee (Female)	Entrepreneur (Female)	Employee (Male)	Entrepreneur (Male)
Size	28 (26.70%)	27 (25.70%)	23 (21.90%)	27 (25.70%)
Conation	3.73	4.09	3.9	3.98

Source: Compiled by the author based on the research database.

This table highlights the clustering of Entrepreneurs and Employees as per the gender i.e., ‘male’ and ‘female’. By inputting the questions (as mentioned), the conation score turns out to be 3.73 for female employee and 4.09 for female entrepreneur whereas 3.98 for male entrepreneur and 3.90 for male employee. The clustering size is reflected as 28, 27, 27, and 23 respectively. The box plot supports the calculation as the distance is small between male and female employees as well as male and female entrepreneurs, so they form two clusters. The distance between two clusters is clearer. Therefore two is the optimal number of clusters here.

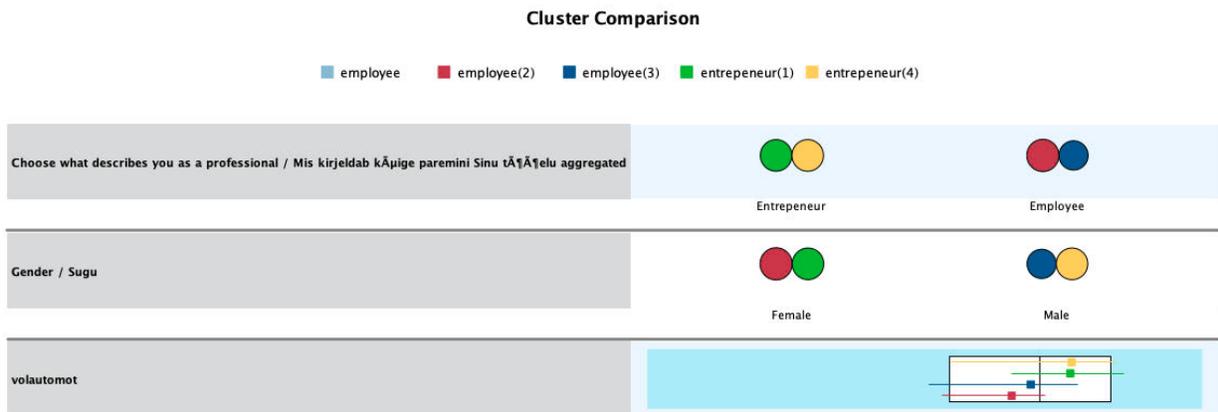


Figure 3. Cluster comparison of entrepreneurs and employees based on gender (Source: Compiled by the author based on the research database).

- **Cluster 3**

Question: Is it your first business?

Answer options: Yes / No

Table 15. Cluster analysis of conation between entrepreneurs based on if it’s their first company ever.

Cluster	2	1
Label	Yes	No
Size	34 (63%)	20 (37%)
Conation	3.94	4.19

Source: Compiled by the author based on the research database.

This table highlights the clustering of Entrepreneurs only based on their entrepreneurial experience. By inputting the question (as mentioned), the conation score turns out to be 4.19 for entrepreneurs who already have experience of running the business and 3.94 for the entrepreneurs who are running the business for the first time. The clustering size is reflected as 20 and 34 respectively. This shows that there is a slight difference in conative aspects among entrepreneurs having first ever company versus entrepreneurs who have had more than one company. The standard deviation (0.46) among experienced entrepreneurs is lower than the first time entrepreneurs (0.68).

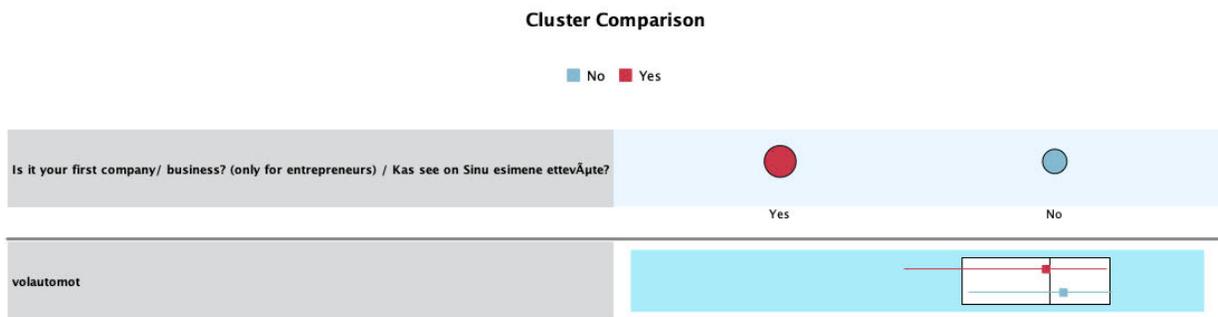


Figure 4. Cluster comparison of entrepreneurs based on entrepreneurship experience (Source: Compiled by the author based on the research database).

- **Cluster 4**

Question: What is your age group?

Answer options: Under 30 years / Over 30 years

Table 16. Cluster analysis of conation between entrepreneurs and employees based on age group.

Cluster	4	3	2	1
Label	Entrepreneur (over 30 years)	Employee (Over 30 years)	Employee (Under 30 years)	Entrepreneur (Under 30 years)
Size	33 (31.40%)	22 (21%)	29 (27.60%)	21 (20%)
Conation	3.96	3.69	3.89	4.14

Source: Compiled by the author based on the research database.

This table highlights the clustering of Entrepreneurs and Employees as per the age group i.e., ‘under 30 years of age’ and ‘over 30 years of age’. By inputting the question (as mentioned), the conation score turns out to be 3.96 for entrepreneurs over 30 years of age and 4.14 for entrepreneurs under 30 years of age. Whereas 3.69 for employees over 30 years of age and 3.89 for employees under 30 years of age. The clustering size is reflected as 33, 21, 22, and 29 respectively. It shows that entrepreneurs in both the age groups are more similar and the employees in both age groups are relatively similar.

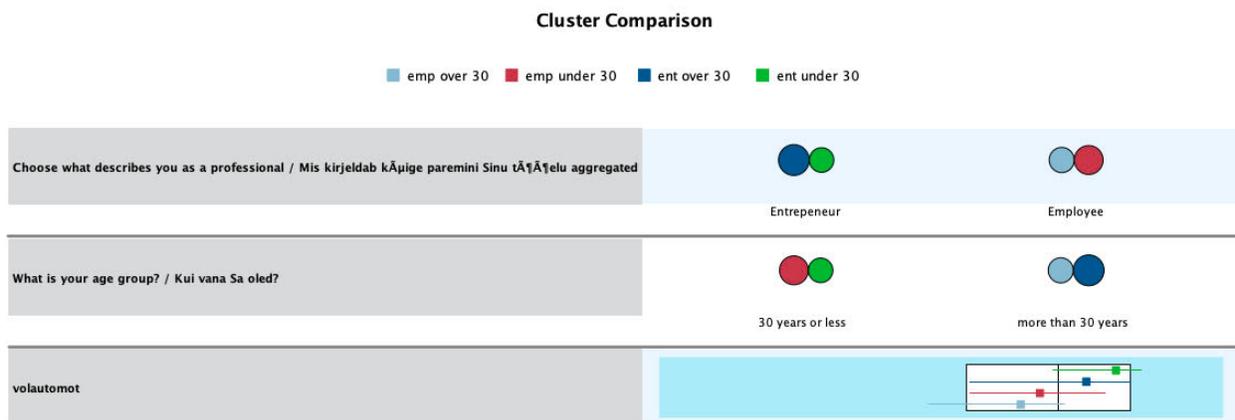


Figure 5. Cluster comparison of entrepreneurs and employees based on age group (Source: Compiled by the author based on the research database).

K-means cluster analysis

Table 17. K-means cluster analysis

CK-means	Entrepreneurs	Employees	Total
Cluster 1 (Low Conation)	13 (41.90%)	18 (58.10%)	31
Cluster 2 (High Conation)	41 (55.40%)	33 (44.60%)	74

Source: Compiled by the author based on the research database.

K-means cluster analysis shows that two clusters were formed on the basis of low and high conation scores. Cluster 1 in this analysis shows that 13 (41.90%) entrepreneurs and 18 (58.10%) employees fall under low conation score clusters whereas 41 (55.40%) entrepreneurs and 33 (44.60%) employees fall under high conation score clusters. This means that entrepreneurs seem to possess moderately higher conation than employees.

Number of Cases in each Cluster

Cluster	1	74.000
	2	31.000
Valid		105.000
Missing		.000

Figure 6. K-means cluster analysis

Cronbach's Alpha Validation

To calculate inter-item correlations we have used Cronbach's alpha. To validate the reliability of both the constructs combined (autonomous motivation and volition) we have used Cronbach's alpha. As per Zinbarg et.al (2005) a high Cronbach's alpha reflects that the instrument is reliable and there is a firm consistency within the questions. In table 18 below, we can see the results . Cronbach's alpha value is 0.764. There were 14 statements in the questionnaire reflecting the autonomous motivational and volitional constructs.

Autonomous motivation statements:

- My decisions represent my most important values and feelings.
- My actions are in agreement with who I really am.
- I strongly identify with the things that I do.
- I set specific goals before I begin a task.
- My decisions are steadily informed by things I want or care about.

Table 18. Cronbach alpha validation of autonomous motivation aspect in the questionnaire.

Cronbach's Alpha	No. of Items
0.899	5

Source: Compiled by the author based on the research database.

Volition statements:

- I never persist very long on a difficult job before giving up.
- If the task is too difficult, you do not even want to start with it.
- I know that I give up when the situation is against me.
- I really can't get much done without the right mood.
- It is very difficult to force myself to do something when I am not interested.
- I make a conscientious effort to get out the best results.
- If there are no procedures given with a task, I create them myself for better performance.
- If I want to do something, I do not let others distract me much.
- I feel that almost everything can be achieved if one wants.

Table 19. Cronbach alpha validation of volition aspect in the questionnaire.

Cronbach's Alpha	No. of Items
0.552	9

Source: Compiled by the author based on the research database.

Table 20. Cronbach alpha validation of conative aspect in the questionnaire.

Cronbach's Alpha	No. of Items
0.764	14

Source: Compiled by the author based on the research database.

The instrument is strong and reliable in this study.

Qualitative approach

In order to get more insights about the above studied constructs, we interviewed an entrepreneur who filled the questionnaire as well. The structured interview was conducted for 30 minutes and transcripts can be found in appendix 2. The entrepreneur falls into the over 30 years of age group and has been into entrepreneurship for more than a year now and is her first company. Prior to this she was working as an employee for a global company based in Estonia. As she has experience of both the groups, hence findings from this interview would be significant to understand the logic behind the scores we got from the quantitative approach.

We found out that the entrepreneur tends to be more motivated to work for their own company than they were working as an employee in the past. *“I wanted to do my own business because it motivates me that I can do things that I like to do and do them on my own terms.”* The reason highlighted was that she enjoys the whole process of innovation and building up the company rather than just the end result of financial gains. Also, she prefers to set up her own goals and feels more satisfied working towards them. This shows that the interviewed entrepreneur has strong autonomous motivation.

“But when I worked for a company then the goals were set for me. Not always, of course I had some say in it.” and *“but like someone being an employee, of course they can see the progress, but it's not your baby or your idea that you're putting into life necessarily always.”* It shows that when the same person was working as an employee, she was focused more on completing the given tasks only with the aim of gaining the salary which represents the controlled motivation (as studied above). This shows that entrepreneurs possess strong autonomous motivation levels and the finding sync accurately with the study of Deci & Ryan (2000).

“We formulated a plan, how this would happen, how we would sell our idea, how I would find customers.” Her thoughts are very goal-oriented and she is intended to achieve those goals. *“At some point your employee life gets very routine but then you want to learn more new things. So having this kind of business idea is always good to keep”*. Even being aware of possible financial and psychological challenges from the beginning, she still chose the path of entrepreneurship and

is not afraid of failures, this reflects her strong will-power. As per ‘first person view’ volition concept (Frith, 2013), the volition level also seemed to be quite higher in her being an entrepreneur than she was an employee in the past.

3.4. Research questions and answers

Q1: How are conative aspects reflected among entrepreneurs/small business owners in Estonia?

As per Weinstein, Przybylski, & Ryan (2012), autonomous motivation is considered to be ‘high’ if the mean is between 4-5. In this study, the mean turns out to be 4.33 among entrepreneurs. Hence, we can say that autonomous motivation is high among entrepreneurs. Secondly, as per Ustav (2013) volition is considered to be of high level at 72.6%, whereas in this study it is found to be 74.70% among entrepreneurs. As we know, conation is a mix of motivation and volition (Snow, 1996). Also, we have seen above that there is a moderate and positive correlation between autonomous motivation and volition at 0.557 ($p < 0.001$). Also, from the interview result, we found out that the reason for entrepreneurs possessing the higher conation level is due to the sense of satisfaction they get through innovation and the whole process of setting up their own goals and achieving them. The results show conative aspects among entrepreneurs/small business owners in Estonia are relatively high.

Q2: Can entrepreneurs/business owners be differentiated on the conation-based choice making?

We got almost similar sample sizes for entrepreneurs (54) and employees (51) and we have seen above that the conation score is relatively on the similar scale (4.03 and 3.80 respectively) among both groups. Also, even after clustering the entrepreneurs and employees on the basis of gender, age, and experience, the conation score was still relatively similar. Hence, we can say that it is hard to differentiate entrepreneurs from other other professionals on conation-based choice making.

4. DISCUSSION & CONCLUSION

4.1 Discussion

In this part, we will focus on the summary of our research findings and conclusions. As mentioned in the introduction, the aim of this paper was to study the conative constructs of small business owners/entrepreneurs in Estonia. Hence, we studied two constructs that define conation, these are autonomous motivation and volition in order to conclude the research.

As per Pearson correlation coefficient test, we can say that autonomous motivation and volition are strongly and positively correlated at 0.557 ($p < 0.001$). It confirms the concept discussed in the theoretical chapter that both the constructs are inter-related and part of conation.

Cronbach's alpha of conation is of 0.764 which states that the research instrument was valid and reliable for carrying out the research. It shows that there is a high internal consistency among the questions of the instrument of the study.

As Moen (2015) has suggested in his study, the environment and the organisation put constraints on the managers, limiting their volitional control and ability to perform the desired tasks. However from this study, it can be seen that a relatively high autonomous motivation and volition are found in the employees as well. As table 11 shows, both the constructs (autonomous motivation and volition) are relatively on the similar scale among entrepreneurs/business owners and the employees. This means that not only entrepreneurs/small business owners but even employees in various companies in Estonia possess a high level of conation. Hence, employees with these abilities must be helping their companies to outperform in the market. Also, the employees possessing similar abilities tend to possess the entrepreneurial mindset. Also, considering a high mean value, we can say that entrepreneurs are not only strongly motivated to dream something new and big but also possess the will power to work towards them and make their dreams a reality.

With statements like, *“I feel that almost everything can be achieved if one wants”* (Table 9) 59% of entrepreneurs and 53% of employees confirmed that they ‘strongly agree’ to it. Additionally, 33% of entrepreneurs and 25% of employees confirmed that they ‘agree’ to it. This means a large proportion of both of the samples tend to have similar traits in this aspect. Hence, we can assume that both the samples to a large extent possess high volitional level and are willing to achieve their goals no matter how hard that could be. When the statement was asked in the interview from an entrepreneur, she strongly agreed to it because as per her entrepreneurs possess the winning spirit and in case if their initial plan doesn’t work as expected, they still can figure out other ways to achieve the desired goals. Hence, giving up is not an option or characteristic of an entrepreneur. Further to this I believe employees still have some sort of leverage to give up if they are unable to achieve their target because it’s not their own company and can blame other colleagues, processes or policies in case of failure. Hence, this could be a reason that slightly less percentage of employees strongly agreed to the statement than entrepreneurs.

Also, with statements *“I really can’t get much done without the right mood”* and *“I know that I give up when the situation is against me”* we have reversed the scores. We found approximately 85% of entrepreneurs and 62% of employees supported these statements. Through the interview also we got to know that entrepreneurs don’t have an option of giving up. Therefore, somehow they tend to find the way to get to the right mood so as to get their task completed. Whereas, employees might have an option of giving up on their tasks and can ask for help from other colleagues or the management in case of some hardships. This could also be possible as might be not all employees are directly involved in the company’s goals setting and are not responsible for chasing them. Whereas, entrepreneurs being their own boss do not fear challenges and possess the stronger conation to overcome those in order to achieve their dreams.

We found support for the above mentioned point about entrepreneurs' commitment in the results of the statement *“if there are no procedures given with tasks, I create them myself for better performance”*. The mean of entrepreneurs is 4.18. Whereas the mean of employees is 3.94 (table 10) which is slightly less. In the interview, the entrepreneur strongly agreed to it but she also confirmed that it was similarly applicable for her when she was an employee in the past. An important reason behind this is the cultural aspect as mentioned by the interviewee. She added that people are used to an entrepreneurial mindset because of soviet times, where it was

necessary to find ways out of difficult situations. This could have made people more motivated and possessed strong will-power. This could also be a reason that even employees also possess high conation in this country.

Also when the entrepreneur was asked in the interview about what motivates her then she replied, *“The building process where you learn a lot of new things, you meet new people, you get new ideas, you develop your ideas. It's very interesting and rewarding in itself because even if I won't be a billionaire, I will be a much smarter person.”* This shows that entrepreneurs possess intrinsic motivation (as studied above) where they enjoy the process of entrepreneurship rather than the rewards in the end. I believe it's very important for an entrepreneur to enjoy what they do everyday as this is one of the most important aspects that keeps them motivated. When the entrepreneur was asked about volition, she replied *“I started it alongside my job. I had to test it out and when it seemed that yes it's a like a valid business idea and it can work. Then I dedicated myself full time.”* This reflects the possession of a strong volition among entrepreneurs as if they decide to do something they will find time and way to carry it out.

Comparison of means for clusters after the two-step cluster analysis has shown that the conation score turns out to be 4.09 for female entrepreneurs and 3.98 for male entrepreneurs (table 14). This means female entrepreneurs tend to possess slightly higher conative constructs than male entrepreneurs. This might be because women tend to think through more before committing themselves to become an entrepreneur than men. Similarly, entrepreneurs under 30 years of age have shown relatively stronger conation in this research as compared to entrepreneurs over 30 years of age. This could also be possible as young people are more energetic and possess high risk taking capabilities.

K-means cluster analysis results show that there are slightly more entrepreneurs in the high conation cluster and slightly more employees in low contain clusters, but both entrepreneurs and employees are represented in both clusters.

Finally, this study results indicate that both the groups (entrepreneurs and employees) possess quite a similar level of conation irrespective of gender and age group. However, we can still say that it is not possible to strongly differentiate Estonian entrepreneurs on their conation based

choice making from other professionals like employees. This could turn out to be in the favour of the country's economy and growth.

4.2 Conclusion

In this study, we have discussed two constructs that define conation, these are autonomous motivation and volition in order to conclude the research. We also understood its impact in entrepreneurship. We got to know how conative aspects are being reflected among Estonian entrepreneurs/ small business owners and if they can be differentiated on conation based choice making. In this chapter we will conclude the findings of this study.

Theoretical Implications

This paper will help to understand the concept of conation and its impact in entrepreneurship, especially upon Estonian entrepreneurs and practitioners. We figured out that there is a positive correlation between autonomous motivation and volition. Hence, both the constructs should be managed effectively and neither should be neglected. The study main findings are that even after clustering the entrepreneurs and employees on the basis of gender, age, and experience, the conation score was still relatively similar. Employees in various companies in Estonia possess a high level of conation. Hence, they tend to possess the entrepreneurial mindset. It is not possible to strongly differentiate Estonian entrepreneurs on their conation based choice making from other professionals like employees. This could turn out to be in the favour of the country's economy and growth.

The results of this research exhibits the entrepreneur's motivation and volition characteristics that influences their decision making capabilities. It is an integral part of the entrepreneurial journey as autonomous motivation leads to the thought of launching a business whereas volition leads to taking the real actions. As Estonia has the highest number of entrepreneurs per capita in Europe, the competitive pressure and recent rise in economic growth has brought Estonian entrepreneurs to enhance the role of entrepreneurial competences. Therefore, entrepreneurs today require not just the accurate knowledge and skills but also the right mental frame to put their thoughts into actions and achieve the desired goals. The study will help the readers to overcome

any possible confusion regarding the basic concept of all the three constructs and their functioning on an individual and the impact in business.

Practical Implications

This research will be helpful for the aspiring entrepreneurs to learn from other entrepreneurs' mindsets and decision making to have a better choice making while starting their own entrepreneurial journey. It will also help the existing entrepreneurs to get to know more about what is exactly lacking in them - desire or the will power to execute the current or a new idea. This would ultimately help them to be prepared well to overcome the possible yet common hardships during various stages of entrepreneurship.

It will also be very useful for the entrepreneurs while hiring their team as we have found in the research that even employees in Estonia possess a high conation level. This can solve the execution challenges a new business generally faces due to lack of similar mindset and attitude of the initial team members. Entrepreneurs can be more confident while hiring as the employees will tend to have an entrepreneurial mindset as well. It will help to overcome the operational issues as employees will tend to think on their own to find the solutions to the daily challenges. This would help the founders to focus more on the business development rather than being stuck in micro-management. Hence, would lead the business towards an early success.

Also, other practitioners (employees) will gain more confidence from this study about their decision making abilities and will help them to even outperform in their current jobs. Or will also boost their confidence to execute their idea and a possible dream of opening a business.

4.3 Limitation and Recommendation for Future Research

In this part we will discuss the possible limitations and the recommendations for the further research within the same domain. While conducting the research, we didn't interview any employees to get the insights from their perspective too alike we did for the entrepreneurial group. Also, there should be a deeper qualitative survey to follow the constructs and gain more

reasoning behind the logic of entrepreneur answers. We also noticed that the study did not differentiate the group of employees based on their designation. For example, a senior manager or head of department is still considered as an employee but generally such professionals tend to possess a strong entrepreneurial mindset as they are fully involved in the decision making process at every step. Maybe due to this also, the research results show high conation levels among employees in Estonia.

In terms of the future research, we suggest to compare Estonian entrepreneur's conation level to some other country's entrepreneurial conation level. It would be interesting to know how this construct varies based on the geographical and cultural background. This might give us the understanding about why some countries are more capable of performing well in global index as compared to others.

LIST OF REFERENCES

- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory. A social-cognitive theory*. Upper Saddle River, NJ: Prentice-Hall.
- Bandura, A. (1991). Self-regulation of motivation through anticipatory and self reactive mechanisms. *Perspectives on motivation*. Nebraska Symposium on Motivation. Lincoln University of Nebraska Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Baum, L.R., & Locke, E.A., & Smith, K.G.. (2001). A multidimensional model of venture growth. *Academy of Management Journal*, 44, 292–303.
- Baumeister, R., Bratslavsky, E., Muraven, M., & Tice, D. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5), 1252-1265.
- Blackwell, L. S., Trzeńniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. 78(1), 246-63. DOI: 10.1111/j.1467-8624.2007.00995.x.
- Carsrud, A. L., K. W. Olm, and J. B. Thomas (1989). “Predicting Entrepreneurial Success; Effects of Multi- Dimensional Achievement Motivation, Levels of Ownership, and Cooperative Relationships,” *Entrepreneurship and Regional Development*. Vol. 1(3), 237–244.
- Collins, C.J., Hanges, P.J., & Locke, E.A. (2004). The relationship of need for achievement to entrepreneurship: A meta-analysis. *Human Performance*, Vol. 17, 95–117.
- Corno, L. (1989) Self-regulated learning: A volitional analysis. In J. Zimmerman and D. Schunk (Eds.), *Self-regulated learning and academic achievement: Theory, research and practice*. New York: Springer-Verlag.

- Corno, L. (1993). The best-laid plans: Modern conceptions of volition and educational research. *Educational Researcher*, Vol.22, 14-22.
- Covey, S., Merrill, A. R., & Merrill, R. (1994). First things first: To live, to love, to learn, to leave a legacy. New York: Simon & Schuster.
- Deakins, D. & Freel, M. (1998). Entrepreneurial Learning and the Growth Process in SMEs, *The Learning Organization*, Vol. 5(3): 144-155.
- Deci, E. L., Moller, A. (2003). The concept of competence: A starting place for understanding intrinsic motivation and self-determined extrinsic motivation. New York, NY: Plenum Press.
- Deci, E. L., Gagne, M. (2005). Self-determination theory and work motivation. *J. Organ. Behav.*, Vol. 26, 331–362.
- Deci, E. L. & Ryan, R. M. (2000). “Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being,” *American Psychologist*, Vol.55, 68–78.
- Dörner, D., Schaub, H., Stäudel, T., & Strohschneider, S. (1987). Ein system zur Handlungsregulation oder die Interaktion von Emotion, Kognition, und Motivation. (Projekt "Mikroanalyse" DFG 200/5-7. Report # 57). Hamburg, West Germany: University of Bamberg, Lehrstuhl Psychologie II.
- Dweck, C. (2017). Mindset-Updated Edition: Changing The Way You think To Fulfil Your Potential. Published by Stanford University.
- Dweck, C. (1991). Self-theories and goals: Their role in motivation, personality, and development. In R. A. Dienstbier (Ed.), *Perspectives on motivation*. Nebraska Symposium on Motivation. Lincoln University of Nebraska Press.
- Dweck, C. S. (2009). Mindsets: developing talent through a growth mindset, *Olympic Coach*. Published by Stanford University, 21(1), 4-7.

- Drew, C.C., Hart, M., Stephan, U. (2015). Understanding Motivations for Entrepreneurship: A Review of Recent Research Evidence. BIS research paper no. 212, 36-52.
- Efklides, A. (2008). Metacognition. *European Psychologist*, 13(4), 277–287. doi:10.1027/1016-9040.13.4.277
- Ellström, P.E. (1997). Integrating learning and work: problems and prospects. *Contribution to the FORUM Workshop: Learning in Learning Organizations*, University of Evora, Evora.
- Emmons, R. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, *Journal of Personality and Social Psychology*, **51**(5): 1058-1068. DOI: 10.1037/0022-3514.51.5.1058.
- Freud, S. (1915). Instincts and their vicissitudes. in *Collected Papers*. Vol. 4, Ed. S. Freud New York: Basic Books, 60–83.
- Frith, D. F., (2013). The psychology of volition. *Experimental Brain Research*, Vol. 229, 289–299.
- Gollwitzer, P. M. (1990). Action phases and mind-sets. *Handbook of motivation and cognition: Foundations of social behavior*. Max-Planck-/nstitut für psychologische Forschung, 55-62.
- Haggard, P. (2019). *The neurocognitive bases of human volition*. *Annual review of psychology*, Vol.70, 9-28.
- Heckhausen, J. (2007). *The motivation-volition divide and its resolution in action-phase models of behavioral and developmental regulation*. Vol. 4, 163–180.

- Heckhausen, H., & Gollwitzer, P. M. (1987). *Thought content and cognitive functioning in motivational versus volitional states of mind*. *Motivation and Emotion*, Vol. 11, 212-230.
- Herman, J. (1990). Action plans to make your vision a reality. *NASSP Bulletin*, Vol. 74(523), 14-17.
- Huitt, W. (1999). Conation as an important factor of mind. *Educational Psychology Interactive*, *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. [25th March, 2021], Retrieved from:
<http://www.edpsycinteractive.org/topics/conation/conation.html>.
- Huitt, W., & Cain, S. (2005). An overview of the conative domain. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved from
<http://www.edpsycinteractive.org/brilstar/chapters/conative.pdf>.
- Hume, D. (1758). *An enquiry concerning human understanding*. Oxford University Press, Oxford.
- Holtey-Weber, J. (2016). *Growth Mindset Interventions: Lessons from Across Domains*. Published by University of Groningen, 3-7.
- Jacobs, R. & Pons, T. (1993). Developing a New Model of Individual and Team Competence in Small Business. *Paper presented at the 16th National Small Firms Policy and Research Conference*, Nottingham.
- Kane, R. (1985). *Free will and values*. Albany: State University of New York Press.
- Kanfer, R., Frese, M., & Johnson, R. E. (2017). Motivation related to work: A century of progress. *Journal of Applied Psychology*, Vol. 102, 338–355.
- Kolbe Corporation. (2004). *Kolbe Bottom Lines*, Kolbe Corporation.
- Kolbe, K. (1990). *The conative connection*. Reading, MA: Addison-Wesley Publishing Company, Inc. Retrieved May 1999, from <http://www.kolbe.com/>.

- Kovač, D., Meško, M., Bertonec, A. (2010). Entrepreneurial Conative Component of Competences: the Case of Slovenia., *Organizacija – Journal of Management, Informatics and Human Resources*, Vol. 41 (4): 127-135. DOI: 10.2478/v10051-008-0014-6.
- Kuhl, L., Kraska, K. (in press). Self regulation and meta motivation: Computational mechanisms, developments, and assessments. In R. Kanfer, P. L. Ackerman, & R. Cudeck (Eds.), *Abilities, motivation, and methodology: The Minnesota Symposium on individual differences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Kuhl, L., Kazen-Saad, M. (1988). A motivational approach to volition: Activations and deactivation of memory representations related to uncompleted intentions. *Journal of cognitive perspectives on emotion and motivation*, 63-85.
- Kuhl, J., & Kazen-Saad (1989). Volition and Self-Regulation: Memory Mechanisms Mediating the Maintenance of Intentions. *Journal of volitional action*, 387-390.
- Kurczewska, A., (2017). The interplay between cognitive, conative, and affective constructs along the entrepreneurial learning process. *Published in Emerald Insight*, 4-11.
- Kyrö, P., (2008). *How the dialogue between cognitive, conative and affective constructs in the entrepreneurial and enterprising learning process is explicated through concept mapping?* Proc. of the Third Int. Conference on Concept Mapping Tallinn, Estonia & Helsinki, Finland 2008.
- Lumsden, L. (1994). Student motivation to learn. Retrieved June 2002, from <http://chiron.valdosta.edu/whuitt/files/stdtmotv.html>
- Mansfield, B. (1999). What is “competence” all about? *Competency*, Vol.3, 24-28.
- Marczewski, A. (2013). The intrinsic motivation RAMP. [Online]. Available: <https://www.gamified.uk/gamification-framework/the-intrinsic-motivation-ramp/>. [Accessed: 21-Feb-2021].
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, Vol. 41, 954-969.

- Maslow, A. (1954). *Motivation and personality*. New York: Harper.
- McClelland, D. C. (1980). Motive Dispositions. *Journal of review of personality and social*. Vol. 1, 10-41.
- Metzinger T (2006). Conscious volition and mental representation: toward a more fine-grained analysis. In: Sebanz N, Prinz W (eds) *Disorders of volition*. Bradford Books, MIT Press, Cambridge, 19–48.
- Miller, D., & Le Breton-Miller, I. (2017). Underdog entrepreneurs: A model of challenge-based entrepreneurship. *Entrepreneurship Theory & Practice*. Vol. 41, 7–17.
- Miller, E., Rankin, N. & Neathey, F. (2001). *Competency Frameworks in UK Organizations*. London, CIPD.
- Mischel, H. N., & Mischel, W. (1983). The development of children's knowledge of self control strategies. *Child Development*. Vol.54, 603-619.
- Mischel, W. (1996). From good intentions to willpower. In P. Gollwitzer & J. Bargh (Eds.), *The psychology of action*. New York: Guilford Press, 197-218
- Murnieks1, C., Y., Klotz1, A., C., Shepherd2, D., A. (2019). Entrepreneurial motivation: A review of the literature and an agenda for future research. *Journal of Organizational Behavior*, 1-20.
- Moen, O. (2015). The Positive Effect of Motivation and International Orientation on SMEGrowth. *Journal of small business management*, 659-661.
- Neumann, O. (1987). Beyond capacity: A functional view of attention. In H. Heuer, & A. F. Sanders (Eds.), *Perspectives on perception and action*. Hillsdale, NJ: Earlbaum, 361-394.
- Norman, D., A. & Shallice, T. (1985). Attention to action: Willed and automatic control of behaviour. In R. J. Davidson, G. E. Schwartz, & D. Shapiro (Eds.), *Consciousness and self-regulation: Advances in research.*: Vol. 4, 388-390.

- Pintrich, P., R., & McKeachie, W., J. (2000). A framework for conceptualizing student motivation and self-regulated learning in the college classroom. *Conative constructs and self-regulated learning*, 33-41.
- Saputro, R.E., Salam, S., Zakaria, M.H. (2017). A review of intrinsic motivation elements in gamified online learning. *Journal of theoretical and applied applied information technology*, 4934-4936.
- Schunk, D., & Zimmerman, B. (Ed.). (1994). *Self-regulation of learning and performance: Issues and educational applications*. Hillsdale, NJ: Erlbaum.
- Shane, S., Locke, E.A., Collins, C.J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, Vol. 13, 257–279.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, Vol. 25, 217–226.
- Spinoza B (1677) *Part III: on the origin and nature of the emotions; postulates*. Journal of the ethics (transl 2008). Digireads.com Publishing, 54-61.
- Snow, R. E. (1989). *Cognitive-conative aptitude interactions. In learning, in abilities, motivation, and methodology*. Edited by R. Kanfer, I'. L. Ackerman, & R. Cudeck. Hillsdale, NJ: Lawrence Erlbaum Associates, 435-474.
- Snow, R. E., Corno, L. and Jackson, D. (1996). Individual differences in affective and conative functions. In Berliner, D.C. and Calfee, R.C. (Eds), *Handbook of Educational Psychology*, Simon & Schuster, Macmillan, New York, 243-310.
- Ulrich, D. (1998). Intellectual capital = competence X commitment, *Sloan Management Review*, Vol. 39, 15-30.
- Ustav, S. (2013). The assessment of student metacompetence in the context of entrepreneurship education. *Journal of Periodical of Entrepreneurship Education*. Vol.1, 3-8.

Wegner, D., M. (2003). *The illusion of conscious will*. The MIT Press, Cambridge, Mass.

Weinstein, N., Przybylski, A.K., Ryan, R. M. (2012). The index of autonomous functioning: Development of a scale of human autonomy. *Journal of Research in Personality*, Vol. 46, 397–413.

Zinbarg, R. E., W. Revelle, I. Yovel, and W. Li (2005). “Cronbach’s α , Revelle’s β , and McDonalds, ω^2 : Their Relations with Each Other, and Two Alternative Conceptualizations of Reliability,” *Psychometrika*. Vol. 70(1), 123–133.

APPENDIX 1

Research Questionnaire

1. How old is your company?	0-1 years	1-2 years	2-3 years	More than 3 years	
2. Is it your first company/ business?	Yes	No			
How many employees are in your company?	0-5	5-10	11-2 5	More than 25	
Age	30 years	Over 30 years			
Gender	Male	Female			
	1	2	3	4	5
My decisions represent my most important values and feelings.					
My actions are congruent with who I really am.					
I do things in order to avoid feeling badly about myself.					
I strongly identify with the things that I do.					
I set specific goals before I begin a task.					
My decisions are steadily informed by things I want or care about.					
I often pressure myself.					
I try to manipulate myself into doing certain things.					
I never persist very long on a difficult job before giving up.					
If the task is too difficult, you do not even want to start with it.					
I know that I give up when the situation is against me.					
I really can't get much done without the right mood.					
It is very difficult to force myself to do something when I am not interested.					
I make a conscientious effort to get out the best results.					

If there are no procedures given with a task, I create them myself for better performance.					
If I want to do something, I do not let others distract me much.					
I feel that almost everything can be achieved if one wants.					

Appendix 2

Interview Transcript

Parmeet, 00:00:03 - 00:00:54

Hello. So thank you for joining um This quick interview meeting with me as you know that I'm writing my thesis for masters. Um And the topic I chose was related to entrepreneurial motivation and volition, which we will discuss again through this when we go through this interview around. So yeah. Just just to let you know we are recording this meeting so that I can get the transcripts out of it later on the shelf can be used as uh indeed in my thesis to disclaim my study. All right. So we'll start with some interesting stuff. Um so if I may ask you, what would be your age group? Under 30 or over 30 years?

Entrepreneur, 00:00:54 - 00:00:56

It's over 30.

Parmeet, 00:00:56 - 00:01:00

Perfect. And how long have you been an entrepreneur?

Entrepreneur, 00:01:01 - 00:01:07

Um Over one year. Less than two.

Parmeet, 00:01:09 - 00:01:15

All right. All right, okay. And uh have you ever heard of this concept called Conation?

Entrepreneur, 00:01:16 - 00:01:17

No.

Parmeet, 00:01:17 - 00:02:13

Alright. Great. Um So that's not I mean actually that's true that this subject is quite understudied and being practically under used especially when it comes to entrepreneurs. So I was studying this concept and I came across some really cool facts which I can share with you. Maybe then that can give us some background and then we can talk about some things around it, some questions around it and can discuss your experiences based on those kinds of questions that I'll be asking you. So basically conation is something which is a mix of motivation which I'm sure you would know uh and in volition which is basically your willpower. So when motivation we can in simpler words we can say motivation is basically a desire.

Parmeet, 00:02:14 - 00:02:41

I'm sure it might be some of your desire that lets you do this entrepreneurial journey, that you wanted to do something or achieve something. So when this desire and will power comes together it becomes a conation where the real action happens. The desire is just like it would be dreaming of or thinking of something and willpower actually gives you strength to do it.

Entrepreneur, 00:02:42 - 00:02:42

Okay,

Parmeet, 00:02:42 - 00:03:31

But when you club it together then actually it becomes a conation and then we have real magic happen. The real action happens in the business or day to day life, basically anything. Um All right, so that could be the simplest definition, I can give. Um so any questions regarding this Everybody, this concept explanation now? All right, so you can, you can ask me anything in between too. so basically I would like to ask you a very simple question. Like we just talked about desire or motivation, whatever you wanna call it. I would like to know where you get your motivation from? Like when you thought of starting your business? Your entrepreneurial journey? What was the motivation behind it? And where do you get it from?

Entrepreneur, 00:03:32 - 00:03:34

Umm, Well uh I think it came from that that I wanted to do my own thing like a job or anything where I could do what I do. So there I could uh how to say like create the concept on my own,

what I'm selling to people and then I can manage my own time and basically be independent in what I do uh without needing to how to say like if you work in a job where you get paid then you are very dependent on the company, work for your managers etcetera etcetera. I wanted to do my own business because it motivates me that I can do things that I like to do and do them on my own terms, so to say

Parmeet, 00:04:48 - 00:04:55

Got it. Okay, so before this I assume you were working somewhere, you had your work experience.

Parmeet, 00:04:56 - 00:05:27

Before starting your entrepreneurial journey and entrepreneur is back in the time, maybe some employee for some company, you know, they work with companies then they somehow figured out that they want to do something of your own just like you just said. So when you were working in, in passing with some companies, I'm sure you had a great experience. But were you equally motivated? Uh every day while going to the work when you were working for somebody else? Not for your own self.

Entrepreneur, 00:05:29 - 00:06:16

No, I think I wasn't because then of course like when you have your own company, you also need to do things that you don't necessarily like always, like the paperwork or reports that you need to do for the government etcetera etcetera. But when you work, when I worked for a company then mm the goals were set for me. Not always, of course I had some say in it. And also the result, it was to say for someone else, it wasn't for me. So when I did something, I achieved something, of course it was nice. But how to say the benefits came for someone else rather than me. And the motivations are therefore wasn't also maybe not that high because and also like in your own company, you see the whole picture and they're very motivated because you understand how the parts work together. But like someone being an employee, of course they can see the progress, but it's not your baby or your idea that you're putting into life necessarily always. Of course sometimes people are very lucky and they find the companies where they can do but they're really passionate about.

Parmeet, 00:06:53 - 00:07:26

But what if you were getting paid for doing that thing and let's see if you were getting paid decently, you know financially was good and then it was a bit of peace of mind to because it's at the at the end of the day you're just an employee, you're working for 8 hours a day for a week or a month. And then you chose to be an entrepreneur, I'm sure you'll be working crazy hours definitely. Like you cannot say that it's not my job. It's not doesn't come under my K. R. A. and go to some other department to anyone anymore. You know that's what usually happens.

Entrepreneur, 00:07:26 - 00:08:02

I have to say that I personally also had crazy hours when I worked for another company rather than my own. So it's uh it's similar in a way but then I set my own goals and I can adjust them according to my needs. But when you work for someone then the goals are set for you you get like it's very external in a way. So if someone tells you what to do and even if you like to agree then how to say it's ummm the motivation is different.

Parmeet, 00:08:02 - 00:08:46

All right so um what do you enjoy the most in motivation? Um, like when you were thinking of starting your own company and building up your product or upon working on your own idea, what did you enjoy the most? Uh Even now the end results like where you will of course will become a big company and you will enjoy the financial rewards in the end and you actually get there. Or, or you're enjoying the whole process of building up, you know, hiring people learning new ideas or finding final investors for you. Or just the whole process of building up a company what I enjoy the most.

Entrepreneur, 00:08:46 - 00:09:18

I think the whole process of building the company because like in results to say it's like of course, it would be nice to be a big company and have a lot of money. But like the building process where you learn a lot of new things, you meet new people, you get new ideas, you develop your ideas. It's very interesting and rewarding in itself because even if I want to be a billionaire, I will be a much smarter person. That was before I started this.

Parmeet, 00:09:19 - 00:10:13

All right, okay. So yeah, that's fair enough. Yeah. Because some people who have a different kind of motivation for doing things. Maybe somebody created for the end result, enjoy the fruits of either either financially or something else. Or somebody just enjoys the whole process of like doing it. So that's quite fair enough. And if I may ask you, um Okay. So we talked about motivation and uh so what do you think where uh where does your motivation come from? Like, again, I would like to ask you that you said something, but if you can share something like your experience to for an example, to, you know, dive deep into it maybe uh, when, when you're doing things, you're, you're motivated about opening a company when you were

Parmeet, 00:10:14 - 00:10:31

Umm, so what was the, where did this motivation come from? Like, okay, one day you decided I want to do my company, was it? Or it was slowly building it up through your previous show or you decided or I know this thing very well, maybe I can do it for myself rather than somebody else.

Entrepreneur, 00:10:31 - 00:11:24

I think it slowly built up because like of course you have ideas, but in the beginning you don't know where to start or what you could actually offer to other people. So then like it slowly comes until it like formulates or matures enough when you're like, okay, I have this idea now, it's ready, I can do this, or so then I can start doing today's company thing. So I think it was like for me, at least it was very slow, not very slow, of course, but slower. It wasn't that like I woke up one day and I was like, okay, I'm going to be an entrepreneur. It was like, I don't know, meeting people from my field, talking to them, seeing what other students are thinking, maybe I could also do something on my own as some are doing. So then slowly or get thoughts and ideas and then you develop this kind of concept that you want to do and then you start the business.

Parmeet, 00:11:34 - 00:11:40

Okay. But have you seen business before in your life or is it like is it your first business? Have you done business before?

Entrepreneur, 00:11:40 - 00:11:43

For me, it's the first, it's my first business.

Parmeet, 00:11:44 - 00:11:44

Right.

Entrepreneur, 00:11:45 - 00:11:52

So yeah, but I'm gonna work for companies so have an idea how they behave.

Parmeet, 00:11:52 - 00:12:10

Have you ever seen business closely? In a big company it is just like being a small spare part of the machinery. So um yeah. Have you seen anyone in your family doing business or? Well and your friends closely?

Entrepreneur, 00:12:10 - 00:12:23

Well, I've seen like my brother did business and some of my cousins, so I've seen how they behave. My parents have always been employees, so they never have done anything on their own.

Parmeet, 00:12:24 - 00:12:51

Okay. Okay. So you have you somewhere, we're aware of how much the, how the business people lives are. What are the thought processes, because I'm sure there are differences between how if you work for a company, you can affect salary a month. You know how, how you can proceed with their finances. But business people, they have different things, different ideologies with their finances and their money.

Entrepreneur, 00:12:51 - 00:13:11

Exactly. And you need to, if the business is not doing well, then you feel it immediately for an employee, there is a buffer, Someone else is responsible to get paid at the end of the month. But in being an entrepreneur, you are responsible. That people get paid at the end of the month.

Parmeet, 00:13:12 - 00:14:04

Fair enough. Yes. All right. And so how about the willpower? I got a fair idea from you, how is your motivation started? And about starting the whole journey of entrepreneur or you know how you are making decisions, but what are your thought processes? Um but how about the willpower, let's say you decided to be an entrepreneur. You, you somehow got the confidence, your idea of cool, you want to do it. But what about the willpower when you actually thought of, I'm going to resign from my current job or I'm gonna do it along with my current job extra hours or I really want to do it. So what was that push that actually the strong dedication level where you actually started doing it in real, the real action started

Entrepreneur, 00:14:05 - 00:14:27

Ah well I started it alongside my job. I had to like to test it out and when it seemed that yes it's a like a valid business idea and it can work. Then I dedicated myself full time.

Parmeet, 00:14:27 - 00:15:08

Left your job. Okay. And uh how did you get this push? Like I know you just said that we started along with it and when you go you would like here when it was proven ideas somewhere maybe it was working out for you. I don't know, maybe monetary white or it turns off the logic ways that it is something that what you're doing is required out in the market. So it has some kind of value. But before we go back in the past and say really on the day when you actually started the first thing maybe you register your company or or you know, you write down everything

Parmeet, 00:15:09 - 00:15:50

From the thoughts in your head. It was actually getting into the action a bit by bit. So what I know, because it requires some kind of strength actually, because I think a lot of ideas every day, a lot of ideas that come to mind, but hardly we choose any any, like 1000 of idea, maybe roughly we choose dead, because I'll bring kids producing a lot of idea, but we follow a few. So what was the push? Okay, today, you're like, I'm gonna register this company, I'm gonna open a bank account and I'm gonna start looking for the people who can club with me on this idea, who couldn't be, who can join me or, or I don't know what it was. A one man show. Yeah,

Entrepreneur, 00:15:51 - 00:16:51

Yeah! Actually, for me it was that there was this idea and I started discussing this idea with friends and also some of the people I went to school with and with one of them then we had this click that okay this seems like a good idea. And then we also evaluated in a way that like okay what could we bring on the table and what could we do? And then we formulated a plan, how this would happen, how we would sell our idea, how I would find customers. If you have someone who is also very passionate about that topic then I think it's easier in that sense. Of course I would have done it alone but having support it's always easier.

Entrepreneur, 00:16:52 - 00:17:32

And I feel also that employee position is fun too and you can learn new things but it's always like at some point your life gets very routine but then you want to learn more new things. But then like having this kind of business idea is always good to keep, put some energy into this, start the business and then take this step, register the company in it and then you're like okay this is it like we are now, we should sell something maybe.

Parmeet, 00:17:33 - 00:17:43

So you say you want to say like you have a very strong world power no matter even if your idea doesn't work, but you still have a lot of dedication towards your business or...?

Entrepreneur, 00:17:43 - 00:17:44

Yes, even in the beginning it's not doing well and Yeah of course it's difficult and it's not doing well and like you try I don't know your meetings and people like it. It's interesting but like not for us and then you get I have compared it to like taking job interviews. So like if you apply for a job then of course you feel bad if you don't get the job but then like if you look for a job then it's normal that you don't get higher than the first position that you apply to. Sometimes you get hired for the 50th but you should too apply to. So then trying to take this logic into entrepreneurship as well. So it can't be that I have a great idea and that the first person that I go to that's like oh look I have this idea, do you want to buy this or like it from me? Then they're like yeah and then they call my money. So of course like you meet people you learn you also

through that learn about the market and what they are looking for. So you can also um how to say like uh improve your idea through that. But uh So and of course like you get demotivated occasionally, but then you know I don't go to sleep and then you wake up in the morning and then you just continue.

Parmeet, 00:19:15 - 00:19:37

Okay. Yeah, fair enough. All right. So let me ask you a few statements and see if you agree with it or don't. Or let me put it this way, you can mark yourself from 1-5.

Entrepreneur, 00:19:37 - 00:19:38

Okay.

Parmeet, 00:19:38 - 00:20:05

Right. So I for one means um like strongly disagree like they do not agree to, that means slightly agree slightly disagree. Sorry, this is slightly degree three would be neutral. Four can agree and fifth will strongly agree.

I feel that almost everything can be achieved if you want.

Entrepreneur, 00:20:06 - 00:20:08

Strongly agree.

Parmeet, 00:20:09 - 00:20:11

Why do you think so?

Entrepreneur, 00:20:12 - 00:20:54

Because I feel that I come I don't know if it's that you can do things or but sometimes people get too scared right away. So then uh if you really want to do something you can do it. But of course I will take it. I personally take it I believe in this, but at the same time you also need to know when to quit. So because if something like really really doesn't work, then maybe you need to take a step back and find another route to that goal.

Parmeet, 00:20:55 - 00:21:13

Alright, so basically if it's a plan doesn't work, you need to get another plan. But at the end of the day it should be done, Results will be achieved. So you mean to say you have the need to fix up the result first, That's where I want, where I want to end up and then just figure out your ways.

Entrepreneur, 00:21:13 - 00:21:50

But it doesn't need to be like at least personally, I don't feel that it needs to be like a super specific cool or like it doesn't need to be like I want to, I don't know, being this, I don't know top place somewhere, but it's like okay, I want to have like, I don't know five customers for my business or do this or that, that then like if you try one way and it doesn't happen and it doesn't happen and it doesn't happen, then I feel that there is no point of like, you know, you need to also learn from their mistakes. So because sometimes people get stuck, they have an idea how to achieve something and then they get stuck.

Parmeet, 00:21:52 - 00:22:09

All right. And if it is okay, I got that point. So basically being an entrepreneur, you need to figure out your weight and that's what I want to say. All right, what do you think about this one? I really can't get much done if I'm not in the right mood.

Parmeet, 00:22:12 - 00:22:16

Do you think it's important to be in the right mood to get things done?

Entrepreneur, 00:22:18 - 00:22:20

Well, I would say yes, mood is important, but I'm thinking whether it's like five or 4 maybe rather for like mood is important because then it's easier and sometimes it doesn't take much to get into the right headspace. You can just like take a book or something and then I don't know what you need to do and then just somehow organized.

Parmeet, 00:22:51 - 00:22:57

But again, that's exactly what's getting into the mood is. Getting into the right mood of doing things. Taking a walk, you're actually making up your mood to do that. You need to identify. All right, okay. All right. That's quite fair. Um Without it you thank you. It's not going to give you what you need if you concentrate on your work or the task without the right mind frame, right? Without the right mood, then probably it's going to be very hard for you to deliver the results.

Entrepreneur, 00:23:25 - 00:23:26

Yes.

Parmeet, 00:23:27 - 00:23:28

All right. Okay.

Parmeet, 00:23:32 - 00:23:42

Umm, one of my favourite questions. Umm, if there are no procedures given in the task, I prefer to create it myself for better performance.

Entrepreneur, 00:23:44 - 00:23:45

Yeah. Five

Parmeet, 00:23:45 - 00:23:47

Five. Why?

Entrepreneur, 00:23:47 - 00:24:54

I don't know. I think it was applicable even on my day when I was an employee, so you just create a way to do things or like if no one. Mhm. So like I personally in my past experience have also felt that it's maybe a cultural thing because uh like when I used to work in a like multinational multicultural company then uh I saw kind of a big difference between my Estonian colleagues and other colleagues from like other parts of Europe like more Western parts because they were highly reliant on those guidances and that like everything should be told to them and that they don't need to like follow or that that they don't like they should only like follow what's

told to them. And they were also a lot like that whether something is in their job description or not that they had very strict lines there that like this is it or my workday ends here and my private life starts then. But I feel that like at least me and the colleagues that they had there, but we had like different different view on this, that I think we took more those tasks as a challenge in a positive way when there were no guidance is how to achieve something or do something that we just didn't like figure it out ourselves and then we just did it and if we succeeded then we had like this good feeling that okay, we managed to do good work despite of not having enough resources or I don't know, it's like I have to say reward on its own or something.

Parmeet, 00:25:49 - 00:26:35

You all right, You just mentioned a very interesting point, let's say about this cultural thing. And you said like because you said your Estonian counterparts were kind of figuring out their way that there was no guidance. But on the other hand, your counterpart from the other parts of Europe or these different countries, they were not being able to get those things, ask you guys if there were no guidelines, why? Why do you think that, why what what what was special in Estonian employees of or your or your colleagues or you're in you like what what made you to actually you know, to have those extra zeal of doing the things, extra willpower of doing the things, but those other people were not having that.

Entrepreneur, 00:26:36 - 00:27:26

Yeah, actually we discussed it with colleagues then and I have discussed it with a couple of friends as well, that it seemed weird to me at that time, but then it makes sense as we think about like historical perspective and like that we didn't have soviet union that long time ago, although now all it is kind of long time ago, but personally my parents and I was born in the soviet union, so my parents and everybody had this kind of soviet mindset where like you didn't have enough resources like no one had so like there wasn't enough food or like clothing or anything in the stores. So our parents and grandparents, they needed to somehow figure things out.

Entrepreneur, 00:27:27 - 00:28:24

Renovate the house or build something, then they just like somehow figured it out. I don't know, we have stories about like stealing or borrowing but but then again it's like people get very how

to say innovative in these cases that like if you don't have everything and an estonian case, we had like this Western tv where we saw what's possible and then we saw the reality where we are at then our, those people started inventing things so they figured out how to live a normal life in a situation where everything is not really are easily available to you. So then I think that this kind of like mindset came from our homes and our parents that, and also like, I think this kind of positive like motivation or the feeling that you have achieved something came that we saw it like when our parents figured something out or they somehow managed to, I don't know, improve the house or build a home or do something without having like resources available that this was achievement on its own that you could do it, that you somehow managed to do things. So I think this is something like that and I think it could be also that Uh I think in age wise it might not be the case in like people who are 25 years old in Estonia. Because I've seen it in my workplace as well, because I think as they were born in Estonia where everything like we had shops and supermarkets already and everything was available, then they don't have this kind of mentality anymore, but it's some kind of generation that that's still that learned it and I think it gives a big advantage as well.

Parmeet, 00:29:33 - 00:29:34

All right. That's all. Thank you very much.

Appendix 3

Non-exclusive licence for reproduction and publication of a graduation thesis1

I Parmeet Singh Sawhney

1. grant Tallinn University of Technology free licence (non-exclusive licence) for my thesis Conative challenges among small business owners in Estonia supervised by Dr. Sirje Ustav

1.1 to be reproduced for the purposes of preservation and electronic publication of the graduation thesis, incl. to be entered in the digital collection of the library of Tallinn University of Technology until expiry of the term of copyright;

1.2 to be published via the web of Tallinn University of Technology, incl. to be entered in the digital collection of the library of Tallinn University of Technology until expiry of the term of copyright.

2. I am aware that the author also retains the rights specified in clause 1 of the non-exclusive licence.

3. I confirm that granting the non-exclusive licence does not infringe other persons' intellectual property rights, the rights arising from the Personal Data Protection Act or rights arising from other legislation.

05th May, 2021

1 The non-exclusive licence is not valid during the validity of access restriction indicated in the student's application for restriction on access to the graduation thesis that has been signed by the school's dean, except in case of the university's right to reproduce the thesis for preservation purposes only. If a graduation thesis is based on the joint creative activity of two or more persons and the co-author(s) has/have not granted, by the set deadline, the student defending his/her graduation thesis consent to reproduce and publish the graduation thesis in compliance with clauses 1.1 and 1.2 of the non-exclusive licence, the non-exclusive license shall not be valid for the period.

