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**THE ROLE OF STRESS MANAGEMENT IN THE
PRODUCTIVITY OF BUSINESS STUDENTS**

Bachelor's Thesis

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

The document length is 9770 words from the introduction to the end of conclusion.

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ABSTRACT

The world is changing quickly, and there are more potential sources of instability, pressure, and stress than ever before. Stress can have a big effect on how people feel and how productive they are, which is why managing stress is such an important part of management. University students now and in the future will be the future leaders and managers, especially in the business world.

The research problem is that the importance of stress and being able to understand and deal with it well can no longer be overstated. People have access to more information and news than ever before, most of it is upsetting and hard. Current university students are more connected to the rest of the world than any other generation of students has ever been. This makes them more likely to be affected by the bad things going on in the world. The author of this thesis sets out to gain a more comprehensive understanding of stress, time management, and the impact that these factors have on the productivity of current undergraduate students majoring in International Business Administration.

From the qualitative interviews, the author learned that students do feel stressed, at least in part because of university. Several of the respondents feel stressed because their courses and subjects are difficult. They describe their stress as feeling overwhelmed or anxious, but they also show signs that they seem to know how to cope with it as they understand the underlying health risks associated with stress.

The world is evolving rapidly, and there are more studies and facts about stress than ever before. This information should also be shared with people to make sure we all have a healthier future.

Keywords: stress, stress management, productivity, university students

INTRODUCTION

We are more likely than ever before to hear phrases like "stress," "time management," and "lack of motivation" in the modern, rapidly and constantly shifting world, where the population has only recently surpassed 8 billion people (Kight & Lysik, 2022), there are more potential sources of unrest and pressures than ever before. Such phrases can be heard more frequently than ever before through various sources of mass media, including social media, radio, television, newspapers, and everyday conversations. These patterns may undoubtedly be linked with the world-renowned events that have taken place over the previous several years, such as the COVID-19 epidemic and, more recently, soaring inflation rates owing to the conflict in Ukraine. Stress has an effect on the wellbeing of both the body and the mind. People require stress to some extent in order to function well and protect themselves, but excessive stress can overwhelm them and drive them to react in a number of ways. (World Health Organization, 2021). It is crucial for our mental and physical health to develop the abilities required to effectively manage stress. The significance of stress in relation to the attainment of goals cannot be overstated, making stress management an essential part of management.

The relevance of this research work is significant because there is a pressing need to comprehend how today's undergraduates, who will go on to become tomorrow's business leaders and workers, cope with the pressures and rigorous requirements of their academic pursuits in the midst of what is, without a doubt, the most extraordinary and unpredictably turbulent era in comparison to even the span of their own lifetimes. Based on the author's personal assessment, an increasing number of students report being stressed more than ever before, stress has unquestionably become the most commonly mentioned factor as a barrier to academic achievement. Many of the mental and physical symptoms that are prevalent among students, such as headaches, weariness, sadness, anxiety, and an inability to manage, can be related to stress or made worse by it (Dusselier *et al.*, 2005).

The author selected the topic of his thesis owing to their personal interest in how other business students deal with the issue of stress. There are many separate works that are dedicated to the concepts of stress, stress management, and productivity; however, there are not a great deal of

works that bring together all of these concepts, particularly in the context of university students. This is one of the reasons why the author's interest was further sparked in picking this subject. In addition, the author was interested in writing about this topic because of their own personal experience in attempting to maintain a healthy balance between their profession and their academic pursuits.

The research problem is that there is seemingly a lack of research and knowledge about how business students deal with stress, nor do we know how big of an influence appropriate stress management has on the level of productivity and academic success that the students achieve. The significance of stress, as well as its comprehension and effective management, cannot be understated any longer. Because of the internet and a variety of social media platforms, today's students in colleges and universities are more connected to the rest of the world than any previous generation of students has ever been. Although the words "stress," "depression," or "unmotivated" can be seen on people's Twitter or Instagram feeds on a daily basis and appear to be subjects that are widely spoken about a lot in the modern day, the level of understanding of the significance of stress management and the methods by which it can be accomplished appears to be low. The amount of information that enters people's lives today is more than it has ever been, and the majority of it is unsettling and difficult. There are an increased number of opportunities for interruptions and diversions. It is now much simpler to keep tabs on what friends, acquaintances, and enemies are up to and to keep an eye on the rises and falls in status that occur on a near-constant basis. There is an increase in the amount of societal pressure to reveal private information. Individuals' lives are seemingly taken over by technology and social networks like these, which create time constraints and social demands that put people at risk for the adverse consequences of stress on their physical and mental health (Robinson & Smith, 2022).

The aim of this work is to gain insight into the ways in which Bachelor students of International Business Administration at Tallinn University of Technology perceive the concept of stress, what potential ways of managing the stress they use, and the sheer impact that stress has on the productivity and academic outcome of the students. In order to gain the desired insight into these topics, the author of the thesis formulated three research questions, which serve as its focal point:

1. How do Taltech business students manage stress during their studies?
2. In what way does stress affect the productivity of business students?

3. What are the possible outcomes of poor stress management on students and their performance?

These research questions are structured to gain more specific and realistic responses from the students that are being researched as part of this study. In addition, they are meant to encourage students to build a comprehension of both stress itself and the significance of stress management. Interviews that are semi-structured will be used to carry out the research, and the people who will be interviewed are going to be university students attending Tallinn University of Technology. Because the author wanted to receive data from participants who had a greater potential experience of dealing with stress during their studies, he chose not to include students in their first year of university in the sample. In order to facilitate additional analysis by the author, the interviews will be recorded and afterwards transcribed into text.

In the first chapter of this thesis, the author will cover the theoretical background behind the research. The author will begin by laying the theoretical framework for the research and will then introduce the reader to the concepts of stress as well as stress management. In the second chapter, we will discuss the methodology that was utilised for the research that was carried out. The author has decided to perform qualitative research, and the second chapter will appropriately display and describe the qualitative findings. It is thought that semi-structured interviews are one of the best ways for collecting qualitative data, hence the methodological section of the thesis will be undertaken through semi-structured interviews. Because they allow the interviewer to get data directly from the interviewee while allowing the subject to respond freely to questions, semi-structured interviews are one of the most effective techniques for qualitative data collection. In the third and last chapter, we will present an empirical analysis of the findings of the research. In this chapter, the author will also examine probable problems and draw some conclusions. The author's work will be ended with a conclusion, a list of references, and appendices once the theoretical portion, the research technique, and the outcomes of the research have been presented.

1. THEORETICAL FOUNDATION

This chapter of the thesis will provide a theoretical overview regarding the subject of the study. Specifically, it will first review the existing knowledge and science behind what stress really is, and then it will provide an overview of the existing research behind stress among business students and how they cope with it. Both of these reviews will be conducted in order to provide a comprehensive understanding of the subject of the study. The purpose of this chapter is to acquaint the reader with the conceptual framework upon which the thesis and subsequent research are based, by connecting the points of view of a number of different authors, to compare those points of view, and to assist the reader in comprehending the significance of the research that was carried out.

1.1 The concept of stress

The way we behave as human beings when we feel under pressure, intimidated, overwhelmed or under pressure is what we call stress. In most cases, it takes place when we are in a circumstance that we do not believe we are able to handle or control. From a biological standpoint, the response of a living organism to a threat or any change in its environment that is detrimental is referred to as stress (Greenberg *et al.*, 2002), whereas, psychologically stress is a type of psychological pain that can be described as a sensation of mental or emotional strain and pressure. Increased levels of stress can be associated with an increased risk of both mental and physical disorders, including depression and even heart attacks.

Over the course of many years, the study of stress has continued to be an essential component of scientific activity. In the past, stress was thought to be the consequence of external insults that were beyond the control of the individuals who were suffering the stress. On the other hand, in more recent times, many have started to suggest that external conditions do not have any inherent power to cause stress, but that its influence is instead mediated by the perceptions, abilities, and knowledge of the persons in question. According to Lazarus and Folkman (1988), stress may be regarded as the outcome of an imbalance between demands and resources, as well

as the phenomenon that occurs when one's perceived capacity to cope with pressure is exceeded by the pressure itself.

1.2 Different types of stress

Throughout the years, several experts in their fields have defined or categorised stress in a variety of ways. In the article *Confusion and Controversy in the Stress Field* (1975), Dr. Hans Selye presented a model that categorises stressful experiences as either eustress or distress. The term eustress refers to stress that is seen as beneficial or constructive. The individual will emerge stronger than before as a direct result of this hardship. It is the consequence of having reached a high level of success in one's life. It might come in the shape of winning a game or race, giving birth, doing well with studies, or any number of other things. In other words, in situations where it actually improves function, stress may be referred to as eustress.

The other type of stress, that Selye (1995) defined in the same article, is distress. Contrary to eustress, which can be perceived as a positive kind of stress, distress is a type of stress that is considered to be negative stress since it increases an individual's likelihood of being unwell as it is possible for persistent stress that is not addressed via the use of coping or adaptive strategies to lead to discomfort, which in turn may lead to anxious or withdrawing behaviour (depression).

Another type of stress is acute stress, which is one of the most prevalent types of stress experienced by people. It is a psychological disorder that develops as a result of exposure to anything scary or traumatic. Walter Bradford Cannon was the first person to describe the acute stress response, also known as the “fight or flight response”, in his book *Bodily changes in pain, hunger, fear, and rage*, published in 1915. Cannon describes it as a theory that animals and individuals react to threats with a widespread discharge of the sympathetic nervous system. A significant portion of the body's reaction to acute stress consists of the physiological changes that follow. Acute stress can be both eustress or distress. Acute eustress typically manifests itself in relatively modest doses (described as pleasant and exciting stress), whereas acute distress is typically the result of excessive stress (described as the cause of mental health issues as well as physical difficulties, such as headaches and exhaustion). Acute stress symptoms often manifest themselves within minutes after the onset of the stressful stimuli or event and typically subside over a span of two to three days.

The presence of the stressor over a prolonged period of time is a key factor in the development of what is known as chronic stress, which gets its name from this fact. This is the kind of stress that gradually grinds individuals down over the course of many years. Chronic stress is harmful to not only the body but also the mind and life. It causes harm by slow and steady attrition over time. It is the type of stress that comes eg. from living in poverty, from having families that are dysfunctional, from being confined in an unpleasant marriage or a profession that you dislike. It is the tension that comes from having to deal with constant demands and expectations for a seemingly endless amount of time. Selye studied and identified chronic stress by researching it with a number of animal tests, such as exposing rodents to malnutrition and high temperatures. He reasoned that individuals subjected to extended stress might develop heart disease and high blood pressure (Szabo *et al.*, 2012).

The author of this thesis has made the decision not to discuss a number of other types of stress that have been defined. This is due to the fact that the work's primary focus is on business students, their relationship with stress, and the management of stress.

Time stress, or simply put, time pressure, will be the subject of the next and last category of the stress that will be discussed. Time stress was originally defined by Dr. Karl Albrecht in the book *Stress and the Manager* (1979). This form of stress is the subsequent impact of an individual's anxiety about time or the lack thereof, worry about the amount of things that an individual needs to perform, and fear that the individual will fail to accomplish something critical. It's possible to have feelings of being imprisoned, sad, or even despairing. This tension is prevalent in every aspect of people's life.

1.3 Managing stress as a concept

Individuals' stress levels may be brought under control by the use of many methods, skills, and procedures that make up what is known as "stress management." The first step in managing stress is to pinpoint the factors that contribute to it. Taking control of one's surroundings and the manner in which one approaches challenging situations is the key to effectively managing stress.

As established in a previous sub-chapter, Lazarus and Folkman (1984) stated that stress can be thought of as a result from an imbalance between demands and resources, occurring when pressure exceeds one's perceived ability to cope. They defined stress as a structural imbalance within the individual as a result of deficiency or shortfall in the individual's expectation. The idea that stress is not a direct response to a stressor, but rather an individual's resources and ability to cope or mediate the stress response and are manageable by an individual, was the premise on which stress management was developed and built. This allows stress to be manageable and under one's control. There are many different coping mechanisms available to people. A person's ability to handle stress may be helped eg. by several methods of time management. In order to effectively manage stress in the face of high expectations, it is necessary to understand how and when to set certain limits for oneself, and to decline some of the demands that are made by others.

Stress can be assessed on a scale from low to high. One method is to assess stressful life events using the Holmes and Rahe Stress Scale. This scale was developed by two psychiatrists, Thomas Holmes and Richard Rahe in 1967. In 1970, Rahe conducted yet another research to see whether or not the stress scale was an accurate predictor of health problems. A total of 2,500 sailors were asked to rate the frequency with which certain life events had occurred during the preceding six months. The health of the sailors was tracked throughout the following months and a positive connection between the stress scale and sickness was found, providing significant evidence to back the idea that stress is related to health problems (Rahe *et al.*, 1972).

While each person manages their stress in ways that they personally see fit, in recent times several medical clinics and professionals have begun educating and informing people about four effective stress management techniques referred to as “the 4A’s of stress management”. While there are a number of references to these techniques from the last decade, this stress management technique originates from the Mayo Clinic and American Institute of Stress, where Conway defined it in 2021.

1. Avoid the stressor: In the context, the stressor refers to anything that has the potential to bring about stressful circumstances. It is important to learn one's limitations and maintain them, steer clear of individuals who can constantly generate stress in one's life, take control of one's surroundings, steer clear of controversial issues, and evaluate one's schedule, obligations, and daily duties.

2. Alter the stressor: There are certain stressful situations that cannot be avoided, and as a result, the most effective method to deal with them is to attempt to change them from their initial positions or states. This entails the manner in which one interacts and functions in day-to-day life, namely via expressing one's expectations to others and doing so in a clear and concise manner.
3. Adapt to the stressor: It is possible to adapt in a practical manner to stressors that cannot be altered. Changing one's expectations, norms, beliefs, and behaviour can help one adjust to stressful events and recover a sense of control. Adapting to difficult situations is possible.
4. Accept the stressor: A serious illness, a national recession or natural disaster, or a worldwide pandemic are all examples of stressors that a person cannot ignore or change even if they try. Acceptance of the fact that these things have occurred is the most effective strategy to deal with the source of stress because a single person does not truly have the capacity to change the circumstances. This may be challenging at first, but in the long term, it will be less difficult than fighting against something that cannot be altered. When avoiding or changing the circumstance is not an option, accepting it might help reduce a significant amount of the associated stress.

Even though there does not appear to be much in the way of academic research that supports the 4A's of stress management, in recent years there has been an increasing number of references and articles to these strategies made by professionals such as psychologists who deal with stress in the workplace. This suggests that there is a strong and positive connection between these stress management techniques and a healthy professional life. The fact that doctors and psychologists whose primary focus is the management of stress in a professional setting are making use of and referring to this strategy provides further evidence that these strategies are successful in the modern corporate climate. Because of this, the author decided to place a strong focus on these strategies throughout his work.

1.4 Effect of stress on business

There is no such thing as a stress-free environment in the business world, particularly for entrepreneurs and managers, because owning, operating, and managing a firm comes with an enormous amount of responsibility in terms of money, people, and logistics.

The COVID-19 pandemic is still going strong, and it has altered the way businesses are conducted and managed to some extent. This is because there are many new factors that managers need to take into account, such as the stress that comes with managing people who work remotely and the level of uncertainty that comes with implementing new ways of doing things in the workplace. (Makhbul & Rawshdeh, 2021) During and after these times of instability, some companies have been able to recover and rebuild, but a number of businesses were unable to do so for a variety of possible reasons, including a lack of clients as a result of the lockdown restrictions. The author has personally experienced the effects of a pandemic at his place of employment, which is in the business world, and he has been working there for a significant amount of time.

The stressors brought on by the pandemic do not only influence individuals in their professional life; they also extend beyond that and have an effect on people's personal lives, which, in turn, may have an impact on how well people perform and cope with the pressure in their jobs or studies. In addition to this, the social implications of the lockdown measures, such as concerns over the supply of food and home items as well as social isolation, also manifest as significant sources of pressures. The forced lockdown of all services, with the exception of those considered necessary, has put a large number of people in danger of losing their jobs and exposed them to economic instability. The fact that many people have lost their principal source of income has brought about the unwanted possibility that they may be unable to afford the essential necessities of living, such as housing and food. Therefore, the unpredictability of the economic climate is an additional cause of stress, particularly in vulnerable populations. (Van Lancker, Parolin, 2020). Even after the virus's threat has passed, the increased levels of stress brought on by the pandemic and the lockdown procedures that went along with it is likely to last longer (Hagger *et al.*, 2020)

There is no denying the fact that being an entrepreneur, manager, or running any sort of business is strongly interconnected to a significant amount of stress in some form or another which cannot be taken away fully.

1.5 Effect of stress on students and productivity

Students specialising in Business Education, like students majoring in any other subject, are subjected to high levels of stress while studying. Students frequently have to deal with impending deadlines for their assignments, as well as short notifications for tests and exams and other challenges. According to Rawson, Bloomer, and Kendall (1994), the main sources of mental stress for university students are factors related to their studies, their social lives, their economic situations, and their future careers. If an individual believes that there is not enough time to do a specific work, there is a high probability that this perception will cause tension or an imbalance inside the individual. Students who are subjected to stress of this nature tend to struggle academically and make less progress toward acquiring new skills. Given the above estimate, it is of the utmost importance to point out that the degree of stress that students are under has a significant bearing on the academic performance of business students and other students in similar situations. Based on a report from the Ministry of China, over 20 percent of college students in China have experienced mental disorders owing to a number of stressors, and over half (54.4%) of college dropouts are caused by mental strains, according to a study of a sample survey based on more than 10 million college students in China (Ji, Zhang, 2011).

The presence of stress, and particularly chronic stress which is the type of stress that perseveres for a long time and thus leaves its marks even beyond the end of the individuals' studies, may have a substantial negative impact on an individual's well-being, manifesting itself in the form of mental and bodily discomforts, as well as a reduction in their capacity to do daily tasks. All of these setbacks have the potential to influence or otherwise impair the overall academic performance of students receiving their education.

2. RESEARCH METHODOLOGY

In this chapter of the author's work for the thesis, the author presents the subject of the study, explains the goal of the studies that were carried out, and discusses and justifies the research technique that was utilised. To complete the methodological section of this work, a qualitative research approach will be utilised. This approach consists of conducting online interviews with a handful of business students studying at TalTech in order to collect verified data for further analysis. The methodological discussion will be broken down into two sections: first, the planning and execution of the study, and second, the collection and analysis of the data.

2.1 Research design and sample

The objective of the author's research for this thesis is to analyse how stress affects business students, to find out how future managers and employees deal with stress in their day-to-day lives while they are learning, and to define stress and its management as separate but linked concepts.

Because the primary emphasis of the study is on business students at Tallinn University of Technology, and their knowledge and understanding of the stressors surrounding them, as well as their ability to cope with the stress that comes along with their education, the research is conducted using a qualitative research approach. This is because the author is not intending to collect numerical data, which would call for a quantitative research method, but rather data that is highly individual and unique to each person based on their experiences. Because of this, a qualitative research method is more appropriate for the study. The objective is to place an emphasis on the individual perspectives, experiences, attitudes, and observations of the university students. Therefore, when planning the interview questions, the author had to formulate them in a way that allowed the interviewee to express themselves freely, while also remaining strictly on the topic at hand.

Since the methodological section of this thesis was conducted in its entirety through the technique of qualitative research, in order to aid the readers in better comprehending why this specific research method was used for the purpose of this work, the author will begin by explaining the conceptual framework of qualitative research and once more underlining why exactly this particular research method was used.

The word "qualitative" is used to define such research methods and procedures. In contrast to the more limited information that is typically collected about a large number of cases in quantitative research, the qualitative research method, in general, has a tendency to collect a great deal of "rich" information about a relatively small number of cases. (Veal, 2006)

The goal of qualitative research is to get an understanding of the realities faced by individuals, as well as the cultures and communities in which they are embedded, to the extent that the participants themselves actually experience it. This entails doing research on individuals in the settings in which they live. The qualitative technique frequently leads to the exploratory approach, which endeavours to explain "how" and "why" a certain behaviour is operated in a specific situation.

“Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.” (Denzin & Lincoln, 1994)

There are a variety of approaches that can be used to gather qualitative data. Researchers turn to a variety of research methods in order to get a more in-depth understanding of the ways in which individuals comprehend their social norms and the ways in which they behave within the social environment. Documents, participant observations, journal entries, and open-ended questions are some of the approaches that are frequently utilised in the process of gathering qualitative data and information. Good qualitative data may be generated, for instance, through the use of semi-structured interviews that consist of open-ended questions. This is also the type of interview that is used as part of this thesis. The responder is given the opportunity to speak in their own words, and the replies are given additional depth as a result. Because of the complexity of the responses, the researcher is able to create a true sense of the person's comprehension of the specific issue. By making the interview subjects the main focus of attention throughout the

interview, individual perspectives, experiences, attitudes, and observations, help to create comfortable environments for the interviewees.

Purposive sampling is a strategy regularly utilised in qualitative research for the assessment and characterization of information-rich samples to maximise the use of limited resources (Patton, 2002). Generally this entails locating and choosing individuals or groups of people who have extensive knowledge of, or experience with, a topic of interest. For the purpose of this thesis, the author is not seeking for individuals with considerable expertise or interest; rather, the author is interested in speaking with people who have experience, or lack thereof, with stress and stress management. Bernard (2002) highlights that knowledge and experience are important, but also notes the significance of availability and desire to participate as well as the capability to express experiences and viewpoints in a manner that is articulate, expressive, and reflective.

Students enrolled in the International Business Administration programme at TalTech made up the sample that was used for the study that was carried out. The students that participated in the interview were all in their second, third, or fourth year. No interviews were conducted with first-year students for the purpose of this study since these students have less experience than other students in dealing with the stress that comes with their university education. The author did not segregate the sample by any further means, meaning interviewees could be of any gender and any age. The author did also not make it a criterion for potential interviewees to have work experience. Due to the fact that all interviewees were Bachelor students, the interviewees were between 20-26 years old, although theoretically they could have been even older or younger. As per the author's definition, the primary objective of this thesis is not to collect information from people who have a substantial understanding of or interest in the topic, but rather to collect data from people who have experience dealing with stress while they are receiving their education in International Business Administration. As a direct response to this, the interviews were carried out with the more experienced university undergraduates. The sample consists of five people that were interviewed.

2.2 Data collection and analysis methods

Interviews with a semi-structured format were chosen to be used by the author. The reason behind it is the author's personal consideration that they have proven to be the most adaptable mode of data collection when compared to other options. Because of this, the author planned a general format for the interviews that should be followed, but the fact that the interviews are only semi-structured means that the dialogue may flow more gently and organically as a result of this. It also makes it possible to exclude particular questions if the topic of discussion shifts in that direction, as well as to insert additional unplanned follow-up questions at any point throughout the course of the interview.

The author developed a set of 13 interview questions by reflecting on the theoretical framework presented in the first chapter of the thesis, in conjunction with the three research questions that the author had formulated specifically for the purpose of writing this thesis. Even though there were only three research questions, the author incorporated additional questions in the interview structure in order to help the dialogue inside the semi-structured interviews flow more naturally. This was done in order to improve the overall quality of the interviews, as well as creating a more comfortable atmosphere for the interviewees. The purpose of the additional questions was to obtain further information about the interviewees, such as the year or semester that they are now in, in relation to their studies, or to determine whether or not the interviewees also work while they are studying. This was done with the purpose of possibly detecting variances based on the study year or employment while analysing the data. The structure of the interviews and the interview questions that were used can be found in Appendix 1.

The fact that the interviews were to be recorded was a requirement that the author had to take into consideration. Even though the use of modern technology should make it rather simple to record an interview, the author still needed to choose a place that was convenient for both himself and the person who was being interviewed in order to conduct the interview. In the end, the author came to the conclusion that the meetings would be best organised through the use of Zoom, an internet calling platform. Zoom made it possible to quickly connect with the individuals being interviewed, and the author was able to record the calls they had by using the recording function that is included into Zoom. Because the participants were able to respond to all of the questions throughout the interviews from the convenience of their own homes thanks to

the video conversations, there was no additional strain or stress placed on them over the course of the interviews. The length of the interviews varied between 5-8 minutes. All interviews were conducted after the author had finished writing the theoretical framework of the thesis. Due to the convenience of using the Zoom platform, the author was able to organise all five interviews within one day, allowing more time for further analysis of the data that was collected.

After the interviews were finished, the author transcribed each of the five recorded conversations into written form. This was achieved in part through the use of a dictation tool, for which the author had to play the audio tapes out loud, and in part through the manual transcription of the audio files. Transcribing the audio files into written format allowed the author to analyse and gain a deeper understanding of what the interviewed students said and meant.

Once the audio recordings had been transcribed into a textual format first, the author started analysing the responses to the interview questions and making connections to the research questions, by using cross-case analysis. This method is used when comparing interviewees to each other, in order to gain a deeper understanding of the answers they provided. This type of analysis makes it easier to see similarities and differences across the various cases. (Cruzes *et al.*, 2015) As qualitative analysis requires, the author needed to listen to the recordings a handful of times, as well as reviewing the transcripts that had been created based on the recordings. (Wong, 2008).

Due to the small sample size, this set of interviews does not give an accurate description of how all University students manage their stress but by reanalysing the interviews and transcripts a handful of times, the author began to notice certain similarities and differences surrounding the answers of the interviewees, from which certain conclusions could be made, allowing the author to move on to the results, discussion, conclusions, and recommendations.

3. RESULTS, FINDINGS AND ANALYSIS

In the third and final chapter of the author's work, the author provides a summary of the findings that were obtained from the research that was carried out. This is done by delving more deeply into meaning and background behind the research questions, as well as deeply analysing and discussing the results and findings of the variety of answers that were obtained through the semi-structured interviews with business students.

The author conducted interviews with a total of five students, all of whom are currently enrolled at TalTech and working toward earning their bachelor's degree in International Business Administration.

3.1 Stress comprehension amongst students

One of the initial questions that the author asked the people being interviewed was for the students to give a description or definition of being stressed by using their own words. The significance of this question was to determine whether or not the responses change for different people based on the personal experiences and points of view that they possess. Although the majority of responses were unique and highly individual, additional analysis can reveal a number of connections between them. Based on the responses of the five interviewees, the author was able to make the connection that this sample of students experience stress in the form of anxiety, pressure and overwhelming emotions, which in turn leads to a lack of motivation and procrastination, as explained by three of the interviewees:

“For me it is a very similar reaction to having anxiety. I feel pressure in my chest and I become very easily numb, so I don't do anything if I'm super stressed.” – Interview 5

“I would describe this feeling as something that really annoys you and doesn't allow you to do many things in the right way. So because you cannot concentrate, you can become angry in a

really short period and I wouldn't say that it's a very comfortable and very nice feeling in my life." – Interview 2

"Well, stress is a constant feeling of being worried, of overthinking and feeling like under pressure." – Interview 1

The author posed a further question to the students regarding their awareness of the potential health hazards that stress can cause in order to gain an even better understanding of the level of awareness and comprehension that the interviewees have regarding the topic of stress and methods for managing stress. The majority of students that were interviewed were aware that stress can contribute to a variety of potential health problems, including heart diseases and high blood pressure. While the sample that the author was working with was small, this provides positive signs of the fact that the current generation of university students are aware of the significance of finding healthy ways to cope with the pressures they face in order to reduce the likelihood that they would experience difficulties with their physical wellbeing in the foreseeable future. One of the interviewees also made the connection between stress and a recent flu that they had had:

"Two weeks ago I had a really heavy flu and I would say it's because of stress. So that's why I would prefer to be more informed about it or know how to avoid it or predict." – Interview 2

3.2 Connection between university studies and stress

After first establishing how some of the students in the business administration programme perceive the concept and meaning of stress, the author then moved on to find out what potential causes of stress the students might be facing. To do this, a series of questions were asked, concerning the stress that the students experience as a result of their academic tasks. The first question related to the assumption that studying might be a cause of excessive pressure and stress for the students that the author asked the people that were interviewed, was simply whether or not they feel stressed due to their studies, regardless of whether it is on a frequent basis or more occasionally. In the event that the preceding question was answered in the affirmative, the next question asked was a follow-up inquiry into the topic. The second question was intended to get

responses from the interviewees on the factors that they identify as stressors or causes of stress in their own academic lives. Based on the answers to these questions, the author was able to draw a connection between the overwhelming feeling when being stressed, as described in the preceding sub-chapter, to feeling stressed due to being overwhelmed. In the instance of the interview responses, the feeling of being overwhelmed came across when respondents explained that they often feel stress due to the difficulty of certain tasks and subjects.

“I would say on an occasional basis yes, because studies are hard and they take a lot of my free time. Sometimes I don't sleep a lot because I am late on some assignments, so it's a lot of stress, yes.” – Interview 1

“During the three years it has been the subjects that I have not been good at, and ones that have been hard to pass.” – Interview 5

“For sure because it's really important for me to get great marks and of course to get them, you need to study a lot and when you have a job and many things to do, you become stressed.” – Interview 2

In addition, in order to study the possible ways that students manage and cope with the stress that they experience, the author asked the respondents directly about the strategies that they as university students use to manage and the stress that they face. For this question, the interviewees appeared to show great levels of self-control and understanding of the importance of time management. Based on the author's assessment, in an effort to avoid excess stress, the general consensus appeared to be that the interviewees are willing to complete their tasks and assignments in due time, and plan their time and schedules accordingly.

“Be well prepared. I think when you are not well prepared you are more likely to become stressed but when you have everything under control you are more likely not to feel stressed.” – Interview 5

“Well, I try to plan my time. I have a planner, where I schedule my studying sessions.” – Interview 1

The author also asked the interviewed students if they had heard of the stress management techniques of “4A’s of stress management” (Conway, 2021), which is a stress management technique that is being promoted by a number of healthcare professionals in recent times when it comes to managing stress in professional life. While none of the interviewees had previous knowledge of this method of stress management, two of the interviewees did subconsciously express that they utilise the method of avoiding the stressor to some extent, by distracting themselves from the stressor with other activities to take their mind off the root of the problem for some time, with interviewee 2, a second year student of International Business Administration, providing several valid examples of different ways to avoid the stressor.

“I’m trying to finish all my tasks before the deadline and spend more time with my friends. And also I visit the gym.” – Interview 4

“I just try to walk more because fresh air makes me feel calm and so. If I also get a cup of coffee, everything will be perfect. But actually I prefer reading or watching movies or doing something that is not completely related with studying. So just to do something relaxing, maybe cooking, it's also a very, I would say, nice idea [way] to run away from stress. Many, many choices.” – Interview 2

To understand what steps the interviewed sample of business students do to prevent becoming stressed out due to their studies, the author addressed another key question relating to the topic: what happens if it is already too late to escape the source of the stress? After they have already begun to feel the effects of stress, how do the interviewed business students deal with it?

In spite of the fact that these two questions are very similar in nature to one another, the author was able to identify a minute distinction in the responses. Despite the fact that the interviewed students had not been made aware of Conway's (2021) four strategies of stress management in the past, the responses that they provided to the questions show that these techniques are still being used and that they are also effective for these business students, which left the author positively surprised over the findings:

Interviewee number 4 explained that they can often get stressed for example before having an important presentation. They then went on to explain that they try to make the most of it and be

prepared to overcome the stress that the intimidating task is causing. As per Conway's definitions, this would be altering the stressor:

"I'm trying to prepare for it, to make the presentation to my close friends, maybe I'm trying to start my presentation – to be the first who presents, because it's really stressful to wait."

Respondent number 5 said that confronting stressful situations head-on is the most helpful method for them to deal with the effects of stress. Under Conway's techniques this would be considered part of "accept the stressor":

"Try to get things done. Simply just finishing all the projects and trying to think that I just have to do it."

3.3 The impact of stress on productivity

After first gaining an understanding of how some students perceive the concept of stress and then conducting research to determine the level of impact that university studies have on business students, the author desired to acquire a deeper comprehension of the role that stress management has on the level of productivity exhibited by the interviewed students. Based on the assumption that the students that are studying International Business Administration at TalTech are interested in working in administrative positions, in the financial industry, within marketing, or even as entrepreneurs, this is of utmost importance. Productivity is a requirement of any job, but it is especially essential in the jobs that have been described above.

When asked about the influence that stress has on the quality of output and the productivity of the interviewees, despite the fact that their responses tended to be rather brief and lacking in descriptive detail, the respondents mostly agreed that when they feel stress, they notice an impact on their productivity. The author believes that the fact that many of the respondents had previously shown indications and intentions of good time management brings a good natural balance to the student's productivity. Significant levels of stress which can lead to a notable lack of motivation and productivity, is also combated with adequate time management skills and methods, which can help the student to achieve their goals.

“I wouldn’t say that it has a huge impact, but for sure because of a lot of stress, my health conditions become worse and as a result sometimes I have headaches, and of course it’s disturbing me and I cannot work really well in this condition.” – Interview 2

“Yes, they [stressors] impact [productivity] a lot.” – Interview 3

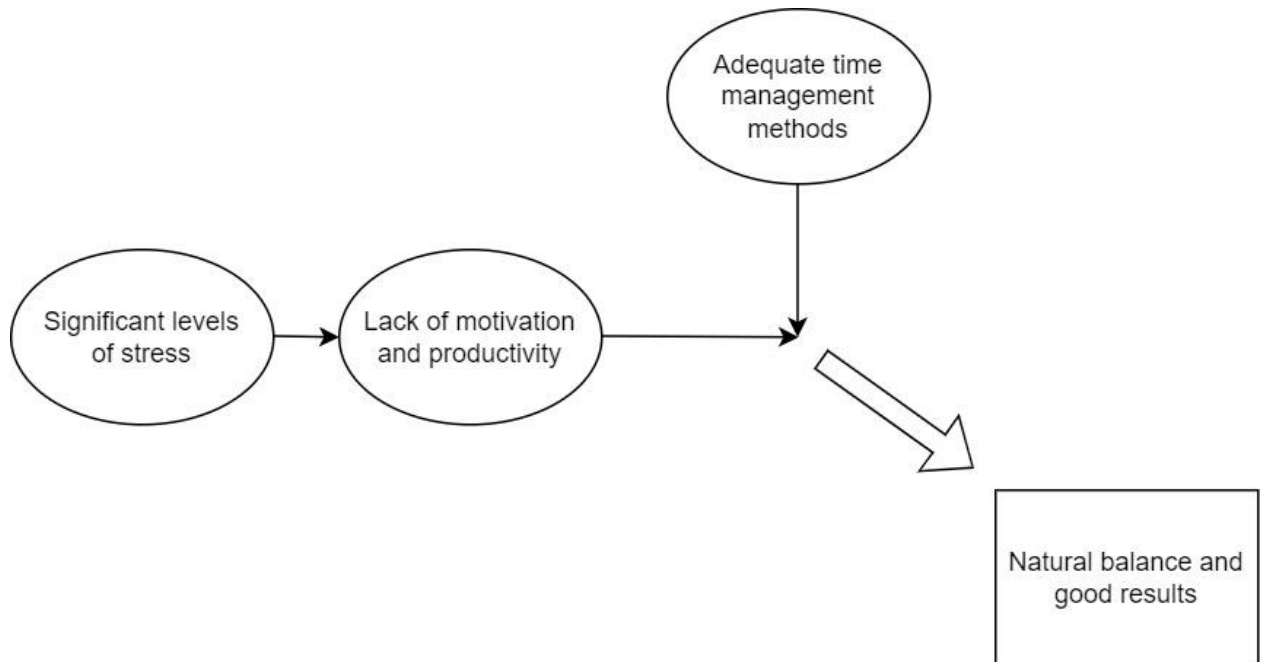


Figure 1. Appropriate time management skills and approaches can help students to increase their productivity.

Source: Created by the author

3.4 Discussion and recommendations

After conducting an analysis of the many aspects and the questions that comprised the framework of the interview, the author was able to identify a number of recurring themes in the responses provided by the respondents. Even though the small sample of students that the author interviewed did not seem to have much of an awareness about the science underlying stress, it was abundantly clear to the author that the business students who were questioned were aware of the presence of stress and acknowledged having to deal with it on a daily basis. It was not expected by the author that the people being interviewed would be knowledgeable and aware of scientific concepts or more specific sorts of stress, such as eustress and distress.

As one of the fundamental research questions used for this study was to better comprehend and to find out how TalTech business students manage with the extreme mental pressure and stress during their studies, it was of the utmost importance for the author to assess this question as part of the interviews that were conducted with the students.

The interviewed students responded that it is the difficulty and lack of understanding of certain subjects and topics that is the main source of stress during their studies. This made the author draw a connection between the student's descriptions of feeling stressed, which they mostly explained as a feeling of overwhelmedness and anxiety, and the fact that the main source of their stress comes from that feeling. Feeling stressed can cause an individual to feel overwhelmed, and likewise, feeling overwhelmed by something may be the cause of stress for the individual.

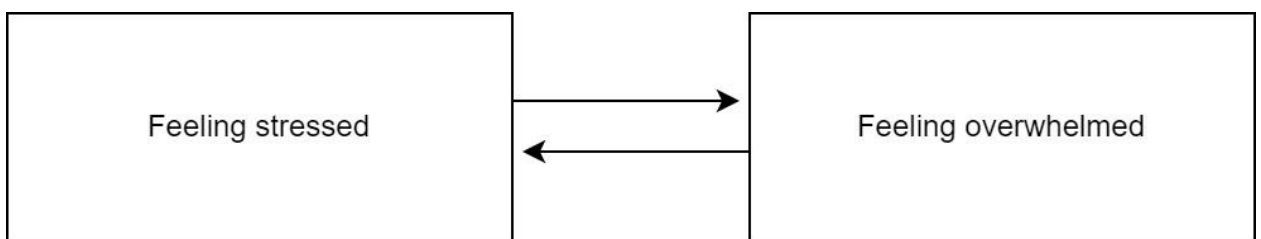


Figure 2. Feeling overwhelmed may generate stress, and vice versa.
Source: Created by the author

After that, the author continued the interviews by asking the respondents about the different ways of stress management that they employ as a way to cope with the pressure and stress that is caused by their studies. To the author's positive surprise, the students appeared to be using similar techniques and mechanisms as described by Conway (2021) regarding the 4A's of stress management. While each respondent had unique ways of managing their levels of stress, the author was able to draw a connection between the student's answers and the definitions of each of the four "A's", which not only proved the science behind Conway's methods to be accurate, but also provided a real-life example of the techniques being in use.

The second fundamental reason behind the work of the author, was to understand in what way stress affects the productivity of business students, and in what way it can impact the business world as a whole. The answers that the interviewees provided to this question were short, but

still informative. The answers were a resounding yes – the students that were interviewed do feel a significant drop in their motivation and productivity when they feel stressed. Due to the fact that the students had, in previous questions, answered that they feel like strict and consistent time management is a way of reducing the levels of stress, the author was able to come to the conclusion that a good way for these students to combat stress and the lack of productivity caused by it, is with the use of good time management skills. This way the interviewed students were able to mitigate the issue or the risk of low productivity. This is not just relevant for students of business, but the same principles may also be applied to other fields of study or even completely different contexts, such as work or even household chores.

While the author's interviews and subsequent analysis of results gives some indication of the impact that stress management has on the student's productivity, it is undeniably a very small sample size and therefore all the findings cannot be taken for granted to be accurate for a larger sample size of business students, or even University students in general.

The importance of stress management must not be understated. In the modern, constantly evolving and changing world, where the population has recently reached over 8 billion people (Kight & Lysik, 2022), there are more possibilities for unrest and stressors than ever before. Universities such as Tallinn University of Technology, which was used as the subject of study in this research work, offer a wide range of courses, but none of them are related to stress management (TalTech, 2022). The importance of educating and advising the current students, i.e. future workers regarding stress management must not be understated due to the fact that stress is a potential cause of serious health issues. Despite the fact that stress management may be considered a very specialised field and that it might not be feasible to teach it as a stand-alone course at a university, it might be conceivable to make it a more central focus of certain other courses and fields of study.

Even though workplaces cannot host classes on the same level as those found in universities, businesses might nonetheless benefit from implementing concepts and nuances of a similar kind. The author is of the opinion that sufficient improvements in people's mental wellbeing could be seen if workplaces were to place a greater emphasis on the significance of stress and time management, for instance with the assistance of some brief courses, workshops, or team building exercises and events related to stress management.

The very last question of each interview that the author conducted was formulated with consideration given to the recommendations. The author posed a question to the respondents, inquiring as to what piece of advice they would give to future business leaders, aspiring business owners, and students of business related fields, relevant to the subject of how these individuals could more effectively cope with the high levels of stress they experience in their studies, jobs, and personal lives.

The short pieces of advice that were provided by the students who were questioned varied from a range of diverse techniques and tips, once again putting a focus on the critical nature of effective time management. One of the respondents even brought up the option of seeking professional assistance in the event that the pressure and high levels of stress reach a point where they are intolerable and cause concern for the health of the person who is experiencing the stress.

It is important that the significance of efficient time management is not being overlooked. According to the data that the author obtained from his research, this appears to be a highly effective method of controlling and preventing stress even before the feeling of being stressed occurs.

Prior to the final interview question, the author had also asked the question of whether or not the respondents believe that universities and workplaces could, or should, do more to acknowledge the existence of stress in the studying environment and workplace respectively, as well as the importance of knowing how to manage stress. While all respondents were united in agreeing that the universities and workplaces could do more to bring awareness to the subject of stress, one interviewee also provided a more detailed answer that many young people have a wish to work at the same time as they are receiving their education. This is something that schools and universities could take into greater account, showing their support for working students for example with collaboration with potential employers for students and to promote the positive aspects of gaining working experience while also studying.

The author believes that his research provides sufficient foundations to understand that university students have an understanding of what the idea of being stressed is, but at the same time he believes that there is room for even further improvement and education due to the serious health concern that stress possesses in the modern world.

CONCLUSION

The author of this work set out to accomplish the goal of gaining a more comprehensive understanding of stress, time management, and the impact that these factors have on the productivity of current undergraduate students majoring in International Business Administration. This is because these are the individuals who, by obtaining this education, will be qualified to take on the roles of future leaders and managers.

Five students who are currently enrolled at TalTech and working toward a bachelor's degree in International Business Administration were interviewed by the author. The research, which was carried out by using interviews that were semi-structured, gave a useful insight into the manner in which business students experience stress. Significant stress-related subjects and questions offered apparent variances from one person to the next, but other stress-related topics and questions revealed certain commonalities among the participants.

Each of the five interviewed students were asked about their experiences with stress and admitted that they do in fact suffer from it, albeit to varying degrees and at different intervals. Additionally, every interviewee was given the opportunity to provide a succinct explanation of how they understand stress and how it makes them feel. All of the people who were interviewed stated that they are aware, at the very least to some level, of the potential health concerns that are associated with stress.

The author was able to get an understanding from the interviewees that students do, in fact, suffer stress, and that this stress is, at least in part, generated by the students' academic obligations. Some of the interviewees characterised it as a sensation of being overwhelmed or anxious. It became clear that the respondents have feelings of being overwhelmed when they mentioned that they frequently feel stressed as a result of the complexity of various courses and subjects.

On the bright side, all of the responders did have strategies to deal with their stress, but each of these solutions was highly unique. In spite of this reality, the author was able to make a

connection between the student's strategies for managing their levels of stress and the techniques for coping with stress known as the 4A's of stress management, despite the fact that the students had no prior awareness of these methods. The author also concluded that a useful strategy for students to battle stress and the loss of productivity and motivation it causes is with solid time management skills.

Even though the author's interviews and subsequent analysis of results give some indication of the impact that stress management has on the student's productivity, it is undeniably a very small sample size, and as a result, all of the findings cannot be taken as a given to be accurate for a larger sample size of business students, or even University students in general. This is because the sample size is so small. For this reason the author believes that the subject of his thesis still has a lot of aspects to be researched further. Different fields of studies come with their own unique and individual challenges, which were not taken into consideration in this work as the author focused solely on the Bachelor students of International Business Administration at TalTech. Further research could be conducted in a wider range of universities and a larger sample of students. The author also believes that if differences of experiencing stress due to studies were compared between bachelor and master students, or IT and Business students for example, there is potential for further findings to be made.

Stress management is crucial. In today's rapidly changing world, instability and pressures are more likely than ever due to several factors, including the global pandemic of COVID-19 over the past years and the fears and uncertainties that the war in Ukraine brings. The author is of the opinion that there is always room for improvement among business students' understanding of what stress is, how to manage it, and the risks that come along with excessive amounts of stress; however, it is clear that there is a general, basic understanding among business students of these topics. Educational institutes, such as universities, as well as workplaces can do more to offer students and workers with the appropriate information, acknowledgment, and care addressing stress in their respective environments. The author believes that this is possible to achieve for example with the help of individual courses, lessons or workshops to improve the awareness of stress management.

The current and upcoming generations of university students will be the future leaders and managers, especially in the business field. The world is evolving rapidly and there is more

research and information available about stress than ever before. Therefore, this information should also be passed forward to people to ensure a healthier future for us all.

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APPENDICES

Appendix 1. Interview questions

1. Which study programme are you part of at Tallinn University of Technology?
2. In which year or semester of your studies are you currently?
3. Do you also have a regular job along with your studies?
4. In relatively broad terms, how would you describe or define the feeling of being stressed?
5. Do you feel that your studies cause you excessive amounts of stress, whether it is on a frequent or occasional basis?
6. [If question 5 is yes] What in particular about your studies do you feel is causing you to be stressed?
7. What measures or actions do you take to avoid becoming stressed over your studies?
8. What measures or actions do you take to cope with it when you already feel stressed?
9. Do you feel like increased levels of stress have a significant impact on your productivity?
10. [If question 3 is yes] You mentioned that you also have a regular job. How does stress affect your professional life?
11. Are you aware of the possible health risks associated with excessive levels of stress?
12. I will present you with a few closed questions now. Please respond with either yes or no:
 - a. Have you heard of the stress management technique known as “the 4 A’s of stress management”?
 - b. Have you heard of the terms “eustress” and “distress”?
 - c. [If question 12b is yes] Do you know the difference between eustress and distress?
 - d. Do you know that high levels of stress can lead to heart diseases and high blood pressure?
 - e. Do you feel like universities and workplaces could do more to acknowledge the existence of stress and the importance of stress management?

13. In a few words, what advice would you give to future managers, entrepreneurs and business students regarding coping with stress?

Appendix 2. Transcripts of semi-structured interviews

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