Milcah Kipkoech and Sami Shrestha

STRESS AND WAYS OF COPING AMONG INTERNATIONAL STUDENTS IN CENTRIA UNIVERSITY OF APPLIED SCIENCES

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ABSTRACT

The thesis is focused on stress and ways of coping among international students studying in Centria University of Applied Sciences. The purpose of the thesis was to identify sources of stress and ways of coping among international students in Centria UAS. The aim of the thesis was to come up with recommendations based on our research findings and results that may help other international students to cope with stress.

Quantitative research methodology was used in this thesis. Data was collected only from international students who were in their second year of studies and above excluding the group of first year. The research was done by sending the questionnaire through email to 22 groups of international students which contained 585 members among which 58 responded, statistical analysis was done, and results presented in percentages.

According to the results, 74% indicated that they had experienced some stress during their studies in Centria UAS. Challenges related to studies, finances, relationships and health were the causes of stress among international students of Centria UAS. Within these challenges, too many assignments, difficulties in finding work, meeting new people and lack of physical exercises constituted the most responses. Over 60% of the respondents selected talking with the family members as a way of coping with stress.

Key words
Coping, higher education in Finland, international studies, stress, university of applied sciences
LIST OF ABBREVIATIONS

CALD: Culturally and linguistically diverse students
CBT: Cognitive behavioral theory
EU: The European Union
HEI: Higher Education Institutions
ILS: Index of life stress
Migri: Finnish Immigration Service
REBT: Rational emotive behavioral theory
UAS: University of applied sciences
USA: The United States of America
1 INTRODUCTION

Globally, the number of students moving out from their home country for better education has been increasing. Most commonly they leave their native country in search for better opportunities and high quality of education. This has been favored by travel ease, change in political set up, cultural needs and economic needs. (Trower & Lehmann 2017, 275-289).

According to statistics Finland on Education statistics, there were 31,900 degrees awarded in 2016. Almost 50% of those awarded were women and 7% were foreign students. Foreign students constituted 10% and 23% of all the degrees awarded in higher degrees and doctorate level respectively. Centria University of Applied Sciences is a multidisciplinary, dynamic and international advanced education organization which has been offering multicultural environment for studies since 1992, with approximately 2900 students in 5 fields and thirteen-degree programs. The university offers degree studies in the fields of Social Services, Business and Administration; Technology, Communications and Transport; Social services, Health and sports; Culture; Humanities and Education. More than 10% of degree seeking students are foreigners from more than 40 different nationalities. Additionally, hundreds of them are exchange students everywhere throughout the world. The programs are taught in English and Finnish. (Official statistics of Finland 2016).

Moving to a foreign country for studies could be exciting as well as a stressful life experience for students. For some, it may be exciting to be in a new country while for some it might have been their first time to board a plane, or the first time to travel abroad or even the first time to be away from family and friends. There are various factors that may affect the international students’ experience during the time of study for example language differences or adjusting to the new environment. Evidently, there have been studies on stress among international students. Therefore, the authors were inspired to research stress factors that affect negatively on students’ experiences during their study in a foreign country. (Akanwa 2015). In the case of Finland, there has been some Bachelor theses done in Universities of Applied Sciences about the topic (Essel & Owusu 2017). However, the authors would like to provide a more profound view of international students and their experiences, specifically in Centria UAS.

The purpose of this thesis was to identify sources of stress and ways of coping among international students in Centria UAS. The goal of this thesis was to come up with recommendations that may help international students to cope with stress.
2 THEORETICAL FRAMEWORK

According to the dictionary of psychologists, stress is a natural response to a stimulant. In stressful situations, an individual may cognitively respond to stress by trying to control the situation. Consequently, it may lead to exhaustion or disappointment. Exhaustion can also occur when a person is not able to fulfill his/her wishes either due to lack of capacity or denial from the environment which may be expressed as anger either consciously or unconsciously. Unexpressed anger may elicit symptoms like feeling of helplessness, lack of sleep, impaired appetite, being irritable and increased tiredness. These symptoms represent attainment of control of situation through the psychological point of view according to the Freud Ergo theory that all wishes are granted. (Halbesleben 2008, 2-4).

Stress can also be defined from different other disciplines, for example biologists mainly focused on testing the body's defense system in relation to environmental sources of stress. Meanwhile, psychologists have focused on a person's ability to respond to environmental demands and the relationship between expected responsibilities with the environment or response to intense experiences in one's life. Stress among university students has been recognized by researchers and teachers due to the demanding and challenging nature of university studies as a result of change in environment. Some of the sources of stress could be self-inflicted by students themselves based on their own expectations and demands during study life. (Hamaideh 2009, 66-80).

Coping with stress and stress management may be achieved through cognitive coping methods, physical activities, eating healthy, having a strong social support system or seeking professional help in order to improve functional capacity. It can be achieved by reducing unpleasant effects of stressors which could be expressed as anger, anxiety, being tensed and distressed. Most students cope with stressful situations through psychological and emotional methods. (Kellerman 2009, 240-241).

In this chapter of the thesis, the authors would like to provide general information on international students’ situation on visa, cultural background and the alike which may potentially become stress factors. Moreover, ways of coping with stress which have been mentioned in previous studies are also included in this chapter.
2.1 International studies and factors affecting international studies

International studies involve movement of students from their home country to a foreign country mostly after completing high school or college. International students are individuals studying in foreign country other than their own. There is a growing population of international students worldwide accounting for approximately 20.6 million students in 2011. This group of students contributes politically, socially and economically to the country they choose to undertake their studies. The desire to become an international student caused by economic, social and safety issues may be attributed to factors that push one away from their country. It could also be the factors that attract them to the country of choice to undertake their international studies. For instance, the knowledge about the university, cost of living, environmental and social connection in the new country. In addition, most students are lured by the benefits that come with international studies for example better education, prestige, lifestyle change, the prospects of finding employment and peace in the new country. (Wintre, Kandasamy, Chavoshi & Wright 2015, 255-264).

The decision to study abroad is impacted by different individual and logical assets, for example, financial status, accessibility of data about abroad studies, history of travel abroad, language capabilities, home and school settings. These elements can be grouped out under four general classifications. Human capital which involves learning or aptitudes that could be favorably expanded by studies abroad. Financial capital which involves financial reserves the student is accessible to for studies abroad. Social capital which involves data or systems that expands one's capacity to access studies abroad. The student state of mind and qualities that add to expanded social status and social refinement. (Twombly, Salisbury, Tumanut & Klute 2012).

Globalization forms a major part of most universities’ goals. Most universities have adopted study abroad programs through policy and aims at encouraging and supporting their students to cover part of their studies abroad. It has been shown that students who take time to study abroad had better performance and graduation rates compared to their counterparts who did not take part in any study abroad programs. It was also shown that most students who studied abroad had a better perception of their university and therefore had higher retention rates and reduced dropouts. In Finland for example, international students may be granted one-year extended permission for studies after completing studies after fulfilling all visa requirements. This gives time for international students to find work after graduation. (Mazzoli & Campbell 2012; Migri 2018; Maggio 2017, 1-16).
Gender and racial origin are important factors for example investment in women in studies abroad has been achieved reliably as twice that of men and this measurement has not changed over the period. According to research done in the United states of America (USA), women constituted 65% of all international undergraduate studies. Between 2009–2010 the rate had dropped to 63.5% throughout the decade, at that point, men's support in favor of studies abroad has expanded from 35% to 36.5%. Racial and Ethnic minorities is also an important factor and is reflected in relation to decision to study abroad for example 78.7% of students opting to study abroad were white, while 21.3% of all undergraduate studies who considered abroad were from racial or ethnic minorities. The students mainly from Asian American/Pacific Islander origin were 7.9% while Hispanic/Latino origin were 6.4%, African American origin were 4.7%, multiracial origins were 1.9% and Local American/Alaskan local undergraduate studies 0.5%. (Guthrie, Hu, Jones & Osteen 2013).

In addition, awareness and encouragement was also one of the factors limiting students from taking up places to study abroad. Most universities have programs in place to give information about the opportunity to study abroad, however, some students may not heed to this due to lack of approval and encouragement from their parents. A research done in the USA showed that African American students who would have wanted to go back to their native countries to study abroad, received negative feedback from their parents who believed had more experience in the location the students were choosing. (Brux & Fry 2009, 508-527).

Research has shown that financial difficulty is one of the factors limiting students from taking up opportunities to study abroad. This is related to the cost of studies abroad in terms of living costs and money lost when the student is abroad especially for students who are already working during their studies. For some it is staying behind to keep their job contracts which might be lost if they were to travel abroad. (Brux & Fry 2009, 508-527).

2.2 Higher education in Finland

Finnish education system has undergone progressive changes since the pre-independence age in the 18th century when the church was responsible for education and mainly provided education through mobile
schools to a curriculum-based training and subsequent changes in the 20th century. There has also been a change in relation to language of instructions in schools from Swedish to Finnish and governance through establishment of an oversight body by ministry of education to provide inspection, monitoring and general governance of the school system. Now, Finland is among the top countries in Europe in terms of literacy and science mostly because of universal access to primary education for all, highly knowledgeable and skilled teachers, independence of schools and general positive attitude towards education. The focus is given to supporting students towards learning, health promotion in schools and efficient library services. Finnish education system is flexible to meet the demands and capabilities of each student hence ensuring that everyone has access to education. (Halme, Lindy & Piirainen 2014).

There are many Universities and Universities of applied sciences that offer English-taught degree programme. For example, Centria UAS provides Nursing, Business Management and more study programme in English. In order to apply, international students must check the eligibility criteria on studyinfo.fi or the school’s website where they would like to apply to. In some cases, students may be required to take part in an entrance exam. (Studyinfo 2019).

Nursing studies worldwide have undergone many changes over the years, with many countries adopting WHO global standards for education of nurses and midwives which sets guidelines on how nursing training should be conducted to ensure and assure quality of training among all the graduate nurses irrespective of where they study in the world. The aim of the global standards was to ensure that training institutions for Nurses prepare nurses who can apply evidence-based care in practice, promote critical thinking, professional development and leadership, cultural competence and ability to meet their population needs and resource management while at the same time promoting safety in patient care. There is an estimated 35 million nurses and midwives globally, making it a substantial workforce in healthcare provision sector. The role of nurses is to provide preventative care against diseases, health promotion, care of the sick, disabled and dying individuals. In addition, nurses act as advocates of the patient, promoting safe environment, participating in review of health policy, research work, patient management and health systems management including education. Midwives are responsible for preventative and maternal health promotion in order to safeguard safe pregnancy and delivery of children. (WHO 2009).
2.3 Visa requirements to Finland

Except for students who are citizens of EU, Iceland, Norway, Liechtenstein and Switzerland, the rest of the students from other parts of the world require a residence permit to be able to study in Finland. Acquisition of this requires that the student meet certain requirements including showing evidence of acceptance from a learning institution in Finland which comes after the student has passed entrance exams that are organized in selected locations in the world. This could be a source of stress for the student because of the preparation process for the exams, having to travel to different location for the entrance exam and the anxiety that comes with not knowing whether the results will be a pass or fail. In addition, health insurance to cover medical expenses must be fulfilled and it entails selecting an acceptable insurance company to take the insurance which could be a source of stress for students who have no prior knowledge about this. Moreover, evidence of payment of tuition fees or scholarship certificate, if the fees are paid by a sponsor and evidence of availability of funds to support the student for at least one year of studies must be fulfilled; this may be a major challenge for most students who are not able to raise these amounts. (Migri 2018).

It is therefore evident that visa restrictions have an impact on how students choose their location for international studies. There has been emergence of online and virtual studies and increase in the number of other academic providers for higher education. However, many students all over the world still perceive the USA as a destination of choice for their higher education. Students however are progressively evolving and conflicting government controls with respect to visas. Students from countries that are still developing and particularly those from Islamic nations reported being stigmatized by US authorities. Teachers in these institutions expressed concerns that a critical number of international students were denied visas or were compelled to wait for so long that they change their mind about studying in the USA. Introduction of tracking system for international students has further added to these challenges. (Baker & Wiseman 2008, 315-347).
2.4 Language as a challenge

Trouble with language seems, by all accounts, to be the most difficult part for many international students. Initiation of communication may be difficult resulting to distress. On the other hand, local students’ familiarity with the language made co-operation smoother with most of the individuals and the capability to connect with people without challenges. Language weakness provoked more emotions related to change leading to stress among international students hence being more withdrawn and nervous in the academic and internship settings. Familiarity with the language would enable the international students to achieve the most from the university by actively participating and taking an interest in conversations. International students go through numerous difficulties related to studying in another nation especially if they study in a new environment and in a completely different language. Students analyzed that the learning process was lengthy and tiresome in comparison to the students on their home country. International students also figured out that the pressure was also on communication affecting daily activities. Moreover, students distinguished the importance to discover strong chances to talk and progress in new language. (Chan, Bhattacharya, Nagami & Walker 2015).

International student’s identity in the institution may have an impact on how the students view their institution. Personality is molded through connection with others and reaction from others. To some extent, personality salience depends to a great extent on environmental setting. Positive personality salience is identified with the degree that students see that their beliefs, history and culture being appreciated. Accordingly, students in inferior positions encounter authority uniquely in contrast with students in superior positions in the institution. Thus, a person's position and power inside the association and his or her status as "insider" or "outsider" emphatically impact their perceptions and consequently impacting on how they experience and view the institution. Student’s enrollment and participation in social and cultural activities in the institution gives them a sense of belonging and positive impact on how they view the institution. In many countries, learning and teaching environments have changed to accommodate students from diverse cultural backgrounds. The teachers must be aware of this fact and prepare accordingly in order to become culturally competent thus perform their duties as required. (Chan et al. 2015; Guthrie et al. 2013).
2.5 Challenges related to studies

College attending students may be more vulnerable to stress arising from the competition with peers for grades, images, and friends. It may even be worse for students joining a new environment because they would like to be accepted by their peers. This may deter the student from making personal decisions based on own judgment but instead, follow the decisions of their peers for the sake of fitting in the chosen group. Therefore, the consequences could be detrimental or stressful for the student. With the advent of social media, students may continuously seek approval from peers and may end up losing focus on their studies. Also, students may learn harmful behaviors, for example, alcohol abuse, smoking, drug abuse or neglect of the main goal of studies. In the same study, the results showed that 45% of the respondents found it hard to express themselves and 35% felt like they had too much pressure while 65% felt like nobody cared about them. (Pandey & Pandey 2014, 21-24).

School life is loaded with worries that will undoubtedly influence rest and necessary sleep, which may have negative impact on student’s well-being and performance in the school. Stress related to sleep may cause the student to be late for the classes and increase the student’s absenteeism in school. (Sadigh, Himmanen & Scepansky 2014, 397-406).

Besides the academic tension, the student can be stressed due to the unavailability of the personal computer and lack of internet access. The increased influence of usage of electronic devices has enhanced the learning skills of students inside or outside of the school. However, one may not be economically stable to have such supplies, which causes stress. (Yikealo, Tareke & Karvinen 2018). Further, the higher use of computers and the internet for non-academic reasons like fun and socializing drags the student away from the ambition thus provoking stress. (Weinstein & Lejoyeux 2010). More than that, the workload of too many assignments from the university can be burdensome. The amount of consumption of time and effort put on the assignment exhausts the student hence causes stress. (Ahmad & Lama 2012).

The feeling of newness begins once the student steps on the foreign land and the climate comes as a surprise. The process of adjustment and modification becomes crucial in order to sustain in the new environment. Adaptation to the new weather and climate requires basic prior information about the new place and a fully prepared mindset. Living in autonomy is a quality student gain through the survival and adaptation in an unfamiliar environment. Entering and staying abroad means one has already started
the process while coping with alien weather and accommodation all come thereafter. Uprooting the old and evolving in the new climate is tricky and tough which aggravates stress. Because of entering a foreign land, international students are detached from their socially and emotionally loved ones. They struggle to fill up the emptiness of those loved ones by finding someone they can depend on considering guidance and help. Additionally, the sorrow of losing or leaving someone behind may disturb the student emotionally and obstruct the path for goal achievement. Insecurity and false assumptions about not being welcomed or preferred by people bring out the difficulty in getting along with other individuals. Any reasons that disrupts or weakens the contact with family induces stress according to former research. (Girgin 2009, 811-817).

2.6 Student demographics

According to the statistics conducted on foreign degree students in Finnish higher education institutions in 2017, the highest group of international students are from Russia, Vietnam, China, and Nepal. Many of them have chosen to study Business Administration and law, and engineering. The choice of study path is different from country to country. Chinese and Indian tend to choose Universities while Russian, Vietnamese and Nepalese go for UASs. On one hand, the number of students coming from African and European countries has dropped. On the other hand, the number of Asian students has increased dramatically over time. (Finnish National Agency for Education 2018).

According to a research conducted in Romania international students studying medicine, it was found out that female students experienced more stress compared to their male counterparts. It was found out that level of stress among students from non-European origins affected their well-being which could be associated with difference in risk factors for example feeling of homesickness, feeling lonely because of missing family and friends, limited family and social support, difficulties associated with adjusting to new environment and academic difficulties. Moreover, female students used denial as a coping mechanism while their male counterparts used self-blame. It was also demonstrated that students who were religious/spiritual or atheistic experienced almost similar levels of stress even though some research cites religion as a protective factor from stress. It was also demonstrated that most religious students worked in harmony with other personnel, had good ability to cope with human suffering and had work-life balance. It was also shown that levels of stress tend to reduce as the students progressed in studies.
and could be associated with improved coping mechanisms, increased tolerance and increased experience. Reduction of stress strategy in the university included review of the grading system for pass/fail which reduced stress related to academic performance. Organization of social events, use of technology based cognitive therapy, improving emotional intelligence and improvement of mental health literacy helped to reduce stigma on students suffering from depression (Costescu, Oprea, Herța & Nemeș 2018, 23-26; Pandey & Pandey 2014, 21-24).

Another research conducted on international students at a university has shown that, Index of Life stress (ILS) may be used to assess the extent of acculturative stress experienced by international students during studies. The stress may originate from financial constraints that may have direct or indirect effect on studies as well as level of wellbeing. Stress may also originate form language difficulties related to language of instruction during studies as well as the native language of the people around, perception related to students feeling they are being isolated base on their origin, differences in culture and academic difficulties. According to the research, most students reported academic difficulties as the biggest source of stress. Financial constraints followed by language difficulties, cultural and perceived discrimination were reported as the least source of stress. (Pandey & Pandey 2014, 21-24).

According to previous research, marriage has been shown to reduce stress and symptoms associated with depression. The research aimed at determining whether marriage helped to decrease stress and depressive symptoms in relation to unmarried or divorced individuals. It was found out that access to a spouse may decrease genetic effects of perceived stress and depressive symptoms. On the other hand, the demands that come with marriage and raising a family may increase environmental effects of perceived stress. Marriage is thought to bring resources for example material and time shared with each other as well as support and integration socially, hence great financial well-being and togetherness achieved by sharing activities like dining together, recreational activities, and intimacy in comparison to unmarried individuals. (Chen, Waite & Lauderdale 2015, 356-377).

### 2.7 Cultural background of international students

Fluency in English and ability to express oneself in English was found to be a protective factor according to a research in 2016 on European students studying in USA. It showed that international students from Europe experienced less stress related to interacting with people living in the USA since they could smoothly interact with other people hence easily creating social networks, ease in performing activities
of daily living like shopping for food and excellence in academic studies as the language of instruction was English. European students experienced less stress associated with perceived racism and discrimination compared to their counterparts from Asia, Latin America and African origin based on skin color and race. It was also demonstrated that similarities in culture between the European students and American students, helped the students to easily fit in to the culture and therefore experienced less stress. This is in contrast among students originally from Asia and Africa whose self-determination and expression are dependent on others hence are more likely to experience more stress due to the individualistic sense of culture in the USA. (Yeh & Inose 2016, 15-28).

The challenges faced by international students may be greater in comparison to native students most likely due to changes in environment in terms of actual difference in location and school surroundings, language differences, financial costs involved in changing location and fulfilment of activities of daily living, job restrictions and balancing work with school schedule. The social support system to some extent also changes especially if the support system is back in-home country. This may of course transition when the students receive support from the host country institution of learning. Ability to acquire social skills may help hasten this process through social interactions which may help the student to adjust his/her expectations. Most students may be excited that they are finally achieving what they planned to achieve on starting university life but on the flip side they may also experience culture shock based on their expectations. Careful guidance and induction into the culture and school environment may help the students have an accurate picture of what to expect throughout the learning during the university life. (Wintre et al. 2015, 255-264).

In countries such as the United Kingdom (UK) drinks containing alcohol are usually acceptable and served with food in social environments for adults. They are also available for sale to adults in public places where children also eat. This is also the case in places where university students have their food where alcoholic drinks are available for sale together with food during lunch or dinner times. It is also usual to see students meeting in bars or restaurants from both genders. This may be something new for international students whose background does not permit use of alcoholic drinks, meat or meetings where both genders are together in the same place at the same time. Therefore, it may affect their academic performances, weaken relationships with other students and conflict with their beliefs. This may force the international students to keep to themselves in order to avoid their peers and public meetings. Similarly, the international students face challenges with the food, cultural identity, roles of different genders and friendships. International students may also find it difficult and hard to express their feelings based on their backgrounds or due to fear of being labeled or loosing self-image. Therefore,
they may resort to associating only with other students from the same ethnic, religious or nationality background. Being in a different country and society away from family may make the student lonely. The demands that come with different system may cause the student to be depressed if they are not able to cope with these new demands. However, some of the students can overcome this demand and are able to complete their study goals and become role models from their success stories. (Ramachandran 2011, 201-220).

2.8 Coping with stress

Cognitive behavioral theory (CBT) was initially introduced by Lazarus who made a lot of emphasis on the importance and purpose of cognitive evaluation, person’s ability to manage emotions and the purpose of social support in promoting or inhibiting coping. This theory may have led to development of other theories for example cognitive motivational-relational, self-regulatory behavioral theory, self-efficacy theory, proactive coping theory. Later own proactive coping theories especially for adolescents for example future oriented proactive coping, dual process model of coping, social aspect of coping, religious coping, emotional approach and coping and positive emotion. These theories highlight that coping just like a behavior, can be learnt or unlearnt through focusing on assigning value or meaning to an incident instead of focusing on the actual incident. By assessing the incident and assigning meaning can determine whether a person becomes stressed with the incident or copes with the incident and may be influenced by many factors including past experiences, culture, birth order, the resources available to combat the incident, financial status, personalities, age, education background and current situation. (Devonport 2013).

Moreover, Rational emotive behavioral therapy (REBT) further highlights that a person’s capability can be controlled by the mind. A person believing, they have the resources or capability to perform something might be able to do so. The flip side is when a person belief that they are not capable of, then they may not and therefore when such an incident occurs, they may become stressed about it. Behavior change to accommodate coping with stress may require an additional help from a professional. Centria UAS provides professional help to students through the student tutors, student counselor, religious leader and school nurse whom the students can approach if they are experiencing incidences or situation, they deem stressful. This helps promote mental health and may prevent students from having stress related prob-
lems during studies. REBT highlights assessing the stressful situation using ABCD theory which focuses on assessing the incident, what the incident is believed to cause, the consequence of this and lastly disputing the belief based on facts. (Devonport 2013).

Social support system is of paramount importance when it comes to dealing with stress. It is evident that stressors are encountered daily whether it is noticed or not. The way we act against or towards the stressors determines the reaction that is activated in a person. Situations or happenings around us may be perceived to be stressful or activating negative emotions by one person and the other person it may not. Developing the skill on how to handle this situation is of paramount importance as long term stress may be harmful to one’s health. According to a research that was done on expatriate families found out that even the simplest daily activities like reserving a parking slot for car may be a stressful situation because of lack of information on how it is done in the new country or the instructions are in a different language. Not understanding the language and culture around may make a person feel frustrated, incompetent or ashamed. Leaving behind the support system may also make the person feel lonely. It was evident in this study that getting social support from old friends, family members, employers and people from the same nationality made it easier for the individuals to relieve stress. The employers mainly provided support in terms of information, practical support and emotional support. Old friends or new ones mostly provided a channel for debriefing or sharing experiences, frustrations, expectations or ways of dealing with arising situations. It was also demonstrated that students who were religious/spiritual or a lack of it, experienced almost similar levels of stress even though some research cites religion as a protective factor from stress as demonstrated by most religious students working in harmony with other personnel, their ability to cope with human suffering and maintain work-life balance. (Costescu et al. 2018, 23-26).

Nutrition and exercise moreover may be an important factor. Healthy diet and remaining active have been proven to improve health as indicated by blood pressure levels, cholesterol levels, reduced stress, anxiety and depression among others. As individuals age, it becomes more and more challenging to incorporate exercises into routine work and many people find it difficult to exercise on regular basis. Scientist recommends using easier methods for example using the stairs instead of the lift, gardening, parking far away from the office and walking the rest of the journey to the office etc. These non-rigorous methods of exercising add up the daily requirements of 30 minutes of exercise. Sedentary lifestyle is a health risk including risk of stress even for the non-obese individuals. (McNaughton 2015).
According to a research conducted in France in 2011 on international students studying in university, it was found that most widely recognized substances consumed by the students were marijuana, liquor and smoking for diverting attention from stress. The danger of beginning of drug abuse and similar issues was lifted throughout university course. Drug abuse was the reason for medical issues, university troubles, trauma, assault, sexual conduct, sadness, and mental issue. Liquor abuse had prompted drinking without control at once. Smoking among international students was for interaction with people along with relieving stress, to prevent loneliness, and feeling being member of a group. Apart from relieving stress, smoking also helped to break the silence and start a conversation with another stressed student fellow. Smoking for stress removal was related with increasing danger of nicotine in future. It was also shown that most of them practiced maladaptive coping styles which includes resorting to avoiding the stressful condition, withdrawing from stressful environment, disassociation from stressful relationships, and use and abuse of drugs and/or alcohol. (Tavolacci, Ladner, Grigioni, Richard, Villet & Dechelotte 2013; Amnie 2018).

Moreover, the same research showed other different ways individuals have used to cope or manage stress through adaptive coping, focusing on solving the problem, participation in therapy, professional counselling for ways of managing stress. Participants also used emotion focused coping for example practicing mindfulness, meditation, yoga, use of humor, jokes, participation in religious activities, seeking divine intervention, participation in physical exercises, breathing exercises and seeking social support. (Amnie 2018).

Lastly, from a study done on the effects of exposure to recreational activities and exposure to natural environment on mood and psychophysiological response to stress. It was found out that participation in nature walk had far much more restorative values in comparison to passively watching nature from a screen or participating in physical activities alone. It was found effective especially when individuals were expected to be highly stressed for example during exam times. This was achieved by assessing cortisol levels, heart rate and mood changes on healthy university students before and after exams. (Olafsdottir, Cloke, Schulz, van Dyck, Eysteinsson, Thorleifsdottir & Vögele 2018).
3 RESEARCH PROBLEM, QUESTION AND GOAL

The purpose of this thesis is to identify sources of stress among international students studying in Centria UAS. The goal of this thesis is to come up with recommendations that can help international students to cope with stress. Similar kind of research was done previously in Finland, in Seinäjoki University of Applied Sciences which showed 47% of students’ academic performance was affected by stress. Furthermore, factors arising from academics was due to excessive assignments pressure, factors from relationship was not having social time with other people, environmental factors were career anxiety, financial trouble as personal factors were the leading causes of stress among international students. The students recommended after school activities and stress awareness training to handle stress. The study reported that students' academic and social life were hampered by stress. Considering these findings, our research therefore focused on answering the following research questions:

1) What are the sources of stress among international students in Centria UAS?
2) What ways have international students in Centria UAS used to cope with stress?
4 METHODOLOGY AND DATA

The choice of methodology used in research is dependent on the intent of the research, the research capabilities of the researcher and the intended target group for the research. Likewise, nursing research can be implemented using several methodologies. Participatory action research is arguably one of the best methods of nursing research as it involves partnering with participants, in this case patients using our expertise to provide information and guidance and patients experiences to bring out to life patient’s experiences. Participatory action research goes beyond research results; it involves sharing the results with the participants and advocating for actions that can lead to change in the health situation. This research can also incorporate use of quantitative, qualitative, ethnography, needs assessment and mixed methods. Qualitative research allows the participant’s voices to be heard when they share their experiences to the researcher, and it is through these voices that change can be implemented. Ethnography involves using human anthropology in research. Needs assessment involves identifying gaps in the research subject and mixed method involves use of more than one research method in one research. Quantitative research will be used in this thesis. (Chesnay 2014; Gerrish & Lathlean 2015).

4.1 Quantitative approach

Quantitative research methodology was used in this thesis. Quantitative research method aims to clarify the research problem and recommends the idea of the correlation among variables. It consists of the interrelationships of what is known to be valid from existing evidence, what is thought to be valid based on works by researchers and theoreticians. The role of quantitative research is to identify, predict and guide in exploration and determination of the factors that should be researched before commencement of the research work. Moreover, it provides a structure of factors in which research might be contrasted and incorporated and the outcomes of other researches. In addition, it helps with choosing the most appropriate factors from which to outline the research, aids in their definition and outlining the direction in which the research will take. Quantitative research assumes that there are scientific truths and laws
that can be measured and interpreted. And that these laws are free of bias, implying that social life experiences can be studied as facts similarly to objects. (Martin & Bridgmon 2012).

4.2 Data collection

The study focused on all the international students in Centria UAS. A target of 50-60 respondents was planned to be achieved. There was a total of 58 respondents to the questionnaire which was within the set target number.

The questionnaire on "Causes of students’ stress, its effects on their academic success, and stress management by students" survey created by Essel and Owusu (2017) was adopted with changes by the researchers to fit their research aim and goal. Likert scale was used, where 1 represented strongly Disagree, 2 represented Disagree, 3 represented Neither agree nor disagree, 4 represented Agree while 5 represented strongly Agree and respondents were asked to tick the applicable options. Also, open-ended questionnaire was inserted for the respondents who do not find suitable options to tick, so that they can write down their point of view in a few words. It was reviewed by the analyst and the supervisor to limit blunders. (Martin & Bridgmon 2012).

A pilot study was done by analysts among five individuals (n=5). Pilot test was conducted to find out the mistakes that may have been left unnoticed. Statistics were gathered inside a time of one week. The answers were collected and analyzed. During the pilot process, the participants’ rights and confidentiality were protected. However, they were instructed not to take part in the data collection. A cover letter was adhered to the surveys which contained information to provide answer to the questionnaire. After the pilot test, the length of the questionnaire was reduced, and the questions were made simpler and Likert scale was added. However, the received results from the pilot test met the requirements of the thesis goal.

Questionnaire was developed in English based on questionnaires that have been used previously to assess stress, this was then distributed through school email and a link to Webropol survey and reporting tool attached and to international students studying in Centria UAS. Webropol was easier and convenient as it was provided free of charge to students hence a better way to reach the greatest number of
international students. A sampling method was used to select students who meet the criteria for international students which in our case meant students whose original nationality was not Finnish, even if their nationality has changed by virtue of staying in Finland longer and meeting the requirements to be considered a Finnish national. Questions were designed to assess whether international students had experienced any stress during their studies at Centria UAS and what ways they had used to cope with these stresses. Personal questions about the student for example age, year of studies and gender were also included. Online survey format was used, and the questionnaire sent via email to the international students. The questions were divided into three parts, part 1 was about student demographics, part 2 was about causes of stress and part 3 was about ways of coping. Likert scale was used in part two and three. Statistics were extracted from Webropol survey tool into excel on every individual inquiry and results were analyzed as shown in the results section. (Martin & Bridgmon 2012; Chesnay 2014).

4.3 Data analysis

Webropol survey and reporting tool 3.0 has been used to analyze the data. There was a total of 58 respondents (n=58), we excluded one whose country of origin was Finland hence does not meet the criteria for international student. The data analysis was completed by computing the percentage of individual answers. The explanation of the data collected was done by using percentages. In part 2 and 3 where Likert scale was used, the responses were analyzed based on those who agreed with the statement verses those who were neutral or disagreed.

4.4 Ethical considerations

Quantitative research is mostly implemented using questionnaires that are distributed to participants. Research ethics were upheld during the entire process of designing, distribution of questionnaire, collection of results and analysis of data. The questionnaire was not published until the permission was granted form the concerned authorities. The researchers ensured that informed consent was received from the participants allowing them to access and use the information received for purposes of the research or further research. This was achieved by sending an ethics declaration attached in the appendices, together with the questionnaire stating that participation was voluntary, and in an event that a student participated, it was indicative that they had given consent. In addition, the participants were allowed enough time to
consider the request before being asked to provide information, in this way the participant does not feel pressured to give information or participate in the research. The participant’s privacy and confidentiality of information was guaranteed such that their information could not be traced back to them or their information shared without consent to unintended persons. Moreover, the whole research process was ethically acceptable. This takes into consideration that the research was reliable in a way that the results can be reproduced if the same survey were to be administered to a different group or same group at different times. (Gerrish & Lathlean 2015).

Validity of the research was considered; the research has the highest accuracy as possible. Only the articles that were scientific and relevant to the research subject were used. Centria's guide for thesis and academic writing were thoroughly studied and comprehended. All the resources were obtained directly from the Centria's online library thus preventing the use of prohibited data. A pilot test was conducted to ascertain the quality and validity of the questionnaire. The research was free of bias, meaning that the participant and the researchers did not manipulate the research process in any way that could affect the outcome of the research. (Gerrish & Lathlean 2015).
5 RESULTS AND ANALYSIS

This section shows interpretation of statistics acquired from the respondent's answers to stress and ways of coping among International students in Centria University of Applied Sciences. Data were collected only from international students who were in their second year of studies and above excluding the group of first year. Respondents were from business Administration, business management, information technology, environmental chemistry and technology, nursing and others. The analysis was done by sending the questionnaire through email to 22 groups of international students which contained 585 members among which 58 responded indicated approximately 10% response rate. Analysis was done in relation to the parts as in the questionnaire. The results were extracted from Webropol survey tool in excel format and analyzed as per below charts.

5.1 Student demographics

There were a total of 57 respondents of which 56% were male while 44% were female. With respect to the year of studies (2\textsuperscript{nd}, 3\textsuperscript{rd} and 4\textsuperscript{th}), second year students were the most participants at 37%, approximately, 30% were from third year while 33% were from fourth year. Out of 57 respondents, 80% of respondents were single and approximately 15% of respondents were in common-law marriage. Approximately 74% indicated that they had experienced some stress during their studies in Centria University of Applied Sciences. The percentage of respondents from Vietnam was the highest at almost 40% followed by Nepal at 25%, Cameroon was close to 10%, Kenya at 10% while respondents from Bangladesh were around 4%. There were also respondents from Russia, Pakistan, Norway, Finland, France, Kazakhstan, Nigeria and Morocco. We excluded one whose country of origin was Finland hence does not meet the criteria for international student.
Respondents’ ages were extracted and later grouped as per below chart. The chart showed that the highest number of the respondents were between the age of 20-24 years. One respondent of 50 years was treated as an outlier, and therefore excluded from analysis.
under others. Business had the highest percentage of 35% followed by Information technology, nursing, chemistry and others.

FIGURE 3. Degree Programme (n=57)

Level of stress: 35%, 28% and 14% indicated that they had experienced mild, moderate and severe stress respectively.
Use of alcohol/drugs in relation to stress: It is evident that some respondents had used alcohol/substance of abuse in relation to stress accounting for 16% of the respondents.
Smoking in relation to stress: 90% mentioned they have not smoked in connection to stress. Less than 10% had smoked in relation to stress.

FIGURE 6. Smoking in relation to stress (n=57)

5.2 The sources of stress among international students in Centria UAS

Challenges related to studies: The Likert scale was used, and the respondents were asked to choose the suitable option. The chart below represents the challenges related to studies where too many assignments was selected by most respondents as the biggest source of stress at 40% followed by challenge in adaptation to new climate at 35%, staying awake in class was about 21%, visa renewal challenges at about 21%, poor attendance at about 19%, often late for class at about 13%, English language was below 10% and lack of personal infrastructure below 5%.
FIGURE 7. Challenges related to studies (n=57)

Challenges related to Finances: This bar graph shows the stress amongst the respondents due to financial factors. 47% of participants indicated that their financial stress originated from difficulties finding a job, 39% indicated working and studying the same time while 25% indicated poor budgeting as a source of financial stress.
Challenges related to relationships: The highest challenges related to relationships were the inability to meet people and homesickness with a percentage of about 45%. The number was followed by trouble meeting girlfriend or boyfriend with the percentage of about 39%, worry about family about 36%, not able to get along with other people and inability to express feelings about 34%, Finnish culture about 16% and lost someone close about 12%.

Challenges related to health: The highest challenges related to health were lack of enough exercises with a percentage of about 49% followed by weight changes to about 39%, tiredness to about 31%, nothing previously enjoyable is enjoyable with 30%, food is different to about 29%, sad and depressed to about 24%, no one cares about me to about 23% and health related problems with 20%.
Apart from the above-mentioned sources of stress, respondents also indicated other sources of stress which were not listed in the questionnaire. Few respondents reported “Twenty crises, I can’t stop thinking about my future, career, sometimes I procrastinate”, “Sometimes there are 3 or 4 exams from different subjects in the same week, which makes me stressed”, “Raising a family in foreign land without relatives to help and studying same time is enough stress”, “Late classes are not suitable for international students, 6 hours per day is enough, 8-14 is enough”, “I feel constantly under pressure” and “career” as the sources of stress.

5.3 The respondent’s ways of coping with stress

The bar graph below shows the results as indicated by participants. Each question in part 3 was analyzed based on those who agreed with the statement in comparison with those that disagreed and those that were neutral, meaning they neither disagreed nor agreed with the statement. The most selected way of coping with stress was talking with the family members at 60% followed by physical activities at 55% similarly, talking with friends was at 55%. In addition, participating in hobbies and social activities were around 45%, while travelling was 41%, participating in religious activities was at 30%, meditation around 17% and talking with school nurse or counselor 11%. Respondents also commented some other ways of coping with stress which were not listed in the questionnaire. Few respondents commented
“cooking, cleaning my room, watch movie and be grateful; music, shopping, writing a diary, sleeping, learning new things, “My time alone away from all the drama, and sometimes it's nearly impossible”, “I am not expressive person, so I didn’t share my stress with none. I struggled by myself” as the ways of coping stress.

FIGURE 11. WAYS OF COPING WITH STRESS (n=57)
6 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

In this chapter we give a brief discussion, conclusion and recommendations based on our research findings.

6.1 Discussion

The thesis mainly focused on stress and ways of coping among international students studying in Centria University of Applied Sciences. The purpose of the thesis was to identify sources of stress and ways of coping among international students in Centria UAS. The goal of the thesis was to come up with recommendations based on our research findings and results that may help other international students to cope with stress.

Over 50% of the participants were male students most of whom were in their second year of studies. The highest number of respondents were from Vietnam constituting approximately 40% of all participants, followed by Nepal at 25%, Cameroon was close to 10%, Kenya at 10% while respondents from Bangladesh were around 4%. It is evident from the results that some of the international students studying in Centria have experienced some level of stress, from 57 participants, approximately 74% indicated that they had experienced some stress during their studies in Centria UAS. In another research question related to how much stress the respondents had experienced, the results showed approximately 35%, 28% and 14% indicated that they had experienced mild, moderate and severe stress respectively.

Further results showed that the biggest cause of stress to international students in relation to studies was due to assignments as indicated by 40% of the participants, followed by challenge in adaptation to new climate at 35%, staying awake in class was about 21%, visa renewal challenges at about 21%, poor attendance at about 19%, often late for class at about 13%, English language was below 10% and lack of personal infrastructure below 5%. A participant indicated that “Sometimes there are 3 or 4 exams from different subjects in the same week, which makes me stressed” another participant indicated that” “Raising a family in foreign land without relatives to help and studying same time is enough stress”.

Financial challenge was also indicated as a source of stress to international students, 47% of participants indicated that their financial stress originated from difficulties finding a job, 39% indicated working and
studying the same time while 25% indicated poor budgeting as a source of financial stress. The analysis was done per survey question based on those who agreed with the statement in comparison with those who did not agree and those who neither agreed nor disagreed.

Moreover, challenges related to relationships was also indicated as a source of stress among international students, 45% of the participants indicated inability to meet people caused them stress, similar number agreed with being homesick as a source of stress, 39% indicated trouble meeting girlfriend or boyfriend while 36% indicated worry about family. Inability to get along with other people, express feelings about 34%, Finnish culture about 16% and lost someone close about 12%.

Lastly, challenges related to health arising from not getting enough exercises was indicated by 49% of the participants followed by weight changes at about 39%, tiredness at about 31%, inability to enjoy what was enjoyable previously at 30%, difference in food at about 29%, sad and depressed at about 24%, 23 % of the participants felt that no one cared about them while 20% indicated as having had health related problems.

Results on ways international students had used to cope with stress showed that 60% of the participants had coped with stress by talking with the family members and 55% indicated physical activities and talking with friends as ways they had used to cope with stress. In addition, 45% of participants indicated participating in hobbies and social activities, while travelling was indicated by 41%, participating in religious activities by 30%, meditation by 17% and talking with school nurse or counselor 11%. Some of the participants indicated “Cooking, cleaning my room, watch movie and be grateful” while another wrote “sleeping, party, shopping, music, alcohol as the ways of coping with stress. Some of the respondents indicated as having used alcohol and smoking to cope with stress.

6.2 Conclusion

In this chapter we compared our result findings with those of previous researchers. According to our research findings, about 74% of international students have experienced stress, in comparison to another research conducted in Romania in 2018 on international students studying medicine, which showed 53 % of the students had experienced stress.
Stress related to studies was from excess assignments as indicated by 40% of the participants, followed by challenge in adaptation to new climate at 35%, which is like another research conducted in Seinäjoki University of Applied Science which showed 47% of students’ academic performance was affected by stress arising from excessive assignments pressure.

Stress related to financial challenge was also indicated as a source of stress to international students, 47% of participants indicated that their financial stress originated from difficulties finding a job, 39% indicated working and studying the same time, 25% indicated poor budgeting. In another research done on international students, the findings related to finances showed that 65% of the respondents indicated that parents controlled how much money they spent while 75% indicated having trouble with managing a budget.

Challenges related to relationships was also indicated as a source of stress among international students, 45% of the participants indicated inability to meet people caused them stress and a similar number agreed with being homesick similarly in another research showed 70% of the students feeling lonely because of missing family and friends.

Results on challenges related to health showed 49% were stressed due to lack of enough exercises followed by weight changes to about 39%, tiredness to about 31%, nothing previously enjoyable is enjoyable with 30%, food is different to about 29%, sad and depressed to about 24%, no one cares about me to about 23% and health related problems with 20%. In comparison, in another research, the results showed that 45% of the respondents found it hard to express themselves and 35% felt like they had too much pressure while 65% felt like nobody cared about them.

Results on ways international students had used to cope with stress showed that 60% of the participants had coped with stress by talking with the family members and 55% indicated physical activities, 11% indicated that they had coped with stress through talking with school nurse or counsellor which is more similar to another research previously done that showed 17.6% of those who participated in the research had used therapy from counseling and other professional ways of managing stress while 45.2% of the participants used emotion focused coping through for example practicing mindfulness, meditation, yoga, humor, jokes, participation in religious activities, seeking divine intervention, participation in physical activities, breathing exercises and seeking social support.
6.3 Limitations

The length of the questionnaire might have limited the number of respondents because the response rate was only 10% which may not be a representative of the total international students’ population. Furthermore, the findings were not conclusive for example: students having too many assignments could be a result of actual too many assignments, difference in teaching system in Finland compared to home country or poor time management. Difficulties in finding work or meeting new people could arise from challenges with Finnish language, difference in culture or fear of socializing because of poor Finnish language skills.

6.4 Recommendations

It is evident from the results that international students have experienced stress from too many assignments, difficulties adapting to new climate, difficulties finding jobs, difficulties meeting new people and inadequate exercises. As mentioned in the limitations, it is hard to state exact stress factors among international students. Hence, it is recommended that further research be done to establish the actual root cause of these challenges so they can be addressed.
REFERENCES


Research questionnaire

This is a questionnaire to assess whether international students in Centria have experienced stress or not during their studies. The questionnaire has been adopted based on two similar researches; one was done in Seinäjoki as part of a bachelor’s degree thesis by Essel, G & Owusu, P 2017 and another from Pandey & Pandey 2014 whose earlier version by Berreca and Hepler 2000 was adopted for use by Thomson Rivers University from the USA and it was still in use by the time of writing this thesis. (Essel & Owusu 2017; Pandey & Pandey 2014).

The questionnaire consists of 3 parts: In part 1 we would like to know you and whether you have experienced any stress during your studies, part 2, we would like to know from you what causes you stress and part 3 we would like to know what ways you have used to cope with stress. Please answer the questions as accurately as possible. Likert scale has been used in part 2 and 3 with the following options under each question: Strongly disagree, Disagree, neither agree nor disagree, agree and strongly agree.
STRESS AND WAYS OF COPING AMONG INTERNATIONAL STUDENTS IN CENTRIA UNIVERSITY OF APPLIED SCIENCES.

Part 1: Student demographics.

We would like to know you and whether you have experienced stress.

Please tick the options as applicable to you.

1. Gender
   - Male
   - Female

2. Year of studies
   - First
   - Second
   - Third
   - Fourth

3. Country of origin

4. Age

5. Marital status
   - Married
   - Single
6. Degree Program

- Business
- Chemistry
- Information Technology
- Nursing
- Others

7. Have you experienced stress during your studies?

- Yes
- No
- I do not know

8. If yes, how much stress do you feel you have experienced since joining Centria UAS?

- None
- Mild
- Moderate
- Severe
- I do not know

9. Have you used alcohol or any other substance of abuse during your studies in connection to stress?
10. Have you smoked during your studies in connection to stress?

☐ Yes
☐ No

Part 2: Sources of stress.

We would like to know what causes you stress if any.

11. Studies and related issues (Please choose 5 most important ones)

☐ I am not sure if I am able to do well in college.
☐ My attendance is poor.
☐ I am often late for class.
☐ I have too many assignments.
☐ I cannot stay awake in class.
☐ I do not understand English very well
☐ I do not have personal infrastructure like computer or internet to aid me in my studies
☐ I find it difficult to adapt to the new climate here
☐ I have experienced challenges with renewal of my Visa.

☐ Other

12. Financial challenges (Please choose 4 most important ones)
I cannot get the money I need to pay for college.

I do not have the money to pay basic expenses.

My parents control how much money I spend.

I have trouble managing a budget.

I cannot get a job.

I am financially responsible for someone else.

I am working at the same time studying. If yes, how many hours per week?

Other

13. Relationships and social challenges (Please choose 4 most important ones)

I do not know how to meet people in Centria/Kokkola.

I have trouble meeting a boyfriend/ girlfriend.

I am homesick

I do not understand the culture in Finland.

I do not get along with other people

I have lost someone close to me

I find it hard to express my feelings.

I am worried about my family

Other

14. Health and wellbeing (Please choose 4 most important ones)
I find the food in Finland different and cannot eat
I feel that I do not get enough exercise
I have experienced weight changes since I came here
I feel tired all or most of the time
I feel sad and depressed.
I do not feel like anyone cares about me.
I do not enjoy the things that I used to enjoy doing

I have had health related problems. If yes, what kind of problems?

Other

We would like to know what ways you have used to cope with stress.

Please tick all the options as applicable to you.

15. What ways have you used to cope with stress? (Please choose 5 most important ones)

- Participation in Physical activities
- Traveling
- Participation in hobbies
- Participation in social activities with other students from my country
- Meditation
- Practicing optimism by believing I can manage
☐ Talking to the school nurse or counselor

☐ Talking with my friend(s)

☐ Talking with family member(s)

☐ Participating in religious activities.

☐ Other

[ ]
Ethics declaration

Dear Recipient,

Our names are Sami Shrestha and Milcah Kipkoech, we are bachelor’s degree students in nursing in our final year of studies at Centria University of Applied Sciences, Kokkola.

We are kindly requesting you to participate in our research study by responding to the survey questionnaire on the link attached below. The survey will take approximately 10 minutes to complete. The purpose of the research is to identify sources of stress among international students in Centria UAS.

By participating in the study, you will help us achieve our research study goal which is to come up with recommendations that may help international students to cope with stress.

The basic ethical considerations will be followed while conducting the research to ensure that all respondent’s identity is kept private and confidential and respondents are not exposed to any harm or benefit during the entire research. Participation is voluntary and therefore one may refuse to participate. Once complete, the results of the study will be published in Theseus.fi, if you would like to know the results.

If you have any questions or concerns regarding the survey, kindly contact Sami Shrestha sami.shrestha@centria.fi and/or Milcah Kipkoech milcah.kipkoech@centria.fi

We kindly request you to complete the survey by 10.9.2019. Find below the link to the questionnaire: https://link.webropolsurveys.com/S/7ACADC9789A2BB2C