

# Images of the future as "laboratory of the possible"

Current international degree students of Turku's higher education institutions in the year 2030

Master's thesis in Futures Studies

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20.6.2022

Turku



#### Master's thesis

**Subject**: Futures Studies **Authors**: Anna Ryzhova

Title: Images of the future as "laboratory of the possible": Current international degree students

of Turku's higher education institutions in the year 2030 **Supervisors**: Professor Petri Tapio, M.A. Johanna Ollila

Number of pages: 71 pages + appendices 2 pages

**Date**: 20.6.2022

#### Abstract

Ministry of Education and Culture of Finland suggests increasing national competence capacity, improving employability, and meeting future national labour needs by among other things attracting international degree students to Finland. However, international students have to face different challenges in a foreign country. The thesis aims to provide a better understanding of students' needs and perspectives by examining their images of the future.

The first research question of the thesis explores what kind of images of the personal future international higher education students in Turku have for the year 2030. The second research question aims to discover what factors international higher education students see as obstacles to achieving the desired images of the future.

The theoretical framework of the thesis studies personal futures and images of the future. Within the part of the personal futures, key points from other disciplines are presented. Different approaches to studying personal futures and the ways how futures studies methods can benefit individuals are considered. After that, the nature of images of the future, as well as their influence on human behaviour and decisions, are examined. Finally, the formation process of images of the future and the positive images of the future's importance are demonstrated.

An action-based and participatory method future camp was utilised to collect images of the future of international degree students. Twelve international degree students participated in the future camp -event. The future camp aims to encourage participants to explore different alternatives and inspire them to think about the futures. Two warm-up exercises and four main exercises were designed to collect research materials.

Research results demonstrated different perspectives on the futures as well as revealed the possible obstacles. Personal future expectations of international degree students are mostly positive yet include some fears and challenges. The results provided images of the future categorised by the main personal domains in life. Then, three images of the future week in 2030 were created based on the analysed research materials.

As an outcome of the research, three recommendations, related to the futures guidance, social life, and well-being, were drawn for the City of Turku and HEIs. Future camp feedback showed the need for international students to explore their futures and their alternatives more.

**Key words**: images of the future, international degree students

## Pro gradu -tutkielma

Oppiaine: Tulevaisuudentutkimus

Tekijä: Anna Ryzhova

Otsikko: Tulevaisuuskuvat "mahdollisuuksien laboratoriona": Turun korkeakoulujen nykyiset

kansainväliset tutkinto-opiskelijat vuonna 2030 **Ohjaajat**: professori Petri Tapio, FM Johanna Ollila

Sivumäärä: 71 sivua + liitteet 2 sivua

**Päivämäärä**: 20.6.2022

#### Tiivistelmä

Opetus- ja kulttuuriministeriö näkee kansainväliset tutkinto-opiskelijat ryhmänä, joka voi myötävaikuttaa kansallisen osaamiskapasiteetin lisäämiseen, työllistettävyyden parantamiseen ja tulevien kansallisten työvoimatarpeiden tyydyttämiseen. Kansainväliset opiskelijat kohtaavat kuitenkin erilaisia haasteita vieraassa maassa. Opinnäytetyön tavoitteena on antaa parempi ymmärrys opiskelijoiden tarpeista ja näkökulmista tutkimalla heidän tulevaisuuskuvaansa.

Opinnäytetyön ensimmäinen tutkimuskysymys käsittelee sitä, millaisia tulevaisuuskuvia Turussa opiskelevilla kansainvälisillä tutkinto-opiskelijoilla on tulevaisuudestaan vuonna 2030. Toisen tutkimuskysymyksen tavoitteena on selvittää, mitkä asiat kansainvälisten korkeakouluopiskelijoiden mielestä ovat esteenä haluttujen tulevaisuuskuvien saavuttamiselle.

Teorialuvussa esitellään henkilökohtaisia tulevaisuuksia ja tulevaisuuskuvia. Henkilökohtaisia tulevaisuuksia käsittelevässä osassa esitellään näkökohtia muilta tieteenaloilta. Samassa osassa tarkastellaan sekä erilaisia lähestymistapoja henkilökohtaisen tulevaisuuden tutkimiseen että tapoja, joilla tulevaisuudentutkimuksen metodit voivat olla tässä hyödyksi. Sen jälkeen tutkitaan tulevaisuuskuvien olemusta sekä niiden vaikutusta ihmisen käyttäytymiseen ja päätöksiin. Lopuksi esitellään tulevaisuuskuvien muodostumisprosessia ja positiivisten tulevaisuuskuvien tärkeyttä.

Kansainvälisten tutkinto-opiskelijoiden tulevaisuuskuvia kerättiin osallistavalla future camp -menetelmällä. Future camp -tapahtumaan osallistui kaksitoista kansainvälistä tutkinto-opiskelijaa. Menetelmän tavoitteena on kannustaa osallistujia tutkimaan erilaisia vaihtoehtoja ja innostaa heitä miettimään tulevaisuutta. Tutkimusmateriaalin keräämiseksi suunniteltiin kaksi lämmittelyharjoitusta ja neljä pääharjoitusta.

Tutkimustulosten perusteella kansainvälisillä tutkinto-opiskelijoilla on erilaisia näkökulmia tulevaisuuteen, ja he tunnistavat myös mahdollisia esteitä tavoitteiden saavuttamiselle. Kansainvälisten tutkinto-opiskelijoiden henkilökohtaiset tulevaisuusodotukset ovat pääosin myönteisiä, mutta ne sisältävät myös pelkoja ja haasteita. Tulokset esittelevät tulevaisuuskuvia, jotka on luokiteltu elämän tärkeimpien henkilökohtaisten alueiden mukaan. Kerättyjen tulevaisuudenkuvien analyysin perusteella luotiin kolme tulevaisuuskuvaa vuodelle 2030.

Tutkimuksen tuloksena laadittiin kolme tulevaisuudenohjaukseen, sosiaaliseen elämään ja hyvinvointiin liittyvää suositusta Turun kaupungille ja korkeakouluille. Future camp -tapahtumasta saatu palaute osoitti kansainvälisten opiskelijoiden tarpeen pohtia enemmän tulevaisuuttaan ja vaihtoehtojaan.

Avainsanat: tulevaisuuskuvat, kansainväliset tutkinto-opiskelijat

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# **LIST OF ABBREVIATIONS**

 $HEI-Higher\ Education\ institution$ 

TYY – The Student Union of the University of Turku (Turun Yliopiston Ylioppilaskunta)

# 1 Introduction

# 1.1 Background and relevance of the research

Attracting international students to Finnish higher education institutions is becoming one of the priorities of the Ministry of Education and Culture of Finland's policy. As in many other European countries, Finland's population is ageing. Taking into consideration population projections, financing and running a welfare state will require more international talents in the labour market. International degree students are seen as a group with a significant potential for increasing national competence capacity, implying the improvement in employability is expected to meet future national labour needs. (OKM 2019; Juusola et al. 2021.) In the future, study-based immigration may become one of the crucial components in fulfilling national education needs and may alleviate regional access to the labour force, which is one of the main challenges for the functioning of the labour market (Aro et al. 2020).

According to the Education Policy Report (Finnish Government 2021, 33–37), which outlines a vision for education and research in Finland for the next 10–20 years and thus set the goals and guide the changes, Finnish government aims to increase the share of foreign students to 15 per cent of all higher education institutions' degree students by the year 2030. To achieve this aim, Finland should attract threefold number of foreign students compared to current situation. Another goal is that 75 per cent of international students who have completed a degree enter working life in the Finnish labour market. (ibid.) The latest available statistics shows that only about 50 per cent are employed in Finland after graduation (OPH 2019). These goals are very ambitious and requires active participation of municipalities and higher education institutions.

In Turku Urban Research Programme, it is stated that municipalities have a strategic role in national development. Internationalisation is one of the most current matters and it is also at the heart of urban policy. International migration as one of the global trends affects Turku's urban policy and indirectly also the objectives of the urban research program. This research will facilitate intercultural interaction and provide a better understanding of the special needs of the international part of the population. Multiculturalism and internationalisation are special resources to increase the competitiveness of the municipality. A few thousand of international students from 100 different countries study

at higher education institutions in Turku. The effort of students is not enough if society is not ready to accept and actively involve everyone. Municipalities should provide support for international inhabitants to be internationally interesting to attract new experts to the city.

The author of thesis was responsible for international affairs and development cooperation in the Executive Board at the Student Union of the University of Turku (TYY), where the area of responsibility included the promotion of academic and social interests of international members of the Student Union from January until December 2021. During this work, the author got to know challenges, opportunities, and policies related to the international community in Finland and Turku better. In this master's thesis, international affairs experience and futures studies knowledge is combined to analyse current situation and future expectations through exploration of the images of the future of international students of Turku higher education institutions.

Rubin and Linturi (2001) argue that differences between the images of the future of the individuals (international students in this case) and the policymakers (City of Turku, Finnish government) can lead to misunderstandings in society. The images of the future are presented in a qualitative form and contain important information about the feelings, underlying motives, meanings, fears, and hopes of international students. Rubin (2013) states that the images of the future are created based on personal expectations and knowledge, values and beliefs, taste and needs, as well as other elements. Therefore, they can affect the choices and decisions of individuals both consciously and unconsciously. Awareness of the images held by international students will be beneficial for the decision-making, city services development processes, and consequently employability rate of international graduates.

Images of the future can facilitate understanding of international students' hopes, fears, expectations, and confusion, which leads to better opportunities to help and guide them in their personal development and career in Turku. It is important to consider the aspect of international degree students' integration process to understand their position in Finland. Moreover, integration experiences affect career expectations after graduation (Korhonen 2015).

# 1.2 Integration of international students

Research shows that international students around the world often have to face a lot of challenges and pass through different issues that complicate the integration process (Mak and Tran, 2001; Wu, 2015; Hopkins, 2012; An and Chiang, 2015). It is a common problem that international students are separated from local students that also hinders socio-cultural integration. One of the possible explanations for that is the difference between cultural factors that influence the actions, behaviour and lifestyle of people (Wu 2015). Iwara (2017) reviewed studies on international students' integration process from different parts of the world, and as a result, some problems were similar, among them: study pressure, language barriers, new food and culture, lack of support, homesickness, possible discrimination and inferiority feelings.

Various factors affect the integration of international students into Finnish society, these factors are mostly related to students' socio-cultural background, home country and its culture, the university community, and Finnish society. A supportive local environment that takes into account cultural diversity gives international students an opportunity and stimulates them to be more active participants in student life and Finnish society. Social contacts and personal networks also act as important places to get support and receive information. (Korhonen 2015.)

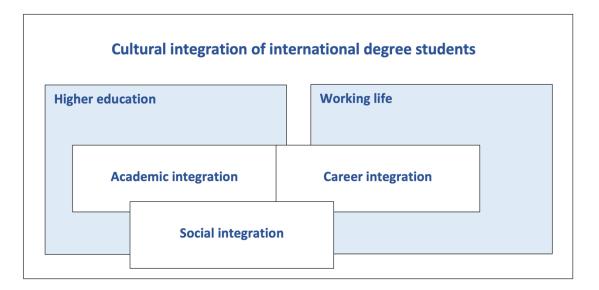


Figure 1. Aspects of the integration experience of an international degree student in relation to the contexts of the country's society, education, and working life (modified from Korhonen 2015) The publication of the Ministry of Education and Culture (Juusola et al. 2021, 15–16) extracts factors that are facilitating or hindering the integration process of international

students from previous research in Finland. The smooth progress of studies and availability of support services to set up a study process provided by the university were named as a starting point of integration. In addition to that, the low hierarchy level between university staff and students is a positive factor for the adaptation of new students. The following factors that are hindering the integration process were identified: differences in academic cultures of the home country and Finland, a limited amount of information available in English, lack of interaction with local students, and discrimination. (ibid.)

Korhonen (2015) distinguishes four main aspects of international degree students' integration experience: cultural, academic, social and career integration. Better support in the first three factors will lead to better career integration and improve students' competitiveness in the Finnish labour market. Figure 1 shows that cultural integration is a broader concept that is being built throughout both higher education studies and working life. It includes language and cultural knowledge, participation in society's activities as well as networks made outside of the university. During higher education studies, academic and social integration play the most important role. Academic integration means successful management of own studies as well as the importance of studies for a student and own interest. Social integration is achieved through participation in student life and student organisation activities, and contacts with the teachers that also influences the study progress. Social and cultural integration can also have overlapping areas because social contacts can be made both inside and outside the university community. The successfulness of social integration may influence employment prospects. Career integration implies the comprehension of international degree students concerning their expertise and career opportunities available according to that in Finland as well as expectations of their own competitiveness in the Finnish labour market and their perception of how realistic it is to get employment. (ibid.)

# 1.3 Research questions and objectives of the research

The research questions of the thesis are focused on exploring images of the personal future of international students. What do international students expect after graduation? What are their hopes, fears, and alternatives? Where do international students see themselves in the year 2030? Do they see their future in Finland or abroad? These subquestions will be covered by the main research questions:

- 1. What kind of images of the future do international higher education students in Turku have for the year 2030?
- 2. What factors do international higher education students see as obstacles to realisation of the preferable images of the future?

One of the objectives of the research is to find out the ways the City of Turku can support international students better. The analysis will show what elements of personal futures students emphasise in their images, their hopes, fears, and what kind of alternatives they have. It is important to know the obstacles to realisation of the preferable images of the future as the awareness of them can facilitate the efficiency of policymaking process. The research is focused on integration aspects and personal futures as previous research shows that working life along with personal relationships are two main reasons international students stay in Finland after graduation (Mathies & Karhonen 2020). The data obtained in the study are necessary to understand the thoughts and intentions of foreign students, their educational and career strategies in Finland and possible trajectories of their integration into society. The time span for the images of the future is around 10 years. The research is limited to international students who are studying for a degree in higher education institutions in Turku.

In general, foreign degree students' faith in their own employability and finding a job that matches their education is not as strong as that of Finnish degree students (Juusola et al. 2021, 24). There are different projects and services available, but many international students are not aware of the support they can receive in Finland to make their life and the job search easier. Objectives of the research also include encouraging and inspiring students to think about the futures, providing students with the tools to approach personal futures more efficiently through the discussion on the images of the future and to introduce them futures studies approach to the future. Assumptions about the future affect decisions now (Bell 1997, 82) and understanding of what is possible, hence it is important to broaden one's horizons. Images of the future can act as a "laboratory of the possible" (van der Helm, 2009) to explore different paths.

#### 1.4 Structure of the thesis

The thesis starts with an introduction that provides background information on internationalisation in Finland, the relevance of the research, and cultural integration

theory in the context of international degree students to contextualise the research topic. Besides, the objectives of the research and research questions are presented.

The theoretical framework provides a review of different approaches to personal futures to find out how to examine them and continues with consideration of the images of the future as a futures studies research area. Different features and influences of the images of the future on human actions as well as the role of holding positive and negative images of the future are discussed.

After that, the research design chapter gives an introduction to participatory futures research methods and presents future camp as a research method, followed by the description of the exercises designed to collect materials. The data collection process is presented as well as the content analysis method utilised for further examination of the data. After that, results are presented according to categories and three generalised images of the future are presented. In the discussion part, three recommendations are given to the City of Turku and HEIs.

### 2 Theoretical framework

The theoretical framework examines personal futures and images of the future concepts that are crucial for further research of the topic. First, the subchapter introduces the concept of personal futures in futures studies as well as key points from philosophy, psychology, cognitive and affective neuroscience studies. Next, different approaches to personal futures such as images of the future, future orientation, personal futures framework, and future selves are discussed. For further understanding, the dissonance between personal, national, and global futures was considered. Finally, the end of the subchapter explores how futures studies methods can contribute to individuals' future.

The second subchapter conceptualises images of the future as futures studies research area. First, the nature of images of the future, their features as well as a place within the futures studies domain are presented. Then, images of the future's influence on human behaviour and actions as well as the importance of holding positive images of the future are analysed. To gain a better insight into the topic, the formation process of images of the future is examined.

#### 2.1 Personal Futures

People possess a natural capacity for compound future-oriented thinking, which allows imagining and pondering different alternatives and possible outcomes of the decisions made. Through that, people can contribute to the building and materialisation of the preferable future. (Giddens 1991, 28–29.) Typically, futures studies practitioners have been more involved in examining global futures such as societal, organisational, and environmental. However, global units are formed of individuals with their sophisticated perspectives and understandings (Koponen 2010). Eleonora Masini (1993, 3) highlights the importance of individuals' decisions characterising futures studies as "a way of constructing our minds ... our everyday actions, our every decision." A higher awareness level of the scope of one's possibilities may result in an influence on both local and global activities. Bell also (1997) emphasises that the future-oriented behaviour of individuals benefits not only their personal futures but simultaneously the social framework as a whole.

Mannermaa (1993, 40, according to Kasurinen 1999, 7) argue that when people are pondering the future, they mostly think about personal relationships, studies, and work,

while taking global matters into account less often. Tonn & MacGregor's (2009) research emphasises that external stimuli such as special occasions (birthdays and New Years) as well as their own sense of responsibility make people ponder their personal futures. In the decision-making process concerning their own futures, people tend to rely on personal past experiences and not on the experiences of other people (ibid).

Young Adult	20-29 years. Completing education and beginning career and family.			
	Potential coping and financial pressures.			
Adult	30-39 years. Managing family and career growth. Increasing numbers of couples are starting families in this stage. Continued coping pressures.			

Figure 2. Stages of life relevant for the research (derived from Wheelwright 2005, 223)

According to Nurmi's (1991) research, the profound of planning expands with age, while sociological studies (Kasurinen 1999, 8–9) show that skills of planning personal future activate in transition phases of life. Figure 2 shows Verne Wheelwright's (2005, 223) division of life stages applicable to the research. The context of this study is the transition from young adult to adult and from higher education studies to working life, which makes it a suitable time to start thinking about possible development trajectories of own life. This division is considered as the basis; however, some variations are possible according to the personal experience of an individual. Du Bois-Reymond (1998) & Petrogiannis (2011) argue that different life stages of adulthood and the transition from one stage to another should not be defined by age as it varies depending on different circumstances.

# 2.1.1 Key points from other disciplines

The philosophical grounds for the personal futures concept can be found back in 1736, philosopher Joseph Butler wrote: "If the self or person of today, and that of tomorrow, are not the same, but only like persons, the person of today is really no more interested in what will befall the person of tomorrow, than in what will befall any other person". It emphasises the importance of feeling a commitment to the future self by being able to properly imagine self in the future in order to create a better environment in the personal future. (Butler 1736, 305.)

Philosopher Derek Parfit (1971) highlights the multiplicity of the future by using "one of my future selves" phrase. He argues that the level of connectedness to personal futures varies depending on people and this level influences rationality of behaviour. Reiff &

Quoidbach (2020) state that this level has a strong influence on well-being in a long-term perspective.

From the point of view of psychological as well as cognitive and affective neuroscience studies, when a person thinks about self in the future, they think the same way as they would think about a stranger. It may have a significant impact on decision-making that leads to neglecting own well-being in the future for the sake of gratification in the present, because people inherently tend to be more interested in their own benefit than those people that are not close to them. (Pronin & Ross 2006; Ersner-Hershfield et al. 2008; Macrae et al. 2015; Burum et al. 2016; Hershfield 2019.)

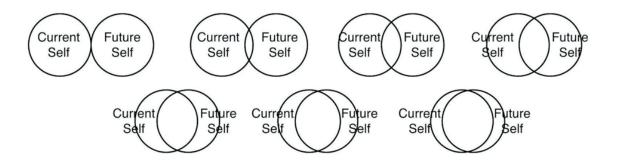


Figure 3. Future self-continuity scale (Ersner-Hershfield 2009)

Hal Ersner-Hershfield et al. (2009) created a simple way to measure future self-continuity of a person. Figure 3 shows different pairs of circles, where one depicts current self and another – future self. In each pair, circles overlay to a different extent. Research participants have to choose which pair represent the best their feelings of connection to future self. Firstly, research showed the link between a bigger level of perceived future self-continuity and a better financial situation of the participants. Later, Hershfield et al. conducted more elaborated studies on this topic. Questions about different personal traits at the current moment and in the future were used to measure perceived similarity with the future self. Finally, it was found that people with a bigger overlap between current and future selves at one time point have better life satisfaction and well-being 10 years later. (Ersner-Hershfield et al. 2009; Reiff & Quoidbach 2020.)

# 2.1.2 Different approaches to personal futures

Researchers utilise different methods to examine the perspectives and expectations of different people regarding their personal futures. Among wide-known research, David Hicks (1996), Rubin (1998; 2000; 2013), and Rubin & Linturi (2001) use images of the future research method to explore how young people see both global and personal futures. Nurmi (1989a; 1989b; 1989c; 1991; 2005) and Kasurinen (1999) approach personal future expectations of young people by focusing on future orientation technique. Verne Wheelwright (2005) developed his own framework to help individuals navigate their own futures.

Some earlier studies (Toffler 1974; Johnson 1987) shows that young people tend to have more positive images of their personal future than images of global and national issues. However, Hicks (1996) argues that this dissonance was dispelled later on, and both personal and global futures were considered uncertain as the young people's attitudes and expectations about the future "reflect the sociopolitical concerns of the time". Rubin's research (1998; 2000) explains this dissonance in the following way: young people imagine personal futures based on hopes, dreams, and aspirations allocating less attention to how exactly it can be achieved, while national and global futures are seen through the prism of concerns and threats consistently presented by different media channels. Professors of psychology Pronin & Ross (2006) also state that positive attributes such as aspirations and hopes are more perceptible than probable obstacles on the way when thinking about the personal futures.

Future orientation is utilised by individuals to navigate the personal futures – the concept has been examined by both futures studies researchers and psychologists. Future orientation acts as an element that stimulates human beings to act in a specific way and make certain choices. In psychology, it is seen as a cognitive-motivational system. (Trommsdorff 1983.) Seginer (2009, 3–5) describes future orientation as "individuals' tendency to engage in future thinking". Future orientation highlights a personal part in influencing the future. It is a key part of behaviour – the desired images of the future define a subjective approach to orient in the future and construct the desired outcome. (Nuttin & Lens 1985, according to Ahvenharju et al. 2018.) Future orientation plays an important role in individuals' development throughout life stages and transitions between them (Nurmi 2005).

Future orientation has a lot in common with images of the future – both include thinking about the futures and pondering individual expectations. Hideg and Nováky (2010) state that future orientation can be described by four main elements: attempts to reduce uncertainty, actions to get into desired future, pondering the futures, and own expectations, while Nurmi (1991) highlights three main parts of the future orientation: motivation, planning, and evaluation.

Markus and Nurius (1986) present a possible selves concept which has many similarities with images of the future and represents a psychological perspective on personal images of the future. Possible selves consist of plans, dreams, hopes, and fears of individuals concerning their personal futures. Moreover, they examine how these elements and personal expectations influence motivation, the behaviour of people, and perception of a current situation.

Futurist Verne Wheelwright states that government and organisations extensively benefit from futures research methods, and individuals should have the access, too. Figure 4 shows six key personal domains in life, identified by Wheelwright, that should be considered when pondering own futures: activities, finances, health, housing, social, and transportation as well as more detailed sub-forces of the key domains. He primarily utilises scenario development and strategic planning to facilitate navigation in an individual's futures. (Wheelwright 2005; 2009.)

#### **Activities**

School, training, self-improvement, work or career, religion, sports, hobbies, travel.

#### **Finances**

Income, expense, assets, liabilities, investments, risks, insurance.

# Health

Health status, conditions or diseases, medications, diet and exercise, medical care, personal care.

## Housing

Home, care facility, community, nation, region, climate.

#### Social

Family, friends, co-workers, community, advisors, organizations, communication.

# **Transportation**

Mobility, personal transport, car, public, special, long distance.

Figure 4. Six personal domains include the primary forces and some sub-forces in life (Wheelwright 2009)

Wheelwright's method starts with personal research including past events and present situations of an individual as well as personal values and aims. After that, different life

stages, personal domains, and life events are examined. The conjunction of the above-mentioned elements allows a wider understanding of the past, present, future, and the connection between them. Verne Wheelwright highlights that people should elaborate images of the future for each life stage for the efficiency of the personal futures research process. It is important to guide students to navigate in the futures. Students have to make choices that might have a high influence on their life paths as well as the futures of the whole society, however, they are usually not provided with the tools to deal with the futures more efficiently. (Wheelwright 2005; 2009.)

Futures studies research methods are not extensively presented to the people outside of the field, making them inaccessible to the public (Glenn & Gordon 2009). An innate capacity and curiosity of human beings toward the future can be advanced by providing opportunities to participate in the activities and test different methods. Futures research methods can fill in the gap in individuals' connectedness to their future selves.

The ability to look into the future with hope, having sense of purpose and optimistic expectations is an important personal tool that gives strength to people to handle uncertainties and ongoing changes (Stoddard & Pierce 2015). These days young people are exposed to a variety of unpredicted situations in a rapidly changing environment when shifting into the future (Heggli et al 2013; Chisholm & du Bois-Reymond 1993).

Images of the future were chosen as a tool to examine how international students see their personal futures in this research as they affect decisions and choices people make. Many futurists argue that images of the future influence people's behaviour (Polak 1961; Whaley & Whaley 1986; Inayatullah 1993; Hutchinson 1996; Bell 1997; Rubin 2013). Bell (1997, 82) states that current behaviour contributes to the creation of an emergent personal futures, while images of the future are one of the "causes of the future as it becomes the present" (ibid.).

# 2.2 Images of the future

Images of the future are among futures studies' key research areas (Bell 1997). Images of the future reveal the possible ways of behaviour and probable actions of a person as well as the motivation behind that. One of the crucial reasons to study images of the future is the significance of their impact on the choices and decisions made by a person. (Rubin 2013.) Bell (1997, 82) states that the crucial fundamental research questions for futures

studies practitioners might be "What is the nature of images of the future? What are their causes and consequences?" (ibid.). Van der Helm (2009) states that images of the future are "laboratories of the possible", people can develop a variety of images and then make a comparison between them and assess the probability, preferability and own benefits.

# 2.2.1 The nature of images of the future

The yearning to know more about the trajectory of development towards the future is in human nature (Haapala 2002, according to Rubin 2013). Striving to achieve this goal, people were always trying out different tools and methods, hoping to make the events more predictable. People, in their actions, build mental models, assessing the probable future and making assumptions about it. Images of the future emerge during this process which could be both intentional and subconscious by nature. People are creating elaborated hypotheses on their beliefs about the current situation, its backward as well as supposed progression in the future. Based on this information, future image is deducted. (Rubin 2013.)

Interesting, that one's images of the future can be inconsistent, illogical, and irrational in some elements (Rubin 1998, 2000, 2013; Hicks 1996). Images of the future of different actors can comprehend totally contradictory parts. This might be the case with personal as well as social and institutional images of the future. Reciprocal communication and tension between the images are a part of everyday life. Even though societal commonly accepted images of the future and individual images of its actors are related to each other, a variety of groups and institutions create an environment for developing contradictory elements based on their own background, perceptions, and motives. This tension might cause both positive and negative consequences by navigating society towards innovations and prosperity or diminishing balance and legality. (Rubin 2013.)

One more interesting point about images of the future is that they can remain latent and indistinct and, consequently, never be questioned. Some hidden images of the future that are generally perceived as truth, but not even formulated well, can impact the actions of people, although it does not have grounds for that. (Rubin 2000, 74–75.)

Within the futures studies domain, images of the future can be compared with visions and scenarios. The main aim of the vision is to outline a clear direction for changes, providing a unique idealised future, while the nature of images of the future is exploratory and

highlights the possibility of alternative futures. In addition to exploration, images of the future give an opportunity to analyse a specific future. However, images and visions had often been exploited interchangeably by the futurists because the definitions were overlapping. The same characteristic shared by images and visions is that they both describe a specific future and, as a consequence, can sometimes look the same. (van der Helm 2009; Beers et al. 2010.) Considering scenarios and images of the future, the main difference is that scenarios are sequential sets of events that represent different possible development trajectories in the future (Godet 1994; Kahn & Wiener 1967) while images of the future emphasise a particular point in the future for analysis and exploration. Nevertheless, both scenarios and images of the future highlight the possibility of alternative futures. The similarity can be also found in Polak's (1961, 46) statement that images of the future of a person depend on the reflections on the following question: "What really dominates the future, and how is the domination accomplished?" The second part of the question shows that images of the future are related to backcasting in some way. Backcasting is a method in futures studies representing an action plan created when a desirable future is identified (Robinson 1982).

## 2.2.2 Influence and importance of images of the future

Frederik L. Polak first developed an image of the future concept. Polak (1961) examines a wide historical timeframe by exploring the rise and fall of different cultures and the contribution of images of the future to that. He argues that future capabilities and successfulness of the country could be projected from current thoughts of society, as previously existing images of the future and ideas influenced historical events. He found a connection between positive images of the future and achievements of the society. Working on images of the future opens hidden possibilities for development with big potential, which means it is essential to raise awareness about the part a person plays in building the future. However, Polak's approach was criticised by some scholars, for example, he does not consider thoroughly the formation and contradictory images of the future, approaches the concept broadly and simplistically (Morgan 2002), and ignores some hidden assumptions (Boulding 1962, 193).

To some extent, the perceived probability of the images of the future's materialisation guides people's behaviour both in the present and the future (Whaley & Whaley 1986, 4). In addition to decision-making and actions, images of the future influence human

motivation, implying in the best-case scenario, the motivation leads to the most favourable choices between the options, while in the worst case, they decrease the ability of a person to empower their own life, thereby increasing alienation. Personal perception of anticipated events and changes plays a role in defining the current mindset of a person and, as a consequence, enhances or diminishes the decision-making process and actions related to that. (Inayatullah 1993, 235–253; Bell 1997, 82.)

To identify how exactly images of the future impact the behaviour and actions of humans and their influence on the futures, the analysis of images of the future content is conducted. Content data can be obtained in different ways, including literature review from a variety of sources, governmental action plans, legislation as well as interviews and observation of different actors. In order to prosperously manage their own life, humans should consider and evaluate the possible consequences of current actions in the future. (Bell 1997, 82.)

Hutchinson (1996) states that unpleasant events in the past and present produce more negative images of the future, which might become an endless loop of negative trends. He argues that it can lead to perceiving "fatalistic fallacies ... as destiny", which is a danger of low awareness level concerning alternative futures and the scope of what is considered possible. According to Inayatullah (1998), negative images of the future prevent successful management of the current problems in the present. Rubin (2000) also states that negative images of personal future might probably cause the corresponding position with hedonistic features at the current moment as well as injudicious actions.

Ignorance is at the foundation of the negative images of the future. More knowledgeable actors tend to hold more positive images of the future. The study of images of the future ranges from exploring its causes and content to its consequences. Bell highlights that the future is not influenced solely by images of the future, and they do not become reality as accurately as envisioned. Actions may result in unintended, unexpected outcomes as well as out of human control changes happening. (Bell 1997, 82–84.)

When discussing the importance of images of the future many scholars emphasise the concept of understanding the futures as one of the psychological human needs. Rubin (2013) states that images of the future allow a more understandable perception of the future. Tonn and MacGregor (2006) also highlight that developing alternative images of the future gives an easier understanding of the future. Bell (1998) emphasises that images

of the future influence behaviour and choices, regardless of whether they are conscious or not, meaning it is important to understand the images of the future that people hold. Every person holds images of the future, a part of which is highly personal, and a part is the same with other people. Personal experience and happenings in life together with the surrounded environment have an influence on the formation of personal images of the future. (Rubin 2013.)

The power of images of the future is in influencing choices and decision-making. A choice can be an endeavour to prevent undesirable outcomes, or aspirations to achieve something and substitute possible negative images. (Rubin 2013.) Boulding (1995, 39) highlights that "all decisions involve choices among images of possible futures". Even though the future does not exist yet, which means people cannot be sure about any upcoming events and changes, the future exists in people's minds in the form of anticipation (Miller & Poli 2010). Pondering the future is essential for efficient life management as well as better personal coping (Rubin 2013).

Images of the future are also one of the drivers of social change. By influencing the decision-making process, they are affecting both individual and collective actions. When based on those decisions mixed with exogenous factors that are out of human control, the future becomes the reality of the present, the cycle is repeating itself taking into consideration gained experience. (Bell & Mau 1971, 6–8; Bell 1997, 82–86.) Anita Rubin (2000, 71) also argues that differences between the images of the future of the individuals and the policymakers can lead to misunderstandings in society. It is one of the reasons to explore the images of the future held by different groups of people while creating a strategy for further development. (ibid.)

# 2.2.3 The formation process of images of the future

Figure 5 shows the process of construction and the main elements of the images of the future as well as the relationships between them. The main elements are general knowledge, identity, and social knowledge. General knowledge includes the knowledge concerning surrounded environment. Structural knowledge refers to that acquainted through formal education, pragmatic knowledge implies how a person is used to handle information, while constructive is the general perception of the scope of possible and probable. Social knowledge is collected from the social environment and the experience of other people. One of the main aspects of it is morality and the concept of respecting

other living beings on the planet and the boundaries of other society members. It includes hidden beliefs and assumptions, expectations of the society, generally accepted world views and values. (Rubin & Linturi 2001.) However, Masini (1993, 6) argues that fears and aspirations do not necessarily comply with the possessed knowledge and can even contravene it.

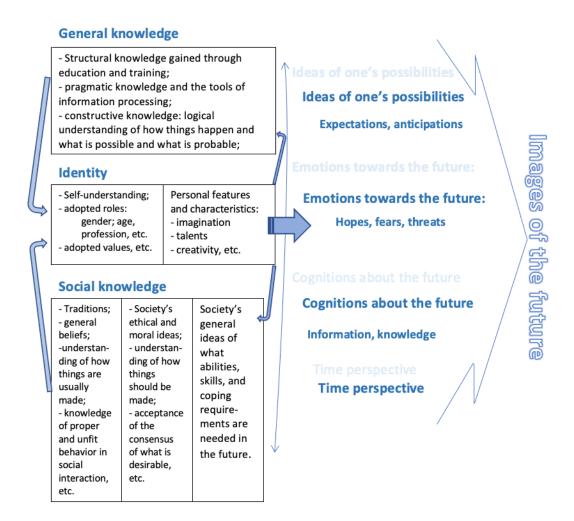


Figure 5. The formation of the personal image of the future (Rubin & Linturi 2001)

General and social knowledge together affect the last main element – identity. At the same time, identity is reflected in the perception of general and social knowledge. Identity includes adopted roles such as age, gender, profession, family status as well as personality, own skills, traits, and talents. (Rubin & Linturi 2001.) Fortunato & Furey (2011) argue that such personal qualities as open-mindedness, ability to identify emerging opportunities, resilience and flexibility, optimistic mindset, and creative problem-solving skills influence the formation process of an image of the future. Based on the above-describes three elements of the images of the future, a person develops the perspectives of their own possibilities and time, expectations, hopes, fears and dreams, and information

about the future. The outcome of merging the elements and their influence are personal images of the future. (Rubin & Linturi 2001.)

Bell (1997, 83) argues that cultural, social, psychological, economic, and political aspects play a role in the formation of images of the future. It is highlighted that past experience is widely used in the formation of the images of the future. (Polak 1961, 45–46; Bell & Mau 1971, 13; Bell 1997, 83) However, even in the same time period, social and cultural situations, people tend to have different perceptions and images of the same past events (Bell 1997, 88). Edward Tiryakian (1966, 7) describes the relationships between past, present, and the future as "The past and the future are not separate entities but are very much part of the present".

# 3 Research design

This chapter demonstrates the details of the methodology of this study. A qualitative participatory technique was utilised to find out more about international students' points of view. Participatory futures research methods are introduced. Then, the chosen research method - future camp - is described. Next, the details of the way data were collected are presented. The end of the chapter introduces the analysis approach used in this research.

To acquire more detailed information about the motives, feelings, and knowledge of people, qualitative research techniques are used. The main difference from the quantitative approach is the nature of the data which is non-numerical or has not been quantified (Saunders 2016, 724). Thus, a researcher analyses subjective opinions within a research context. Qualitative data is not standardised, but interactive and naturalistic. Therefore, it is important not only to get participants, but also cognitive access to their thoughts by establishing a trustful atmosphere. (Saunders 2016, 166–168.)

# 3.1 Participatory futures research methods

Modern participatory research methods began to emerge in the 1960s. Among them were charrettes, Syncons (Synergetic Convergence) as well as different ways to gather data through computer technologies. Nowadays, internet significantly enhanced opportunities for public participation by facilitating communication through collaborative software. Participatory methods are used to examine possible and desirable futures by a group of people in a physical location or online. Groups can be classified as small and large: the small group includes from 1 to 100 people, while the larger group consists of more than 100 people. (Glenn 2009)

Jerome C. Glenn (2009) provides six main factors that should be considered in the design of participatory futures research:

 Success – In order to measure the successfulness of the participatory research, clear aims and expectations of the process should be set. Among desired outcomes of the event can be achieving consensus, giving recommendations to decisionmakers, educating the participants, collecting information on participants' views on some topic, producing some documents for consideration in policymaking, and making public participation a continuing process.

- 2. Future orientation People often tend to consider the past and presence before moving into pondering the futures. A facilitator should ensure that there is enough time to discuss the upcoming alternatives and the futures. A year in the future should be defined in connection to some events or goals to alleviate the process. It is a good idea to come up with creative ways to involve participants in the research with a focus on the future.
- 3. *Content* It should be defined whether one specific topic will be explored during the process or whether the intention is to examine a variety of matters involved in the research theme. The content also depends on the desired outcome of the process, whether the organisers strive to archive consensus on some issue, or plan to gather different alternatives and opinions.
- 4. *Participation* The number of participants should be specified. Depending on the research method, the process can be open to everyone, or participants can be preselected according to their area of specialisation, interest, position, and referrals. Some processes aim to bring together people that probably never have worked together prior to the research.
- 5. *Integrity* The research process should be transparent, and the direction of the research results should not be manipulated and pre-determined. The coordinator of the process should ensure that participants are not limited in their thinking, and everyone has an opportunity to share their views.
- 6. Who should decide There should be a person or a group of people to follow the organisation process and ensure the integration of all-above mentioned factors. For larger groups, the best decision is to create a steering committee consisting of people with expertise in the topic and a different range of views. (ibid.)

Participatory research methods reveal the ambitions of participants as well as general ways to achieve the desired future, however, they are less suitable for creating detailed plans. The participatory methods aim to discover possibilities for future development, hindrances to that, common desires of the public and professionals, and through that enhance decision-making and policymaking processes to make them more beneficial for everyone involved. Another aim is to educate participants by giving them an opportunity to explore a variety of alternative futures and opportunities it may bring. Glenn (2009)

distinguishes focus groups and opinion polling, charrette, Syncon, public Delphi, future search conferences, and groupware as the main larger group research methods for national or regional development. (ibid.)

Another common participatory method is futures-oriented workshops. The future workshops originated in the 1950s when Robert Jungk, an Austrian journalist and writer, initiated group meetings of citizens involved in the same issues with the purpose to cocreate proposals on desired future. The main three elements underlying the idea were participative decision-making principles of a democratic society, creative problem-solving tools, and group synergy to facilitate the process. (Vidal 2006.) Besides the future workshops in their traditional forms, Nygren (2019) distinguishes ten established partly overlapping solutions of futures-oriented participative workshops as elaborated versions, covering different aims and making emphasis on a variety of issues.

Verne Wheelwright (2009) argues that all individuals share a sufficient amount of common matters with each other, which makes it possible to discuss also personal futures together under the guidance. Moreover, discussion allows participants to come up with their personal interpretations of the futures and strategies to materialise a preferred one.

#### 3.2 Future camp

Future camp is an action-based and participatory method that can be used to collect images of the future. Another aim of the future camp events is to inspire the participants, to encourage them to ponder the futures, and reflect on their own thoughts about how life can change in the future. The future camp event aims at activating the futures thinking of the participants. They complete different exercises that allow them to ponder the futures from various perspectives, explore different opportunities through diverse methods as well as consider their own values, expectations, and choices. (Futures Guidance 2022.)

The Future Camp event in its present form was coined in 2014 by Futures Guidance, which is a part of the Finland Futures Research Centre. In the beginning, this method was developed for high school and secondary students. However, it is customisable also for older students and adults and can be adapted according to the needs of the target group. It supports the development of a wide range of skills, for example, it can reveal one's strengths, weaknesses, areas for personal development, and future opportunities. An important feature of the future camp events is a relaxing atmosphere, including a

comfortable environment, music, and possibly snacks - this environment facilitates the imagining process. Participants are instructed before the start of exercises about the idea and goal of the future camp and told how the camp works. (Futures Guidance 2022.)

The future camp concept was utilised as the main method of data collection in "Nuorten tulevaisuuskuvat 2067 (Images of the future of young people 2067)" research, which was conducted between May 2015 and November 2017 in honour of the 100th anniversary of Finland's independence. It explored young people's images of the future at the national level. According to Kettunen (2015), futures studies methods should be developed to be more democratic and citizen-oriented. This way society of the future would be able to address more efficiently the needs of individuals (ibid.) that was also the beginning point for the research project. On the other hand, it is important to encourage students to produce images of the future and give them suitable tools to facilitate the exploration process of alternative paths. Bell (1997) argues that people take responsibility for their own futures when they produce different images of the future and realise that change is possible. In modern society, the future-oriented behaviour of citizens builds the society itself in addition to personal future paths. (ibid.)

The research aims of "Images of the future of young people 2067" were to find out how young people see both national and personal futures and to encourage young people to think about today's decisions affect the futures. Being aware of young people's perspectives allows decision-makers to act in a more beneficial way for future generations according to their needs. (Heikkilä et al. 2017, 5.) 208 high school and vocational school students from different locations in Finland took a part in the future camp event within this research. After that, six different images of the future were created, presenting the main themes identified during the study. These images of the future contain information about different aspects, and they are descriptive, insightful, and realistic. A survey created based on these images of the future was sent out to more students to gather more opinions. Based on the results, seven valuable recommendations, that should be adopted for the development of society and used for future planning, were drawn as a conclusion for decision-makers.

One of the crucial reasons for choosing a future camp as a research material collection method among many other options for this study is the relaxing atmosphere it implies as it allows students to ponder their own futures without pressure. Compared to the individual interview method, where participants would have to share all personal thoughts directly with the researcher, the future camp offers written exercises where students can write statements concerning their personal futures anonymously. This way creates a safe environment for participants to think about their own futures without the need to consider the opinions of others on their personal choices and life values. In addition to written assignments, there is an opportunity for discussion where participants are encouraged to share the things, they are ready to share with others. During the discussion, participants can be inspired by other students and derive something applicable to their own life. Future camp can also act as an encouragement tool to start thinking about own futures more often by providing suitable methods and exercises as well as teaching students how to develop images of the future.

#### 3.3 Research material

Two warm-up exercise and four main exercises were designed for the future camp to collect necessary material. Out of four main exercises, two are individual and two collaborative. Three exercises are written, and one is conducted in the form of group discussion.

In the beginning, the warm-up exercise gives participants an opportunity to start thinking about the future and get into the flow with a simple exercise. It is conducted through Mentimeter software that allows engaging the audience through the code that they enter on the menti.com website on their smartphones. Participants are asked to write a few words answering the questions "What do you think of when you hear the word "future"? What is that bringing to your mind?". After that, every participant gets the *Future self-continuity scale* (see Figure 3) by Hal Ersner-Hershfield (2009), and they are asked to choose a pair of circles that displays the best their feelings about how similar and connected they are to their future selves. As it is a psychological theory, the results of this part of a warm-up exercise will not be analysed. However, it provides a visual representation of a personal future and its difference from the current moment, thus it can give a start of pondering own futures as a base for the next exercises.

The first main exercise of this future camp is "My week in 2030", where every participant is provided with an empty week schedule in a planner style. The task is to fill in the week with different activities that will be relevant for the participants in 2030. Through this exercise, it is possible to collect material concerning different aspects of the personal lives

in the future, including place of residence, what participants do for a living, everyday and weekend activities, hobbies, and social life. In the left upper corner of the schedule, there is a location box, where participants can write continent, country, or city, where they are located in 2030. On the left side, time slots are provided for easier planning, however, participants can change the time, if needed. In the right upper corner, they are provided with the things to consider based on six personal domains in life by Verne Wheelwright (2005, 109): activities, finances, health, housing, social, and transportation. Wheelwright (2009) states that providing people with personal domains guides them into the future and allows them to approach the futures from different angles easier because people tend to have difficulties imagining long-term futures. The visual form of the exercise can be found in Appendix 1.

The second exercise is "How to get there". Participants are provided with post-it notes where they write down different ways they can utilise to get into desired futures and milestones they need to achieve to get into the preferred futures. Everyone writes one way/milestone per one post-it note and put it in the middle of the table where other participants can see all post-it notes. They are encouraged to look into the ideas of others and discover new interesting ways that might be also useful for them, think about how these ways can be implemented in their lives and can be visible in their current actions or life. This assignment was based on the model of the "Future skills" exercise from the Futures Guidance workbook (Ahvenainen et al. 2017), where participants write down different skills that are relevant now or will be in the future on post-it notes, and then spread them across the table and consider what skills they already have as well as what skills they need to develop.

The third exercise is the *group discussion* where participants are encouraged to share their thoughts and reflection on the previous exercises. Firstly, "My week in 2030" is considered, not the content of the week is discussed but if the participants were focusing on probable or preferable futures while completing the assignment as well as reflections on how different or similar it is from their current lives, new things, and alternatives to the completed version. Next, the discussion changes its direction into fears and negative aspects: possible obstacles to achieving the desired future and possible challenges that await participants in 2030. After that, available services for international students as well as ways to improve the situation are discussed. If some other aspects relevant to the research arise during the discussion, it is also taken into consideration.

The fourth assignment is "My day in 2030". Participants are asked to write a short social media post if they are active users of social media or a message to a friend in case they do not usually post anything to social media. A text should describe one day in their 2030, they should consider what is happening and where, who they are with and what is different from now. In addition, they are encouraged to consider what was the best during that day, as holding positive images of the future is empowering and motivates people to achieve the desired future. This exercise was modified from the "Celebrating Independence Day in 2067" exercise where participants were instructed to write a social media update describing what they do and eat during Finland's Independence Day in 2067 as well as in what environment and with whom they spend day (Heikkilä et al. 2017, 15, 30–31).

In the end, participants are provided with the feedback form to reflect on the exercises and give feedback about organisation of the future camp. For the reflection part, the questions concern the feelings they had when thinking about their personal futures. Concerning the organisation of the workshop, they are asked for overall feedback as well as things that they like the most and the most challenging things. In addition to that, two questions about the position of international students are asked: one if there is enough support at the moment in Finland for the international students to achieve their goals, and another about how the City of Turku could provide better support in the future. The feedback form ends with an open feedback section where additional information that did not fit in any of the questions can be left if needed.

# 3.4 Collecting research material

The future camp was organised two times on Friday 18<sup>th</sup> of March and Monday 21<sup>st</sup> of March with the same content but for different participants. It was decided to organise it on two different days because this way it is possible to gather more participants. In addition to that, it is easier to manage smaller groups for a researcher in order to be able to collect and record all the necessary data and ensure that every participant has enough time to state their points of view. On both days event started at 16:00 and ended around 18:00. The typical length of the future camp is 60–90 minutes (Futures Guidance 2022). Two hours were reserved considering that 15 minutes in the beginning will be allocated for small talk, taking the snacks, and waiting for people who could arrive late. 90 minutes were reserved for future camp exercises, while the last 15 minutes were for completing

the feedback form. On both days this schedule was followed with minor differences. Even though the event was organised two times, it is referred to as future camp in singular form onwards representing a holistic research process.

To attract international degree students studying in higher education institutions in Turku, the event was advertised through different channels. Information about the events was published in the stories section on the official Instagram account of the University of Turku and sent in an e-mail newsletter to international degree students of the University of Turku. To reach Åbo Akademi students, an event was advertised to the participants of the "My Finnish career -coaching" course where students from both University of Turku and Åbo Akademi were represented. Students from Turku University of Applied Sciences were invited through personal contacts made during student volunteering in Turku and Study and Stay in Turku -event. At HUMAK and NOVIA Universities of Applied Sciences, there are currently no international degree programmes in English available on Turku campuses. The event was promoted as a Future me -workshop as the researcher should use familiar words for the participants but not professional terms because it can cause confusion among those who do not have specific knowledge in the area of research (Brunt 2017, 155-156). The first impression about a future camp is that it requires a longer commitment like a camp. It could confuse potential participants. However, the future camp concept was introduced at the beginning of the events.

Creating a relaxing atmosphere is one of the key parts of the future camp organisation process (Futures Guidance 2022). Both future camps were conducted in campus chapel space that was rented from the Student Union of the University of Turku. TYY rents it to its members for free, and different student events are usually organised on this premise, such as get-togethers, board games evenings, book clubs, and meetings of the International Council of TYY. The location was suitable for the event as it allowed to create a cosy relaxing atmosphere, serve coffee, tea and snacks, lit up candles, give participants an opportunity to sit on coaches and bean bag chairs to relax, and have unobtrusive light. During future camps, there is usually music playing to create a relaxing atmosphere – *Lo-fi* radio was chosen as it is often listened to by students for relaxation and studies nowadays. Among snacks, cookies, chocolate, nuts, and corn sticks were provided. Vegan options were offered for both coffee milk and snacks. During the future camp printed materials with exercises, colourful paper and post-it notes, pens, felt-tip

pens, markers, and text highlighters were used to enhance the creative process. Photos of the event place can be found in Appendix 2.

A total of 15 students registered for the event. A researcher sent a reminder by e-mail to every person, who has signed up, the evening before the event. However, three persons could not attend the event due to personal reasons. At the beginning of the events, participants were asked to complete the anonymous registration form. To make sure the form works well pre-testing was conducted by the research before the events. Overall, 12 people participated in the future camps: 7 on the first day and 5 on the second day, among them 6 males and 6 females. The international group consisted of students from China, Colombia, India, Pakistan, Oman, Romania, and Russia. The age of the participants varied from 21 to 31 years old. Their fields of study were the following: five students of Information and Communication Technology, among them, specialising in Smart Systems and Cryptography, as well as Internet on things and embedded systems; two students of Global Innovation Management; Cell Biology; Chemical Sciences; Education and Learning; Human Neuroscience; International Business. Eight participants study at the University of Turku, three at Åbo Akademi, and one is pursuing their degree at the Turku University of Applied Sciences.

After that, a researcher provided some crucial information about futures studies and its principles as well as the importance of being aware of different alternatives. The research topic and its aims were introduced to the participants and positive aspects of pondering own future were presented using the arguments of Verne Wheelwright (2009) that companies and governmental organisations are actively using foresight methods in their activities, but individuals do not. Future camp starts with the thought to allocate time to pondering, approaching, questioning own futures, and exploring different alternatives. Instructions were given before each exercise, participants were informed that there are no right and wrong answers, and everyone has their own unique approach to the futures, values, tastes, desires, and fears. Participants were encouraged to ask questions if there was something unclear, some people clarified the content of the tasks.

Filled printed materials were saved and later transcribed to the digital form. Group discussions were audio-recorded. Participants were informed about the recording, later analysis of its transcript by the software, and possible use of their quotes in the research results anonymously. During the group discussion, everyone shared what they wanted to

share, and listening was considered as participation, too. Thus, there was no pressure on the participants. The feedback form was filled in by the participants at the end of the event. Discussions were transcribed by the researcher after the event.

Six main factors that should be taken into account in the design of participatory futures research, according to Glenn (2009), were considered in the organisation process:

- Success To measure the success of the future camp, clear purposes were set. The
  first aim was the collection of international degree students' images of their
  personal futures in 2030 in order to understand their expectations, hopes, and fear
  as well as distinguish their needs. The second aim was to educate participants
  about the methods to approach personal futures.
- 2. Future orientation Two warm-up visual exercises were conducted at the beginning of the event to activate futures thinking. During the group discussion, the facilitator directed the discussion to the future when participants discussed presence. 2030 was defined as a year to focus on in the future. By 2030 Finland aims to triple the amount of new international students and increase their employment rate (Finnish Government 2021, 33–37). The International Programme of the University of Turku is also outlined until 2030.
- 3. *Content* The clear content of the exercises was created before the future camps in accordance with the aim to gather different alternatives, opinions, and perspectives international students have for their future. The content of every exercise is explained in more detail in the *research material* section.
- 4. Participation At least eight participants are required for a master's thesis utilising a qualitative research method, thus the aim was set to get eight participants as a minimum. Eventually, more students were interested to join which allowed the collection of more research material. The events were open to all international degree students of Turku's higher education institutions.
- 5. *Integrity* the research ethics and integrity is discussed in subchapter 3.5 *Research ethics*.

6. Who should decide – The supervisor of the thesis followed the design of the organisation process as well as reviewed the content of the exercises for the future camp.

#### 3.5 Research ethics

The research process was transparent; Participants voluntarily signed up for the future camps and were introduced to the research topic and aims before the events as well as how gathered material will be handled. The research aims were presented both verbally and in the registration form. The direction of the written assignments and group discussions were not manipulated, and every participant has an opportunity to share their views openly. The anonymity was ensured as written exercises and feedback forms did not request the names of the participants. To ensure that any data would not be lost before the analysis process, it is essential to save all the materials and audio-record the conversations (Saunders 2016, 572–576). Participants were informed about the audio recording of the group discussion as well as its analysis, and they gave their consent by participating in the discussion. Participants were also informed that the researcher can include their quotes in the study anonymously.

# 3.6 Analysis of the research material

The qualitative research method provides rich textual data. Its collecting and interpreting processes are closely interconnected, and analysis begins already during data collection. (Saunders 2016, 618–619.) A qualitative analysis should be guided by inspiration and creativity to reveal meanings (Brunt 2017, 272). Data obtained during the research should be prepared for deeper analysis.

Erlingsson & Brysiewicz (2017) state that content analysis is among the most effective analysis methods for obtaining qualitative data. Content analysis allows researchers to reflect on collected data by first familiarising themselves with the content and then revealing the most important concepts by distinguishing clear themes and categories. (ibid.) The anonymity of all participants should be preserved during the whole process.

Berg (2004, 267, 285–287) identifies the main steps that are common in different approaches to content analysis:

1. Collected data should be transcribed into written form for deeper consideration.

- 2. Research questions should be recalled identifying what the research aims to reveal, and analytical categories should be established. Saunders (2016, 572–576) also suggests making a summary of the transcribed data at this stage to highlight the main points and identify the initial relationships between themes.
- 3. A researcher should carefully read the data and establish more detailed themes and categories.
- 4. All data should be sorted according to identifies themes and categories to reveal patterns and relationships between concepts
- 5. Categorised data should be reviewed to ensure proper data partitioning and trustworthiness
- 6. Revealed patterns should be analysed (ibid.)

Firstly, data collected during future camps were preliminarily analysed by carefully reading hand-written materials and listening to the recordings of the discussions. After the events, the collected data was transcribed from audio recording and hand-written assignments to digital written form for further examination. Data was examined cautiously to answer research questions and provide a wide range of perspectives. Data were analysed in NVivo 20. Collected data from each exercise were grouped according to the identified categories and themes. The main six personal domains in life by Verne Wheelwright (2005, 109) - activities, finances, health, housing, social, and transportation - were taken as a basis for categorisation. The elements of the formation process of the images of the future (Rubin & Linturi 2001) were used as categories as well. Some subcategories were created based on the research material content.

As the data were collected after each exercise, to ensure complete anonymity the exercises of one person were unrelated to each other. This approach is usually used in future camps. To analyse the material, each participant has been given a number to refer to, for instance, *Student 1*. As exercises were unconnected, each participant got a new number in every exercise. Thus, when quotes are provided in Chapter 4, *Student 1* in one exercise and *Student 1* in another exercise are most probably different individuals.

# 4 Results

This chapter presents analysed results in accordance with the exercises. Firstly, the results of warm-up exercises are demonstrated. Secondly, data collected from the main exercises are analysed. After that, three images of the future are designed based on the results. Finally, the feedback is described. The results are accompanied by visual elements to illustrate the data.

#### 4.1 Associations related to the future

The future camp began with a simple exercise aiming to activate the futures thinking of the participants as well as identify the thoughts that are associated with the future and primarily arise in their minds. Figure 6 shows the initial associations of students revealed in this exercise. All inputs can be classified into four main categories: positive sides, negative sides, concepts, and alternatives.

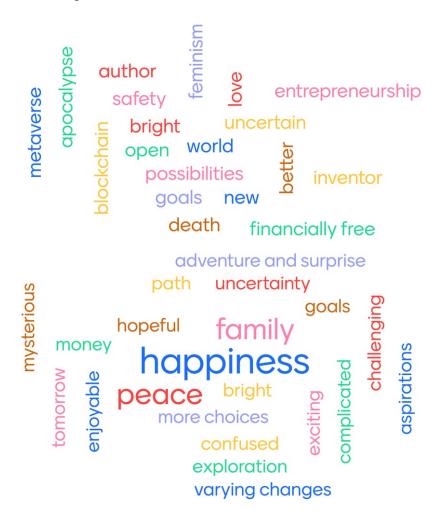


Figure 6. What the word "future" brings to the minds of international students.

Positive sides – bright, better, safety, love, financially free, adventure & surprise, aspirations, happiness, mysterious, enjoyable, peace, hopeful, exciting

Negative sides – apocalypse, uncertain, death, challenging, complicated, uncertainty, confused

Concepts – feminism, blockchain, metaverse, world, entrepreneurship, family, money, tomorrow, path

*Alternatives* – author, new, inventor, open, possibilities, goals, more choices, exploration, varying changes

Results of the exercise show that participants hold more positive associations with the future than negative. However, negative aspects also take place in different forms even though they are less often mentioned. The outcome of this exercise demonstrates that hope for the best in their personal futures prevails. According to earlier studies (Toffler 1974; Johnson 1987; Rubin 1998, 2000; Pronin & Ross 2006; Kaboli & Tapio 2018), expectations for personal futures are generally more positive than expectation for global issues. That may explain the reason for contradictory associations indicated in the words "apocalypse" and "death" being together with "bright" and "safety".

The fact that alternatives form a separate category indicates that international students have a budding base for conscious relationships with the futures and have at least an unconscious understanding of the multiplicity of the futures. Possibility of alternative futures was also considered during the discussion:

"there are more [futures] that we think of but we don't acknowledge them in our mind" – Student 9

The words "author" and "inventor" demonstrate a realisation of own abilities to influence what image of the future will materialise into a reality for a student.

# 4.2 Future Self-Continuity

The next warm-up exercise gave an opportunity to ponder current self and personal future state, as well as the degree of difference between these two identities represented by pairs of the circles. This exercise was extracted from psychological research of personal future, and therefore the meanings of the results are not analysed in this thesis made within futures studies field.

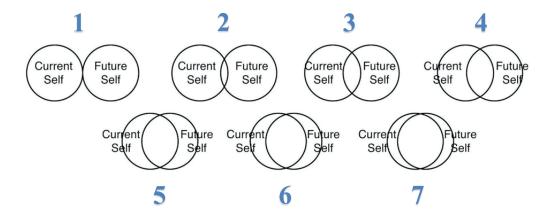


Figure 7. Self-continuity of international students

The most popular option among international students was a pair of circles  $\mathbb{N}_2$  3 shown in Figure 7. This visual representation of a current and future self felt the most suitable for five students. Four students have chosen a pair of circles  $\mathbb{N}_2$  4, while options  $\mathbb{N}_2$  2, 5, and 6 were selected each one time. These results may mean that most students expect some things of their personality to remain the same combined with the varying changes, and elimination of some components with the addition of novel elements.

#### 4.3 Week schedule in 2030

The main six personal domains in life - activities, finances, health, housing, social, and transportation (Wheelwright 2005, 109) formed a basis for categorisation in the data analysis for this sub-chapter. Therefore, the images of the future international students' week schedule in 2030 are presented according to these categories.

#### 4.3.1 Activities

#### Work

Students had versatile images of their future job and career path. Some specified the content of the work detailly adding different meetings to their schedule and allocating time for advertising, writing proposals, and responding the e-mails. Spending time with the future colleagues, for example, during coffee breaks, and maintaining friendly relationships with them were also highlighted by students.

Some would like to continue their academic studies, work as a researcher, and see themselves as school teacher or university professors who give feedback to the students in the future. Becoming an entrepreneur and running own business was also an image of the future of some students. Some creative ways to earn money such as selling own paintings or producing own podcasts were also mentioned. Additionally, working remotely from own laptop while being located in some other place was considered an attractive opportunity. Working part-time was regarded as a possible alternative to their work lives. Another alternative was to be a blogger, travel to different places, make content and earn money from that.

#### Weekend activities

Spending at least either Saturday or Sunday outside was scheduled by most students. They considered being in nature as an important aspect of their well-being and an attractive way to spend free time with family or friends. Many mentioned families in their weekend images of the future. Students see themselves going on the trips and completing tourist activities even in their own city to always discover new places and hidden attractions. Besides that, going out to eat, having a picnic, cooking a special dinner, going to a party, going to the sauna, playing board games, and going to the cinema or museum were options for spending time with close people. Working on their own business idea or own projects were also included in the weekend schedule. Some students would like to do different activities with technologies, for example, testing the robots or making videos with own drone. Also, vertical farming as a form of gardening was an activity for the weekend. Go to the church on Sunday morning was mentioned as well as planning the activities and scheduling the following week during the evening. Students would like to do something new, but they do not yet know what is going to be new for them in 2030.

#### **Hobbies**

Many allocated separate time slots for hobbies. It was highlighted that the present intensive studies restrict the opportunities for hobbies and own interests. However, the students hope to have more time in the future to return to their old hobbies and start new ones. Something they would like to keep:

"something also [of my] current hobbies, something of the routine [I] may want to keep in the future" – Student 2

"now strict study schedule does not give me an opportunity and enough time to do what I am interested in" – Student 4

Students expect that fixed working time will free up some time during the evenings and weekends to pursue their own interests. The following hobbies were scheduled: reading books, watching movies, visiting museums and art galleries, listening to music and playing musical instruments, doing sports, information technologies, writing own books, riding a bike, cooking, and dancing.

## **Self-improvement**

Students are eager to learn new skills and get to know new things in the future. They are not yet aware of what kind of things will be available to learn and try in 2030. Some see themselves as consistently improving their skills and are open to different opportunities:

"I actually wrote 'something new' because I'm pretty curious but I don't know what's there to be something new in 2030 I want to discover" – Student 7

Learning the language was mentioned in the weekly schedule of a few students, which also shows curiosity to learn new things and get to know other cultures better in the future.

"brainstorming", "inventing", "researching"

The above-mentioned verbs extracted from the week schedules show the desire to master existing skills, create something novel, and achieve new milestones.

#### 4.3.2 Finances

Finances were mostly considered through the prism of working life in the form of employment. Some incorporated their own business activities to earn money. Business activities included own firm and selling own art pieces. Work was considered an important part of life to finance the desired way of living:

"If I want to achieve all these things to be able to travel, to be able to cook what I want, I need money... so the way to earn [money] is working, here [is] no other option for me" – Student 7

Investing and crypto trading was mentioned by one student as the source of their income.

#### 4.3.3 Health

Neither health conditions, possible diseases, medical care or visits to the doctors were mentioned. However, most describe how they maintain their health in the future by mentioning something about food and diet as well as sports and exercises. The sauna was indicated as an acquired in Finland habit that some would like to keep in the future because it helps to relax. Some scheduled indicated meditation, rest, and allocated time for yourself as separate slots. The only negative health-related thing in the timetables was "hungover" on Monday morning included by one student.

#### Diet

Food was mentioned a lot in the schedules in different forms. Many see mealtime as an opportunity to socialise and spend time with close people. Some indicated family dinner almost every evening, while others go out to eat or to a bar for a local beverage with friends once or a few times a week. Someone mentioned a special dinner on Friday. Almost everyone has lunch around midday, and some have coffee breaks after that. Separate slots for cooking the meals themselves were also allocated. Some highlighted good-quality breakfast as well as healthy dinner which shows the concern for the future diet and desire to keep it balanced.

#### **Exercise**

Sports and exercises are visible in the schedules of many. Sports activities are performed both during the weekdays and weekends. Some have a consistent sports routine, while others do some exercises occasionally. Among particular sports, only swimming and yoga were indicated. Most exercises were presented as workouts or visits to a gym. Outdoor sports activities such as walking outside, spending active time in the park, or recreational trips to the natural sites were also popular.

#### 4.3.4 Housing

Different typical household duties were presented in the schedules of students including grocery shopping, cooking, washing the dishes, and cleaning the house. The type of home was not discussed much, yet the living in a nice apartment was mentioned with a special highlight on spacious kitchen and sauna. In addition to that, one person emphasised the bathtub, which is not common for apartments in Finland. Someone also considered having an equipped workplace as own studio for work at home as an important feature of the housing, while for another tiny townhouse was a future housing image. One person sees their future house to be powered by renewable sources of energy such as wind and solar systems.

#### Location

Seven have outlined Finland as their location in 2030, and one of them even specified "UTU or ICT city". During the conversation, it was discussed that being located in Finland can help them to achieve the work-life balance they strive for. It was stated that it would not be possible in many other countries and students appreciate the opportunity of balanced working life in Finland. The climate and weather conditions were mentioned as negative sides of being located in Finland. Two students wrote that they are located in EU. Singapore and China were mentioned each once. Another one sees themselves as location independent. One wrote that they can be possibly located on Mars.

#### 4.3.5 Social

#### **Family**

Even though starting a family is not a big dream for young people nowadays as it was before (Rubin 2000). Spending time with the family and doing different activities together were highlighted in many schedules of students. A variety of common activities included going for a walk with the family, playing board games, going to the cinema, having a family dinner together, playing with the children and reading for them, helping the children with the homework, and having a date with a spouse. Different responsibilities concerning family life such as bringing and collecting the kids from kindergarten or school were mentioned. Visiting parents of the participants was also included in the schedules of some.

#### **Friends**

According to the schedules, friends were also considered an important part of participants' living in the future. However, the time spent with the friends was less than family time and the joint activities were less diverse. Mostly, just meetings or gatherings with the friends were highlighted without a specific place or agenda of the meeting.

#### **Community**

The future social community of international students mostly consists of family and friends. However, meeting new people and networking with them were also considered. Building fulfilling relationships with future colleagues and maintaining a harmonious atmosphere at work was emphasised.

### 4.3.6 Transportation

Even though the transportation matter was among the list of things to consider when doing the week schedule exercise, it almost was not mentioned in any of the schedules. One person mentioned riding a bike as a leisure activity, while another one saw themselves driving, flying, or taking a boat to their weekend trip destination. As it was not discussed in the schedules, it remained unclear what the participants see as their main transportation method and whether they go on foot, by bike, by public transport, by private car, or something else. Many also included trips to some nature place during the weekend, however, they did not mention how they would reach the place in question.

# 4.4 What is important in the day in 2030?

The most emphasised thing in the messages describing the day in 2030 were participants' achievements at work: they have completed an interesting project, presented an innovative proposal, got a promotion, performed great at the job, achieved a milestone, sold a painting, or their students enjoyed the conducted class. It is interesting that two students outlined that they have finished writing the book. One student specified the day of the week as Saturday while others did not define the day. However, the days of other participants looked like weekdays because the work was mentioned a lot.

A social element of the day - time with the family, interaction with the colleagues, meeting with the friends - was mentioned by half of the participants. Some of these social contacts were also related to the above-mentioned work achievements of the day as they were described as:

- "...celebration [of a completed project] with the best friends at a nice place"
- Student 3

"a lot of people from the company congratulated me" – Student 5

Though, time with the family was not related to the work matters.

Food was also identified as an important part of the day in the future. It was mentioned differently as having breakfast or dinner with the family, light dinner in the evening, inviting friends for dinner, discovering a new place for lunch, lunch made by mother, cappuccino at a cafe, trying a new recipe or achieving a new milestone in cooking:

"I finally cooked the best momo's [a type of dumpling originally from Tibet]" – Student 7

Activities in the nature were also popular among participants in their days, including a morning walk before work, a walk in the forest with the family despite being tired after work, or just a nice walk outside:

"We were happy to have a nice walk into the nearby forest even though we are tired" – Student 8

Good weather conditions with sun shining outside were also highlighted by two people.

Some participants allocated special time during the day for own hobbies and sports – yoga outside before work, going to the gym or sauna, and watching anime. Improving skills and learning new things, such as composing music, teaching a pet some tricks, and learning a language as well as concepts of diversity and innovation were mentioned as parts of the days.

The continuous ethical dilemma of technologies was mentioned in one of the days as privacy problems when using search engines. Location was mentioned only in two texts: one stated that they are located on the beautiful island of Crete in Greece and tomorrow is heading to Portugal, while the other is going to Spain next week with the family. One more stated that they managed to book tickets for the holiday without defining a destination. At the end of the day, they rest, have a calm evening, one is exhausted, while another one is tired but satisfied that they have spent quality time with the family.

# 4.5 Formation of the images of the future of international students

According to Rubin & Linturi (2001), the images of the future are primarily constructed from general knowledge, identity, and social knowledge (see Fig. 5). The formation processes of the images of the future are considered in order to identify the underlying factors and motives that influence students' thoughts and mindsets.

### Social knowledge

The research shows that students mainly hope for beneficial circumstances for themselves in the future. At the same time, they have concerns about the position of immigrants in Finland and worries concerning labour market competition. As previous research (Toffler 1974; Johnson 1987; Rubin 1998, 2000; Pronin & Ross 2006; Kaboli & Tapio 2018)

proves, images of the personal future are constructed based on hope and own desires while global issues are perceived from a threatful point of view. In this case, the contradiction may be influenced by social knowledge since different beliefs about the labour market, Finnish companies, and their level of internationalisation were mentioned in the discussion. The Finnish language was a point of attention, and the underlying idea behind that is the society's conception of a need to learn the local language to be able to integrate more efficiently and become successful in the foreign country. The social knowledge of these factors affects the cognition about the future, yet the students believe their general knowledge acquired through high-quality education in the host country can help to achieve their own aims.

#### Values

Work-life balance appeared to be attractive to the participants of the research. Participants value their own free time, possibilities for versatile self-development, health, private life, and own happiness. During the discussion, some mentioned the high level of pressure, big workload, and stressful work/study conditions in their home countries. Finland often appears in the news as the happiest country in the world. It may have an influence on images of the future and expectation that life satisfaction will be determined by well-being and good work-life balance.

#### **Identity**

The most mentioned adopted roles were a partner (or wife/husband), friend, worker, and pet owner. Some students can already identify themselves in terms of the profession such as researcher, teacher, or podcast-maker while some put just "work" in their schedules without specifying their title, nature of work, or content of their daily responsibilities. The reason for this may be the lack of self-understanding and that these students do not yet have a clear plan of what steps they are going to take after graduation and did not find their career aspirations. Consequently, it is related also to the ideas of one's possibilities as it may be challenging to adopt a professional role in a less familiar environment. Lack of social knowledge, including how things should be made concerning different aspects of working and social life, can affect the construction of professional identity. Some highlight that they would like to do more skilful studies, participate in different projects, get valuable work experience to improve an understanding of the working culture, and

network with people. These aspirations show the desire to find their own professional identity.

# Time-perspective

Many participants found it challenging to imagine their future ten years ahead. It was mentioned that this activity requires a special preparation:

"I think it's hard to engage with your future like this the first time." – Student 11

The cultural perception of time and tendencies to deal with the future affect the formation processes of the images of the future. For example, it was discussed that patience is one of society's values in China, society expects its members to keep up with the rapid changes, but pondering the future for ten years ahead is not typical.

### 4.6 Milestones to achieve preferable images of the future

Figure 8 shows the main milestones that have to be taken to be able to get into the preferable images of the future that were outlined in the exercise at least by two participants. First, study matters were mentioned as they have to study a lot, do it more efficiently, improve grades, graduate and get the degree, and one person mentioned getting a PhD degree. Another common milestone was related to finding a suitable job that corresponds to their degree, while one person emphasised getting a doctoral position at the university. The participants are quite pragmatic, and income is important for them. They also would like to have interesting work and do it with pleasure. Income and job satisfaction may compete with each other as one more milestone was related to financial matters and being able to finance a nice life and housing that meets their needs and desires.

Work-life balance was also stated as an important feature of the future job they will be searching for. Starting a family, getting married, and having kids were mentioned by some participants as other milestones to be able to achieve the preferable image of the future. Besides that, improvement of their emotional states and mental conditions such as relaxation, being calm, more confident and overcoming anxiety were considered milestones to accomplish. In addition to that, becoming more independent in life is seen as another thing that needs to be done. Networking, getting work experience and

certificates, as well as improving own skills related to the Finnish language and the content of the job was also emphasised by some international students.



Figure 8. Milestones to achieve preferable images of the future

# 4.7 Fears, challenges, and obstacles

# 4.7.1 Challenges in 2030

Some international students expect that in 2030 one of their possible challenges in life will be an aspiration to achieve more at their workplace, become more successful and get promoted. On the other hand, some expect challenges with time management, especially how to be able to balance efficiently between work ambitions, own hobbies and interests as well as household duties, family responsibilities and care for possible future children. This challenge contradicts the above-discussed fact that time management will be easy after graduation as a result of a specific work schedule and the absence of deadlines related to the studies. Another challenge in the images of the future was a fear to lose the goal, not being able to follow the planned path and achieve desired outcomes. Some students questioned in the discussion how they should act if they cannot be the projected future version of themselves:

"I am afraid what if you couldn't be the future you [and if you cannot achieve what you want], how do you compromise with yourself?" – Student 2

One more fear in the images of the future was concerning the declining health as with age people have less energy and various health problems may arise. One person also pointed out the fact that they will need a change of environment in the future to be able to work efficiently and be inspired.

#### 4.7.2 Obstacles

Many possible obstacles that may prevent the participants from achieving the desired image of the future relate to the integration into society because of the cultural differences and overall complexity of the process. International students see experiencing university life for them as problematic and requiring a lot of effort. It may cause further difficulties as a result of narrow networks made during the studies, lack of cultural knowledge and understanding of societal functioning. Getting to know local Finnish students and making Finnish friends are also seen as a challenge on the way to the future:

"When you come here you hear "they are [Finns] shy and not talkative, but if you look around, you can see that they are in their community talking quite loudly... just not so close to you"—Student 9

Another obstacle to the materialisation of the images of the future is the Finnish language. Even though it is an obvious obstacle, it was discussed a lot during the future camp and some undisclosed matters were considered. Students are concerned that even social media accounts of some higher education institutions do not have any content in English (Instagram accounts of Turku University of Applied Sciences and Åbo Akademi were mentioned as examples). As a result, it is more challenging for students to be involved in the student life, get to know the recent happenings in their own university, and feel like a part of the University community:

"Why the university cannot do it... I think that's a barrier for me ... you always have international students in the university as well, I feel that all activities that they organise for the students are for Finnish people" – Student 7

"Even though you can use automatic translation on Instagram, if they have the translation [of information in English] already there, you feel like you are welcome but if it is only in Finnish, you feel it is all for Finns" – Student 2

One more obstacle, that students are worried about, is getting a job that corresponds to their degrees. The hidden job market was mentioned as a concern that many jobs are not even published in Finland. The networks that are made during the studies for their degrees are crucial in the opportunity to get access to the information. As a consequence, an employment matter is influenced by the above-described obstacle to integration into society and getting to know local people. The ways to apply for jobs and recruitment processes differ around the world. LinkedIn as a tool for job search was discussed: at least in China, Columbia, and Russia it is not used, while in Finland it is a popular website where online presence is beneficial for the job search. A variety of matters related to tax systems, employee's rights, and working culture are different in every country and lack of knowledge on these topics were considered an obstacle in the way to getting successful in working life. Participants were mostly not aware of the available support services in Turku and Finland. However, a few people completed the course "My Finnish Career -coaching" offered by the University of Turku and Åbo Akademi to international talents and regarded it as a useful experience consisting of valuable information. Because of difficulties in employment, students see financial issues as a possible obstacle for them.

The next obstacle that was identified by the participants is skills to manage own life efficiently such as time management and purposefulness. The problem of procrastination was highlighted. Some students were worried about how to combine all their interests, and responsibilities and be able to follow their own goals even when the challenges arise.

External unforeseeable factors were described as the next obstacle. Participants discussed the pandemic as a situation that no one expected but it made a huge influence on everyone's lives and changed the plans of many people. Similar problems may affect if the desired images of the future can materialise.

An additional obstacle is finding a social circle to get peer support, maintain the existing friendships, and find a partner. As usually international students live alone while their families are in their home countries, this obstacle is one of the most crucial as it shapes their social life. It was mentioned that the family and friends in the home country do not understand the worries of a person who moved abroad as they do not have similar experience and cannot relate to the existing problems. The lack of social contacts and close people in another country may result in loneliness and lack of support.

Cultural differences were seen as a possible obstacle, too. Stereotypes in different cultures of what is expected from the person after graduation can limit the perspective and outline the path. It may result in the limited scope of what events and developments a person considers as possible in own life and, as a consequence, affect how the images of the future are formed. As specified by Whaley and Whaley (1986, 4), Inayatullah (1993, 235–253), and Bell (1997, 82), personal perception of what is considered probable in the image of the future influences people's behaviour and decision-making in the present and the future.

# 4.8 Three images of the future

Based on the analysed material, three generalised images of the future were designed. Figures 9, 10, and 11 present images of the future in the form of weekly schedules. Each image of the future is also shortly described in about 10 sentences. Presented images of the future are made up of different elements, including work, social life, hobbies, weekdays, and weekend activities.

# 4.8.1 A typical week of a full-time employee

I work full-time at the office in Finland. Occasionally, I work also remotely. My work consists of meetings with colleagues, checking e-mails and doing a variety of other tasks. I hope to get promoted soon as I work hard, I am involved in different projects and always come up with new ideas. On Fridays, we have a special dinner at work and do some common leisure activities with our colleagues to strengthen our company's work culture. My morning usually starts with yoga or my morning routine. During the weekends, I like to wake up a little later. My hobby is swimming - I visit the swimming pool three times a week. Besides work and swimming, I spend a lot of time with the family. During the weekend, we go to the cinema and visit national parks and nice nature places. Being in nature supports my well-being and mental state.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
08:00	Yoga	Morning routine	Yoga	Morning routine	Morning routine	Sleeping	Sleeping
10:00	Start of work	Work meeting with colleagues	Work from home	Checking e-mail	Work	Brunch	Go on a
12:00	Lunch	Lunch	Lunch	Lunch	Special lunch at work	Go to the	nature trip with
14:00	Checking e-	Work	Work from	Work	Playing outdoor games with colleagues	cinema with the family	the family
16:00				Laundry, cleaning	Shopping	Taking a nap	
18:00	Buying groceries		Reading a book		Listen to music	Meet	Cooking dinner
20:00	Swimming	Time for the family	Swimming	Time for the family	Swimming	friends	Planning the next week
22:00	Me time		Me time	- Tunning	Scrolling through social media	Evening routine	Sleeping
24:00	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping		

Figure 9. Image of the future - full-time employee

#### 4.8.2 Researcher's week

I work as a researcher in Turku. My work includes writing, researching, meetings with the research group, teaching, and assessing students' assignments among other things. My scientific work requires novelty and creativity yet implies a high degree of uncertainty due to expected results. A few times a week I have to pick up my children from kindergarten. I also walk a dog in the morning or evening. I have two hobbies: cooking and learning foreign languages. I really like to try new recipes and cook something special for my family. I value time with my family, and we try to have as many family dinners as our schedules allow. I attend foreign language classes two times a week. During the weekends, I like to spend time outside with my family, and we also like to play board games in the evenings. Sometimes I spend time with my friends, and we go to the sauna together.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
08:00	Meeting with colleagues	Work out	Walking the dog	Teaching	Walking the dog	Work out	Rest
10:00	Research	Teaching	Teaching		Research	Househol	
12:00	Lunch	Lunch	Lunch	Lunch	Lunch	d duties	Eating
14:00	Research				R		out
16:00	Picking up children from the kinder- garten	Assessing students' assignments	Writing	Conducting a research workshop	E S E A R C	Having a picnic outside	Rest
18:00	Baking	Attending a foreign language class	Picking up children from the kindergarten	Attending a foreign language class	Trying a new recipe		Going to the
20:00	Walking	Grocery	Dinner with	Dinner with			sauna
	the dog	shopping	the family	the family	Date with		with
22:00	Preparing for sleep	Preparing for sleep	Preparing for sleep	Walking the dog	a spouse	Playing board games	friends
24:00	Going to bed	Going to bed	Going to bed	Going to bed	Going to bed	Going to bed	Going to bed

Figure 10. Image of the future - researcher

#### 4.8.3 A week of a writer and podcast-maker

I am a writer, and my book has just been published. Besides writing, I create a podcast where I invite interesting guests. I tend to write during the daytime, while I spend my evenings brainstorming new ideas and inventing new formats. My hobby is gardening, especially, vertical farming. I cook the food from my garden. In my free time, I like to relax, meditate, visit art galleries, and watch different movies – it facilitates my creativity and helps to reboot my energy that I need inspiration. During the weekends, I can occasionally meet my friends. I like travelling – next week I am going to Portugal. I can work remotely, and I like to be location independent.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
08:00	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping
10:00	Listen to podcast	Listen to music	Stretching	Writing	Writing	Prepare for the day	Visiting
12:00	Lunch	Lunch	Lunch			Home spa	parents
14:00	Writing	Advertisi	ng a podcast	Lunch	Lunch	Home spa	
16:00	Planning a podcast	Inviting guests to the podcast	Recording a podcast	Editing a podcast	Household activities	Vertical farming	Spending time in the nature with friends
18:00	Cooking food from	Business meeting			Cooking food from	Visiting an art gallery	Vertical farming
20:00	own garden	Dinner	Writing	Going to	own garden	Relaxation	Meditation
22:00	Researching	Inventing		the bar	Watching	Watching movies	Watching movies
24:00	Watching movies	Sleeping	Brainstorming	Sleeping	movies	Reading a book	Sleeping

Figure 11. Image of the future - writer & podcast-maker

#### 4.9 Feedback

Most of the participants felt positive emotions, such as happiness, calmness, confidence, and hope, when thinking about their personal futures. However, a few had negative feelings about the future being scary, uncertain, and hard:

"Feelings of uncertainty. Like I am lost" – Student 3

"It was a great experience. Something that I don't do often. I feel a mixture of hope and uncertainty, fear and anxiety when I think about the future." – Student 5

Interesting that despite negative emotions caused by thinking about the future, the participant still enjoyed the experience.

For another participant, the consistency of their own schedule was surprising:

"Was surprising to see my current schedule quite similar to what I want to have in 2030, except for some minor things like starting a family and having family time." – Student 6

Some participants pointed out that thinking about the futures motivates them, and visualisation reveals a better understanding of themselves:

"Scary honestly, but thinking of future do make you work harder and makes you be more focused in your present life" – Student 8

"Though I have thought about my future, I never visualised it that way. The methods helped me discover how close I am to it." – Student 11

The participants liked the most the following things in the future camp: an opportunity to meet new people and share their thought and ideas in a discussion with people in the same situation; peer support was emphasised as a positive outcome of the future camp; visualisation of the futures in My week in 2030; and relaxing atmosphere.

"The workshop and the activities were amasing. I really enjoyed it. I like making the timetable for a day in 2030." – Student 5

Imagining the long-term futures in detail was mostly mentioned as a challenging part of the event.

Concerning the position of international students in Finland, some participants felt that they do not get enough support here. The concerns were related to the language barrier, employment opportunities, social integration, and wellbeing.

They wish for more information and services in English, integration opportunities, options to learn Finnish, more international companies to enhance employment opportunities, more possibilities to get to know Finnish people and recreation activities:

"I think the city and university should engage more in the wellbeing of its residents and try to support what really matters on an individual level." – Student 11

The future camp got positive feedback. It was mentioned that the event is useful and interesting, gives a possibility to think about what they want to change, explore many different possibilities, and broaden their horizons.

# 5 Discussion

# 5.1 Summary of key results

Summary of the key results is presented in accordance with the research questions of the study.

- RQ1: What kind of images of the future do international higher education students in Turku have for the year 2030?

Research results demonstrated versatile images of the future of the international higher education students in Turku. Most of the research participants see themselves being located still in Finland in 2030. Their expectations after graduation from higher education institutions are mostly positive yet with some fears. Hope for the best and anticipation of what a better life can bring are mixed with doubts and challenges on the way to that. The results show that hopefulness for the beneficial circumstances for themselves prevails in the thinking. It corresponds with the previous research (Toffler 1974; Johnson 1987; Rubin 1998, 2000; Pronin & Ross 2006; Kaboli & Tapio 2018) that states the general dominance of positive aspects in images of personal futures compared to global matters.

International students expect to already have certain achievements in their professional activities. It was clearly shown as one of the main success criteria in the imagined day in the future. Besides, social contacts are an important part of their lives: some are mostly fulfilling the social time with their own family, while others focus on friends. However, everyone had a social element in their futures. Participants would like to see themselves as emotionally stable, relaxed, and in a good mental state. The images of the future included self-development, improvement of own skills, and learning new things. The main personal challenges they see in 2030 are related to getting promoted at work, staying focused on their own goals, health, and time management.

Participants had a variety of images related to their career path. Three different images of the future were extracted from the research results showing versatile views of the futures. The first image presented a person who is a full-time employee. After work, they practise their own hobbies, do sports, and spend time mostly with the family. This image of the future prevails among the participants. The second image showed a person who is building an academic career. During the evening, they try new recipes and learn a foreign

language. The third image demonstrates a person of a creative profession – a writer – who has a more flexible work schedule not tied to specific work hours. As a side activity, they create their own podcast for social media.

International students presented a detailed description of their images of the future for 2030 including their expectations, hopes, fears, and alternatives. Analysed and categorised results can be found in Chapter 4.

- RQ2: What factors do international higher education students see as obstacles to realisation of the preferable images of the future?

International students emphasised the following factors and circumstances as obstacles that can hinder the achievement of their preferable futures: inability to experience Finnish student life to the full extent, narrow networks in Finland, lack of cultural knowledge and understanding of societal functioning, limited information in English, insufficient knowledge of Finnish language, financial issues, high competitiveness in the Finnish labour market, hidden job market, time management, black swan events, establishing personal social contacts, cultural differences, and health issues.

Many of the above-mentioned hindrances were identified in the earlier studies (Wu, 2015; An and Chiang, 2015; Korhonen 2015; Iwara et al. 2017; Juusola et al. 2021) as obstacles to the socio-cultural integration of international students in a foreign country. Especially a lack of information available in English as well as limited communication with local students was emphasised by Juusola et al. (2021, 15–16) among the obstacles to the integration of higher education students into Finnish society. Differences in academic cultures of the home country and Finland as well as discrimination (Juusola et al. (2021, 15–16) were not mentioned as obstacles in the future camp, yet the overall differences in the societal functioning and culture were identified as a possible problem.

The researcher presented the findings of the master's thesis to some employees of the Finnish National Agency of Education, mostly from International Higher Education Cooperation Unit. It was discussed that some of the obstacles are not exclusively related to international students but are likely to be also shared by Finnish students, for instance, high competitiveness in the Finnish labour market, time management, black swan events, and establishing personal social contacts.

# 5.2 Recommendations for the City of Turku and HEIs

# 5.2.1 Provide futures guidance to international students

There is a need to provide futures guidance to international students. It is important to broaden the perspectives of students and provide them with the tools to deal with the future as well as to develop future-oriented thinking. International students come from different cultures and a variety of backgrounds. Every culture has its own assumptions about the future and what it should look like. It was discussed during the future camp that in some cultures it is not common at all to think about the futures. Cultural stereotypes and norms may narrow down the range of possibilities and affect students' life expectations and images of the future. The need for more events like future camp was even mentioned during the discussion:

"it would be good if there is some kind of guidance to young people not only to just develop the career but to be free in their minds to follow their dreams" – Student 12

The perception of what is possible in own life affects what a person can choose from -"all decisions involve choices among images of possible futures (Boulding 1995, 39)". The materialisation probability of a certain image of the future affects the behaviour of a person also in the present (Whaley and Whaley 1986, 4). As a consequence of that, if a student does not consider some possibilities, it affects the direction of the efforts in the present. Especially, being an international student in a foreign country may limit the understanding of own abilities due to the lack of local language, cultural, and social knowledge. It is crucial to provide the possibility to see the different alternatives and a variety of possible futures. Earlier research (Juusola et al. 2021, 24) also confirms that international degree students have less confidence in their competitiveness in the job market than Finnish students. Visualisation of the future through the future camp exercises helps to imagine different alternatives, organise their own thought in one place, and motivates students to achieve their goals. The feedback also showed that international students especially liked to discuss the issues with other students in the same situation and get peer support through that. It is important to provide more possibilities for such interactions.

# 5.2.2 Social life is a key to integration into society

During the discussions, it was mentioned a lot that it is hard for international students to experience student life in Finland. International students feel separated from other students. There could have been more activities organised for international students. Having experience being an Executive Board member in TYY, I observed the functioning of student organisations and the established order of student life in Finland. The social life of Finnish students is organised by student organisations that provide a continuous sequence of different activities and events in Finnish. There are some events targeted at international students but only a few.

For instance, a future camp participants expressed concern about the lack of communication with other students even within their own faculty:

"in our faculty [Turku School of Economics] for example there are only two Master's [programmes – Futures Studies & Global Innovation Management] in English but we don't even know all the other group" – Student 7

Erasmus Student Network organises activities for international exchange students. International Students of Turku Universities ISTU ry organised activities for students until 2019 however it is not active anymore. Now there is no organisation targeted at the international degree students. The possible reasons for that may include lack of knowledge of how student organisations work, financial issues (as international students do not get any financial support in Finland, they may need to work a lot to be able to pay for their life in Finland), language barrier, new culture, and integration stress. In addition to that, there is a restricted study time pressure and tuition fee burden that may be as high as € 12,000 for non-EU/EEA students. All these factors prevent international students from active participation in the organisation of activities and social life through student organisations.

Korhonen (2015) states that during higher education studies, social integration has one of the crucials roles. It affects the future career integration as well as students' competitiveness in the Finnish labour market (ibid.). More events and communication both with other international students and local Finnish students are needed. The city, HEIs, or Student Unions should pay special attention to international student organisations and take more responsibility to ensure their continuous functioning.

An earlier study (Niemi et al. 2021, 68) also shows that cities should focus on social and cultural programmes among other elements to retain international talents. However, in the discussion with representatives of the Finnish National Agency of Education, it was mentioned that special arrangements for international students can separate them from Finnish students even more. Hence, this should be done carefully, and this factor should be taken into account when planning programmes for foreign students.

# 5.2.3 Importance of work-life balance

Work-life balance was especially appreciated by international students. It was mentioned as one of the factors that can enable the materialisation of the desired images of the future. Work-life balance in the future workplace was considered a competitive advantage of the Finnish working environment compared to other countries. Work-life balance together with ethical and responsible organisational behaviour are also highlighted as important talent retention elements (Niemi et al. 2021, 69). Therefore, organisations should be encouraged to keep and develop work-life balance practices. The sports services, recreational possibilities, and leisure activities provided by the city also influence the level of well-being of its citizens.

Another important point concerns the mental health of international students. Seeking mental health support is not common in some cultures. Integration into a foreign society and a new university environment is a complex process that may cause a lot of stress and anxiety. International students should be provided with more detailed information about mental health and available support opportunities as well as encouraged to contact support services if needed.

# 5.3 Limitations of the study and ideas for further research

No major issues were involved in the research process. Nevertheless, some minor problems can be identified. It was the first time a researcher organised a future camp-event and collected images of the future. According to Glenn (2009), it is important that participants focus on the future during the discussion. The facilitator should direct the discussion to the future when research participants start to discuss the present. That process went more smoothly during the second future camp -event as the researcher was more aware of how the discussion in the future camp proceeds. It was not an obstacle to

collecting research material, but the situation was stressful for the researcher as the students tried to discuss the present and the past.

The number of research participants was very good for master's thesis work, however, it was small to represent all international students in Finland. Research results cannot be generalised as it is out of the scope of the nature of master's theses. In the future, similar research can be done with a bigger number of participants from different cities in Finland. The results obtained require continuous updating of information, since under the influence of economic and political processes taking place both in Finland and abroad, not only policies to attract students from abroad can change, but also the strategies of the students themselves who come to Finland.

Images of the future of Finnish students can be examined in the same way for further research. It would be interesting to identify similarities and differences as well as compare images of the future of international and Finnish students. Another idea for further research may be to focus on one area of the personal life of students and research, for instance, images of the future of the content of their work and working environment. Furthermore, it can be researched how integration situation of particular students affect their scope of images of the future and positivity of the constructed images. More research can be conducted on the relationships between awareness of available support services and expectations after graduation as well as plans to stay in Finland.

To further research images of the future of international students more exercises in the future camp can be completed. To examine views on the future of international degree students from different perspectives *The Personal Futures Workbook* by Verne Wheelwright (2005) can be utilised. It could be also an interesting research topic to study personal futures scenarios of international students.

# 6 Conclusions

This research explored images of the future of international higher education students in Finland, their expectations, hopes, fears and alternatives. The results showed their associations related to the future, and their images of the future categorised by the main personal domains in life and underlying elements of the images of the future. Students' expectations of personal futures are mostly positive but with some worries, fears, and obstacles. For realisation of the desired images of the future, the City of Turku and HEIs should support international students in their integration way. Based on the research results, three recommendations were drawn for the planners: to provide futures guidance to international students, to enhance the social life of students, as well as their well-being.

Future camp feedback showed the need of international students to explore their own futures more. Van der Helm (2009) describes images of the future as "laboratories of the possible" that allow developing of versatile images, comparing, and assessing them in accordance to own interests, needs, and desires. Wheelwright (2009) highlights the importance of guidance of the individuals in personal futures. Rubin (2013) argues that pondering the future plays a significant role in life management and in overcoming the variety of obstacles on the life path.

Finnish Government (2021, 33–37) aims to triple the share of international degree students and 75 per cent of the graduates enter working life in Finland. To achieve this ambitious goal the efforts should be directed not only at attracting new students, but also special attention should be paid to integrating the international students into Finnish society and guiding them into their futures in Finland.

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# Appendices

# Appendix 1 "My week in 2030" exercise form

		THINGS TO	-WHAT YOU DO FOR A LIVING -SOCIAL LIFE, PERSONAL RELATIONS -HOUSEHOLD -HOBBIES -HEALTH					
LOCATION:						- HOUSING - TRANSPORTATION		
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
08:00								
10:00								
12:00								
14:00								
16:00								
18:00		***************************************						
20:00			<u> </u>					
22:00								
24:00								

# Appendix 2 Photos of the event place



