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Place attachment after COVID-19.

Case study Estonian University of Life Sciences

Master's thesis
Curriculum in Landscape Architecture

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See uuring keskendub COVID-19 pandeemia mõjule Eesti Maaülikooli töötajatele ja üliõpilastele. Artiklis käsitletakse kodukontori tegemise mõju pandeemia ajal ja seda, kuidas kodukontori elustiil on muutnud nende mõtteviisi kontorisse naasmise suunas. Peale kaugtöö ja kontoritöö kogemist on nüüd töökohal mõned muudatused, mida tuleb teha, et muuta see mugavamaks ja omaks piirkonda kuuluvustunnet. Täpse tulemuse saavutamiseks viidi läbi veebiküsitlus. Küsitlus avaldati nii töötajate kui ka üliõpilaste seas, nii et mõlemad ülikooli kasutajad saavad kommenteerida ja jagada oma ideid ülikoolikeskkonna kohta, et jõuda tulemuseni, milliseid muudatusi tuleks teha, et õppida ja töötada oleks meeldivam.

Märksõnad: COVID-19, pandemia, ülikool, personal, üliõpilane, kaugtöö, tervis, kohakinnitus.

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This study focuses on the effect of COVID-19 pandemic on the staff and students of the Estonian University of Life Sciences. The paper goes through the effect of doing home office during the pandemic time and how the home office lifestyle has changed their mindset towards going back again at the office. After experiencing remote work and office work, now some changes at the workplace need to be made to make it more comfortable and embrace the feeling of belonging to the area. To achieve accurate results, an online survey had been done. The survey was published among the staff as well as students, so both of the university users can comment and share their ideas about the university environment to lead to the result that what changes should be done to make it more pleasant to study and work.

Keywords: COVID-19, pandemic, university, staff, student, remote work, health, place attachment.

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1. INTRODUCTION

1.1. Overview

Place attachment refers to people's links to specific environments (Counted et al. 2020). How effectively a community matches a person's needs at a certain time of life or how mobile are the members of their social network are two examples of characteristics that affect place attachment. Because residents of rural areas make decisions about where to live or remain based on considerations other than proximity to services and ease of access to jobs, place attachment is usually higher in rural than in metropolitan areas. When Soviet ideology brutally imposed itself on the identities of rural people who were deeply rooted in nature and who functioned as caretakers of their land, attachment to place was destroyed in Estonia and Latvia (Storie, et al. 2019).

This study's primary goal is to find out about the effect of place attachment after COVID-19 on the staff and students at the Estonian University of Life Sciences. The main focus is on the surrounding area of the university and the campus itself, to find out what elements have the potential to encourage the users to come back to work and school after doing home office during the pandemic period. To accomplish this, an online survey was conducted among the staff and students obtain more precise about the data that needs to be focused on.

1.2. Aim of the Study

This study intends to comprehend the people's attachment to the university following the pandemic, as well as the strengths and flaws of the university environment, directly from its users, and to propose solutions to strengthen the weaknesses.

1.3. Research Questions

Regarding the study, three research questions were proposed:

• How has the pandemic affected the staff working environment?

•How place attachment can affect people's attitudes towards their working place after and before a pandemic?

• Based on the survey done, what are the best methods for enhancing the current landscape components?

1.4. Structure of the Thesis

The thesis structure is described in the sections that follow, along with a summary of each chapter's contents.

Chapter One (Introduction):
To preview and provide insight into the entire study, the introductory chapter provides a summary of each chapter and describes and summarizes the overall flow of the thesis. It also provides a summary of each chapter and expectations for the conclusion.

Chapter Two (literature review):
To understand and obtain the necessary knowledge, it is vital to read pertinent material before beginning the study. There are five sub-chapters inside the chapter "Literature Review": place attachment, the impact of COVID-19 on place attachment definition, place attachment and well-being, place satisfaction, place attachment, and remote working.

Chapter Three (Methodology):

Describes the research's methodology. In addition to the methods for gathering the study materials and how to analyse the gathered data. Also, explain the process used for the investigation. In addition to the methods used to collect the study material and analyse the data collected.

Chapter Four (Results):

The results chapter discusses the results of the methods and analysis of the data collected, it outlines the case study area, and presents the perceptions of the respondents and the proposal for the focus areas.

Chapter Five (Discussion and Conclusions):

The chapter addresses the main findings of the study and considers the relevant literature before reaching a conclusion that provides thorough answers to the research questions.

2. LITERATURE REVIEW

2.1. Place attachment definition

Generally speaking, a person's attachment to a place (place attachment) is a holistic idea that includes the interaction of affect and emotion, knowledge and trust, behaviour, and place-related behaviours. The user's attachment to the location, on the other hand, is characterised by feelings of happiness when present and regret or melancholy upon leaving. Attachment to a place can help promote a sense of well-being (Storie et al. 2019). These good and negative feelings are not merely a result of the location meeting the physical necessities of the neighborhood; they also have to do with how people perceive the location's quality (Ma et al. 2022). There are multiple definitions for that: according to one definition, it is the "links people have to particular environments." (Nisa, Bélanger, and Schumpe 2020). It is the term used to describe the feeling that people have that is closely related to a specific place. Place attachment is defined as a strong emotional connection that exists between a person and their home (Ma, et al. 2020).

Place attachment is a theory that is crucial to understanding how people and their environments interact. Although place attachment theory has been around for some time, there is disagreement among academics as to what it entails and how to evaluate it. For instance, developed the concepts of "place identity" "place reliance" and "place attachment". Place identification, local attachment, natural bond, family bond, and friendship bond are just a few of the five components (Hernandez et al. 2007).

Given that place attachment is not always rooted in a specific location, people may have many locations where they feel a sense of belonging. The affirmation that "This is what shaped me" is made up of several anchors that are intertwined with love, sadness, joy, and security: "I was developing my identity", and "It moulded me into the person I am today" (Storie, et al. 2019).

Place attachment is frequently higher in rural than in metropolitan areas because residents of rural areas make decisions about where to live or remain based on factors other than proximity to services and ease of access to jobs (Storie et al. 2019). Moreover, a person's attachment to a rural area could indicate their links to their culture or ancestry (Storie et al. 2019).

Attachment to place was broken in Estonia and Latvia when Soviet ideology violently imposed itself on the identities of rural people who were strongly rooted in nature and who served as caretakers of their land (Storie et al. 2019). Scannell and Gifford's (2017) tripartite framework of place attachment provides a solid foundation for examining the ideas and values ingrained in place attachment as well as how they are acquired. Standard operating procedures are a complicated concept that, in general, is believed to refer to any link between people and places, good or bad, strong or weak (Gokce and Chen 2021). Family relationships were essential for establishing a sense of place and building support systems (Storie et al. 2019).

Additionally, the world has changed significantly from the 1970s and the early 1980s. Place connection was found to exist despite being in a dangerous region, taking into consideration increased mobility, globalization, the growing homogeneity of locations, and the loss of their distinctive cultural qualities (Lewicka 2011). Recent publications on place attachment often talk about how people form attachments to second homes, vacation homes, recreational locations, or transient lodgings of tourists (Lewicka 2011).

It is thought that physical changes in the environment have an impact on how someone perceives a particular location (Lomas, Ayodeji, and Brown 2021). Life satisfaction, quality of life, and numerous other dimensions of well-being are positively associated when place attachment bonds are robust. Attachment to a location may be influenced by, and potentially explained by, a place's capacity to meet psychological requirements. It is well established that place attachment is correlated with the length of residence and, more broadly, with prior experience in the location (Ariccio, Lema-Blanco, and Bonaiuto 2021).

2.2. Impact of COVID-19 on the place attachment

The COVID-19 pandemic has impacted people in various ways based on location, minority status, and vulnerabilities. Everyday routines, including religious activities, have been greatly disrupted. Abandoned parks, empty arts centres, barren streets, and vacant churches highlight the significant shift in society's connection to places. Attachment issues in urban areas, neighbourhoods, jobs, universities, or places of worship can vary based on contextual and systemic factors. Others have been compelled to live in crowded communal neighbourhoods where they must deal with the pressures caused by the public health crisis daily while some people have moved purposefully to less populated areas where they have greater access to nature, others have been forced to do so (Counted et al. 2020).

Loss of autonomy, freedom of movement, and sense of place are a few of COVID-19's side effects, along with challenging existential queries concerning the nature of the supernatural (Counted 2020). Built landscapes can provide areas where individuals can engage with the natural surroundings and improve their general well-being (Majeed et al. 2020).

On the other hand, the interruption of the COVID-19 pandemic to students' educational experience may have an impact on their perception of a safe and secure environment. After the pandemic, when online classes replace in-person ones, the school no longer feels like "home." The term "place attachment," widely used in academia, explains this feeling (Hudson 2021).

2.3. Place attachment and well-being

The relationship between place attachment and well-being has been researched more frequently at the neighborhood, community, and city scales, some of these studies have concentrated on this relationship among older people in particular (Scannell and Gifford 2017). Landscapes have layers of culture and history that boost people's self-esteem and that of their communities, in addition to their immediate physical surroundings (Storie et al. 2020). When a person feels deeply connected to or has a feeling of place in their environment, they can feel a sense of belonging and well-being (Storie et al. 2020).

Empirical research shows a substantial correlation between feelings of well-being and a sense of

belonging in one's community, whereas poor environmental quality can be seen as a danger to one's quality of life (Rollero and De Piccoli 2010). If having greater emotional ties to a wider area enhances how people view society as a whole, then having stronger emotional ties to a smaller area can have both advantageous and disadvantageous impacts (Rollero and De Piccoli 2010). People's feelings of well-being can be evaluated in terms of their interactions with various components of their physical surroundings as well as how satisfied they are with their relationships with their life. For some populations, such as college students, seniors, and those suffering from mental illness, such as the mentally ill, having a positive opinion of their hometown is a reliable indicator of their well-being. Some college students may experience homelessness if the latter situation involves a geographic move since they have left the area that had previously provided them with security and identity. There are many ways to define and measure well-being, but up until the late 1990s, little focus was placed on how well a person functions socially in daily life. Due to this, Keyes (1998) developed the concept of social well-being, which is defined by people's perceptions of the calibre of their local, interpersonal, and communal interactions.

People may judge the quality of their lives based on the social element of life and such societal issues. The five components of Keyes' (1998) original conceptualization of social well-being are social integration (individuals' assessment of the quality of their relationship with society and the community), social acceptance (trusting others and having a positive view of human nature), social contribution (the sense of being an important member of society with something of value to contribute to the world), and social actualization (assessment of society's progress) (having a positive view of human nature) (the character of people) (the perception of the quality and organization of the social world).

The COVID-19 epidemic affected global public health as well as social boundaries and cohesion on a global scale. Due in large part to the restricted access to urban parks, these disruptions had an impact on both physical and emotional health. Urban parks are essential for managing microclimates, enhancing soil fertility, developing social connections, encouraging involvement, and boosting resilience against disasters. They improve both the direct and indirect quality of life. According to Addas and Maghrabi's research from 2022, people primarily go to urban parks to get away from the city and appreciate nature. Urban parks continue to have a high place attachment

value, which reflects their expanding significance, according to Addas and Maghrabi (2022). The findings by Zhang et al. (2015) reveal a stronger bond with green areas and improved mental well-being where there is availability of increasing easily accessible and functional green spaces.

People's physical and emotional health suffered significantly as a result of the lockdowns brought on by COVID-19. People were cooped up in their homes, particularly in urban areas, which was detrimental to both their physical and emotional health. The cultural ecosystem services provided by urban parks, which include sociability, recreation, education, and aesthetic value, are also essential for people's well-being. Therefore, in urban contexts, park management and infrastructural facility promotion are essential. Urban parks had a significant impact on physical and mental health, including walking, working out, and participating in sports (such as mental refreshment and relaxation). These bans and restrictions during lockdowns had a negative effect on people's health (Addas and Maghrabi 2022).

Thus, in addition to the study's findings by Addas and Maghrabi (2022) also implied that urban green spaces, such as parks, should be managed and the cultural ecosystem services they offer should be improved to improve people's quality of life and well-being. First, during the epidemic, urban parks were substantially more frequently used than they were before. Moreover, family and friends occupied the majority of their time by by spending timet in urban parks, followed by mental relaxation, time with kids (playing, traveling), and physical activity. On the other hand, during non-pandemic periods, people primarily went to urban parks to relax their brains, followed by having some alone time, exercising, and taking in the fresh air (Addas and Maghrabi 2022).

2.4. Place satisfaction

Stokols and Shumaker (1981) developed a model to explain why some individuals are more dependent on a particular location than others called "Place dependence". They contend that attachment to a place might develop when "the social and physical resources within a residential environment are consistent with the major needs of the individual. The idea of location dependency, according to Schreyer et al. (1981), explains links that are primarily dependent on actions taking place in a context, demonstrating the significance of a location in providing

circumstances that support an intended usage (Najafi and Kamal 2012). The term "place dependency" also describes how well a place can support a person's functional needs and objectives. Additionally, they said that while locals might not always be conscious of their ties to a location or contrast their standard of living with that of other communities, a place's economic viability might raise locals' awareness of that place (Albers et al. 2021).

Furthermore, a person may exhibit tenacity and refuse to leave a location that provides a means of support. Studies have demonstrated that when a location satisfies people's needs, they tend to become dependent on it and may choose to stay there even when it is in danger (Butu et al. 2018). For individuals who are threatened with neediness, it has been discovered that picturing a significant place somewhere one feels emotionally tied to can boost one's sense of self-worth, belonging, and significance (Albers et al. 2021).

The geometry and interdependencies of the various person-place structures are still being discussed, and this is also in keeping with those discussions. Two studies on place attachment and place identity in natives and non-natives conducted in Spain suggest that place attachment develops before place identification, at least in the case of non-natives. Kyle, Jun and Absher (2013) expected a different result from their research on residents of the wildland-urban interface outside of San Diego and Los Angeles. They discovered that the human-place link is organised in three separate stages, with place identity acting as a transitional step between place attachment and place reliance (Albers et al. 2021). A place that aids in goal achievement attracts people. This perspective contends that the positive emotional substance of connections comes from the accomplishment of a worthy aim. Expectations for achieving goals based on experience are included in the meanings and insights. Consequently, the following factors can influence place dependency:

1.   When looking for the best places to live, it's necessary to take into account elements like the availability of amenities, the presence of parks and other recreational areas, accessibility, diversity, and proximity. The capacity of a place to assist people in reaching their objectives is referred to as place quality. Several concepts that were connected to it, such as residential density, mixed land use, mix of dwelling types, and street network link, were also discovered and collated

by Alrobaee and Al-Kinani (2019).

2.   The continuity, accessibility, and connectivity of the street network are just a few of the physical attributes of the location that have an impact on expectations. Future cognitive experiences that are anticipated to take place somewhere and are predicated on long-term expectancies between the person and the place are referred to as place expectancy. The definition of place quality and expectations led to the following indicators being derived: the presence of open and green spaces, diversity of land use, diversity of housing types, housing/population density, accessibility, degree of network communication, multiple modes of transportation, and continuity of place over time (Alrobaee and Al-Kinani 2019).
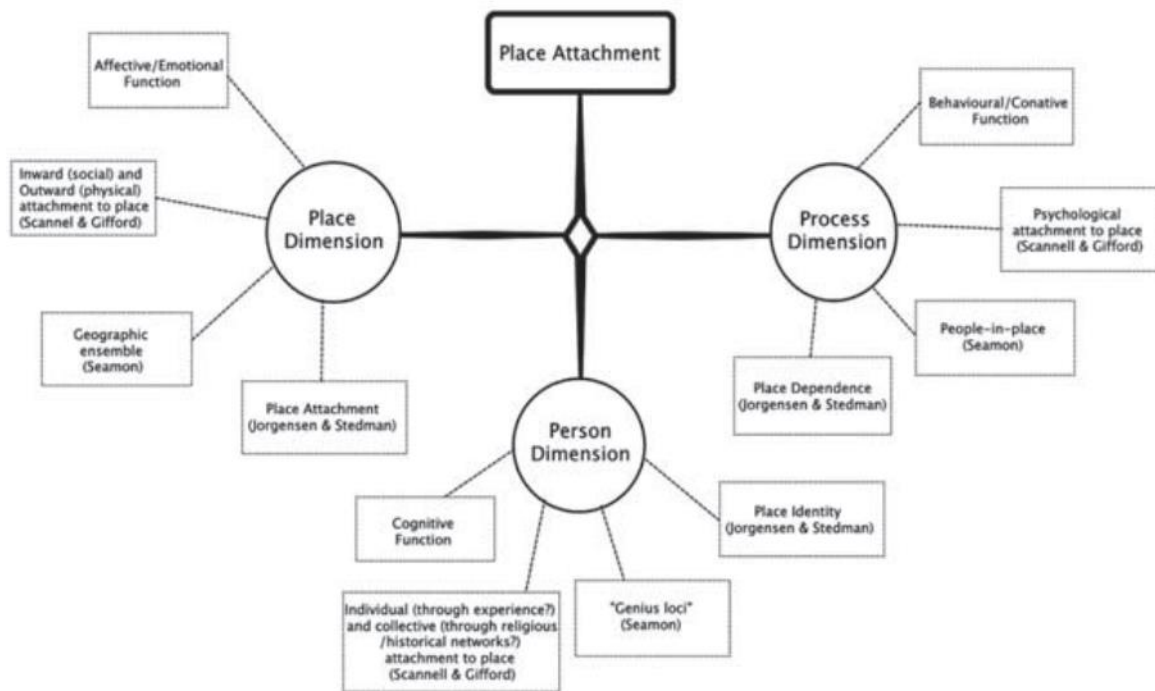
Figure 1. A description of the people, place, and relationship triad of place attachment.

(Counted 2016)

1.5. Place attachment and remote working

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People spend a significant portion of their time at work, thus both jobs and home have an impact on their well-being. Organisations suffer when workers are ill, unmotivated, or perform inadequately. Professionals can identify strategies to have less of an impact on workplace results by establishing a correlation between the clutter in remote workers' home offices and their level of job satisfaction. A person's success as an employee, as well as their home life and health, can be impacted by the quality of their work-related life. Additionally, many businesses may be reluctant to permit employees to work from home since remote-from-home workers complain about undesirable work practices (Ferrari et al. 2021).

Brenner (2004) believed that the effective sharing of knowledge within organisations hinges on the design of the work environment, treating it as a valuable resource. This approach enhances organisational efficiency and enables employees to tap into collective knowledge. Furthermore, Brenner emphasized that a work environment tailored to employee satisfaction and facilitating open exchange of ideas serves as a more effective means of motivating employees for increased productivity.

Based on the results of the study by Ferrari (2021) the workplace clutter of a particular office group as a baseline for investigating the relationship between personality factors and the behavior of remote employees. Unexpectedly, remote workers sespecially those who operate from home have a negative impact on their behavior and productivity at work. It is becoming more popular to manage the psychosocial effects of remote work, including work-life balance and technological stress. The effects of remote labor can be mitigated or made worse, and middle managers are crucial. Lack of supervision may be the cause of resistance to managing distant work. Despite this, both sexes are enthusiastic about carrying on with distant work, with women expressing this preference more strongly. There are gender differences in the importance of and involvement in remote work, especially in office and administrative tasks, where more women are working remotely (Ferrari et al. 2021).

The majority of the post-COVID-19 adjustments will have an impact on positions where employees generally collaborate on-site. The four major COVID-19 affected industries are white-collar administrative occupations, production and warehousing, retail and hospitality, and large

tourism companies. Based on the pre-COVID-19 literature on staff experiences of working from home, there are several notable differences between telecommuters and employees who are stationed at their normal job in terms of relationships, team development, and career promotion. Researchers have discovered that "female employees had the lowest levels of job satisfaction" when "organizations formally implement telecommuting but male colleagues are unable to use the program." Men have the lowest levels of job satisfaction if they are unable to telework owing to a lack of a programme (Allen et al. 2015).

On top of that, numerous studies have been conducted to investigate whether remote employment, also known as teleworking, lessens or amplifies the conflict between work and family. Working from home can help with the integration of work and family, however, Dockery and Bawa (2014) discovered that it can also result in longer work hours and conflict between work and family. Using data from a long-term survey, it has been discovered that mothers with young children who work from home experience less depression. There is, however, scant evidence that telecommuting lessens work/family friction (Allen et al. 2015). Studies on the impact of telecommuting on employee careers conducted before the pandemic revealed that telecommuters face professional repercussions since they are viewed as less devoted to their professions than those who work in a regular office setting (Ferrari et al. 2021).

3. METHODOLOGY

The approach for this study comprised several stages that were created along the process to explore and address the initially defined research questions and objectives.

Online survey: For this research an online survey method has been used for gathering data from both staff and students. A safe platform was used where all the data was secure, in this case, the information was collected on the EMÜ servers.

Survey questions: The survey contained 18 questions that start with the introduction of the thesis idea and goes on to ask questions specifying gender, age, and status (staff or student). It embraces multiple methods of enquiry such as multiple choice, short answers, and choice questions. The

survey has tried to use a narrative method of enquiry which encouraged the respondents to complete it more pleasantly.

Survey's timeline: The main deadline for data collecting had given for two weeks with an extension of one week. During this period twenty-five people from staff and students have cooperated.

Following that, the first idea of the data gathering was to set up interviews. The first trial was done with ten descriptive questions which took 10 minutes approximately to be answered, with the participant of one interviewee. As it was necessary to have at least ten interviewees to get a decent result and interviewing those numbers of people was not possible in a short amount of time, in this case doing a survey offered a good solution. Before sending the main survey out a trial version on Google Drive was tested with 5 participants. The trial version consisted of more multiple choice and short answer questions as well as the number of them with less than in the final version, eventually the final version contained more question compared to the trial version. Since the early drafts were just ideas, the trial version underwent numerous edits before the questions could be developed, then it was asked from two more teachers to have a second look at that for more corrections. The final version was done after a week of correction and testing on the EMÜ platform. The last step was to analyse data on an Excel file by illustrating the result with a graphic language.

Proposals:

The most well-liked campus locations as determined by the respondents are picked based on the survey results. They have a stronger attachment to these locations than to any other on the campus. The main design idea is to develop these locations in a way that leaves a good effect on human health, both mentally and physically based on the research results.

The focus areas are:

1. The two bridges over the pond between the main building and the sports building
2. Dendropark
3. Open area in front of the Metsamaja

Figure 2. Study area (Author, 2023)

4. RESULTS AND DISCUSSION
4.1. Map analyses
4.1.1. Campus map

The analysis demonstrates the current state of the research area. It has been divided into three zones according to the survey results. The first zone is the one that has been mentioned by only one person, the second one by two people and the last one is more than two people. The most mentioned areas were the Dendropark, the part close to the university campus (no.1), also the bridges over the pond between the main building and the sports building (no.2). The middle range is allocated to the Emajogi sidewalk, and Dendropark (no. 6). The places with lowest interest (only one person) were the green area next to Metsamaja building that consists of a small balcony (no.3), a slope behind the Metsamaja building (no.4), and the last one is the green open space in front of

the Metsamaja (no.5).

Figure 3. Campus map (Google Maps, 2023)

4.1.2. Tartu's map

As in the case of the previous map (campus map), Tartu map has embraced the same strategy to categorise and analyse the zones. The most popular areas (zones number 1 and 2) respectively Delta Centre and Tartu University Museum. Moreover, the second most popular are the University of Tartu Library and Bank of the Emma Jogi (no. 9, 10). The zones that are chosen only by only one person are mostly the public spaces that are close to the riverbank.
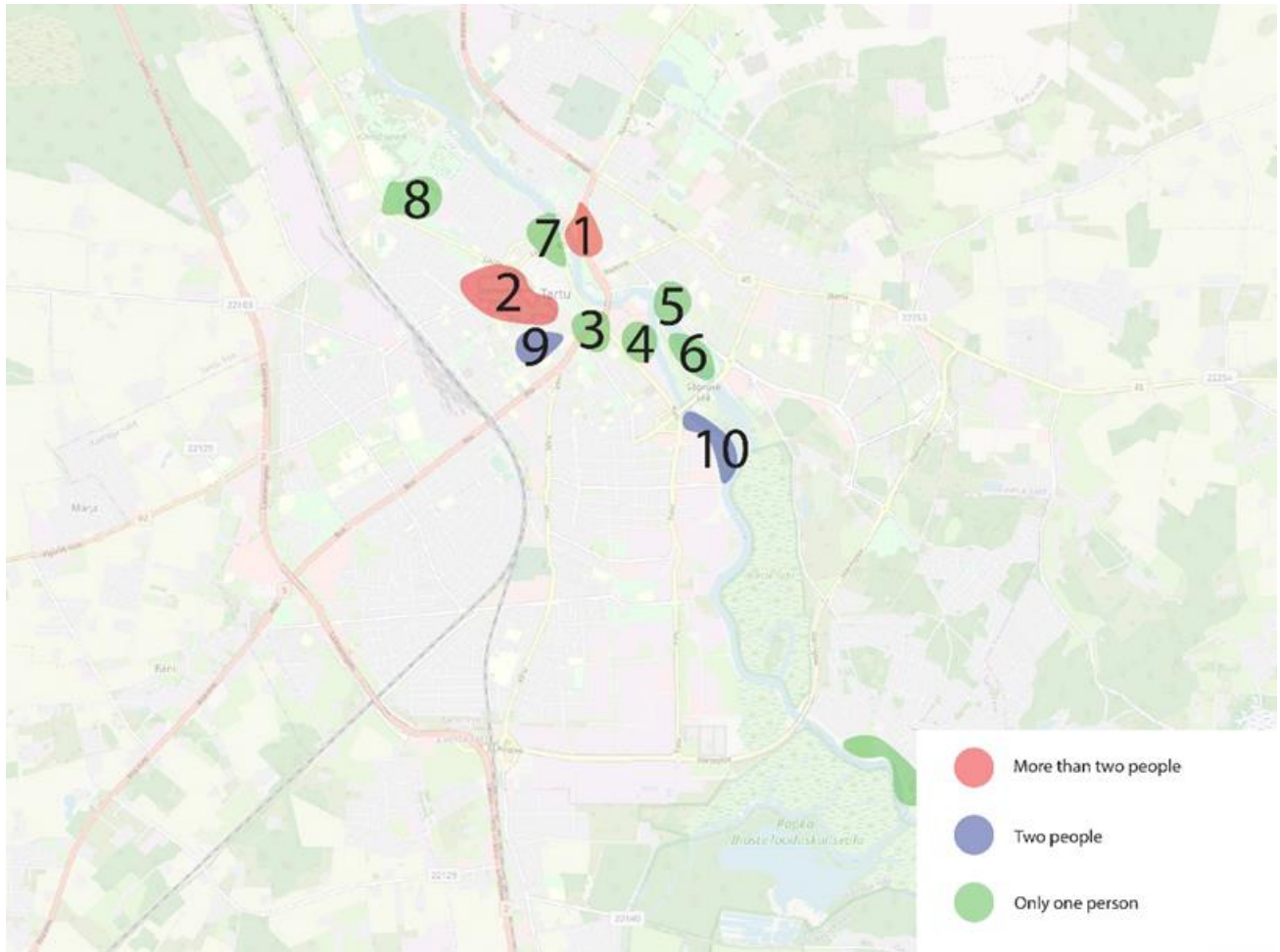
Figure 4. Tartu map (Google Maps, 2023)

4.1.3. Estonia map

The final map belongs to Estonia. Lake Peipsi (no. 1) is the most highly-rated place in the country according to the results from the survey (figure 5). Viljandi is a small city in the south with the second most selected place during the pandemic. The other places are areas that are close to water-bodies.
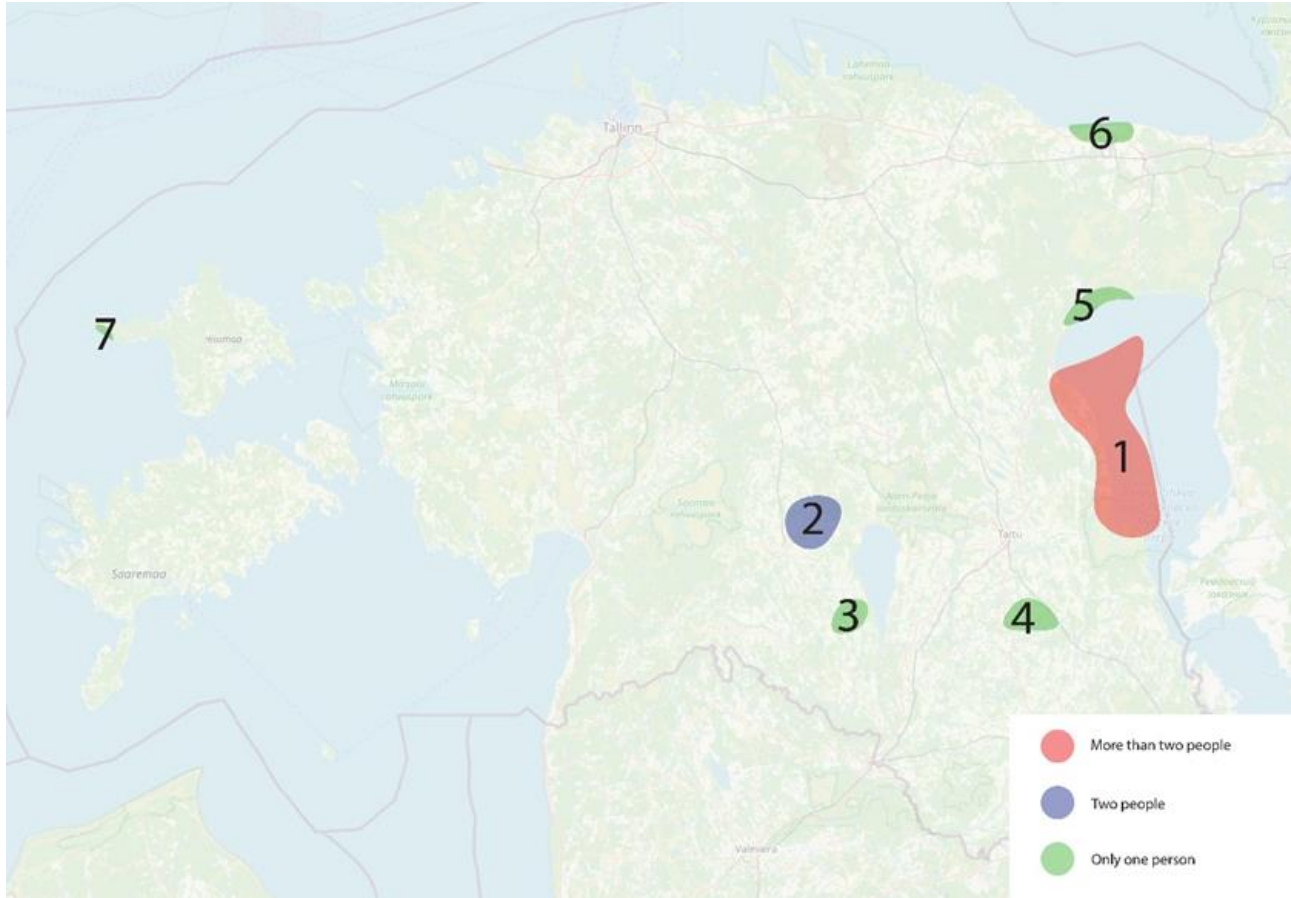
Figure 5. Estonia map (Google Maps, 2023)

Summary of the results

In conclusion, the analysis discussed in the text illustrates the current situation in this research, paying particular attention to various zones based on the findings of the survey. Based on the number of people citing particular areas, these zones are divided into categories. Within these zones, the text lists several interesting locations, including bridges, parks, walkways, and open spaces. The analysis is further expanded to include a bigger map of Tartu, where popular locations like the Delta Centre and the museum at Tartu University stand out while other public spots near the river-bank are less frequently mentioned. The paragraph concludes by mentioning the Estonian national map, which ranks Lake Peipsi as the most popular place in Estonia according to the survey's results (figure 5), followed by Viljandi and other locations near water bodies. In general, the analysis sheds light on the distribution of interests and personal preferences across various geographic areas.

4.2. Survey

For this study, data from staff and students were gathered using an online survey method. The data were gathered in a safe environment on the EMÜ servers. The survey consists of 18 questions. The first three questions collected demographic data, including gender, age, and status (staff or student), and they used multiple-choice, open-ended, and Likert-style questions. To motivate the individuals to complete the survey more enjoyably, a narrative approach to the enquiry was adopted. The primary data collection deadline was two weeks, with a two-week extension. Twenty-five members of the faculty, staff, and students collaborated in this time.
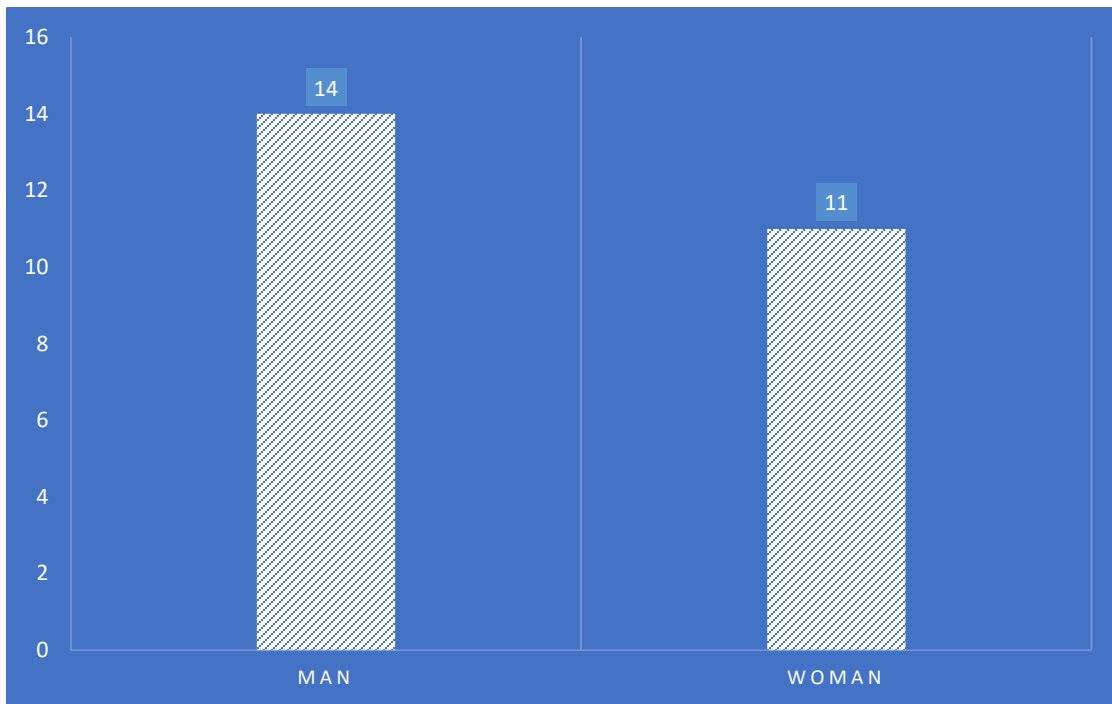
Figure 6. Question 1 –Please specify your gender (Author, 2023)

After the survey was distributed, 25 persons replied. There were eleven female participants and fourteen male. The survey was designed to gather information on staff and students as university users in order to understand their attachment to the campus area, both before and after the epidemic. It also included questions about their opinions and comments on potential improvements to the campus area.
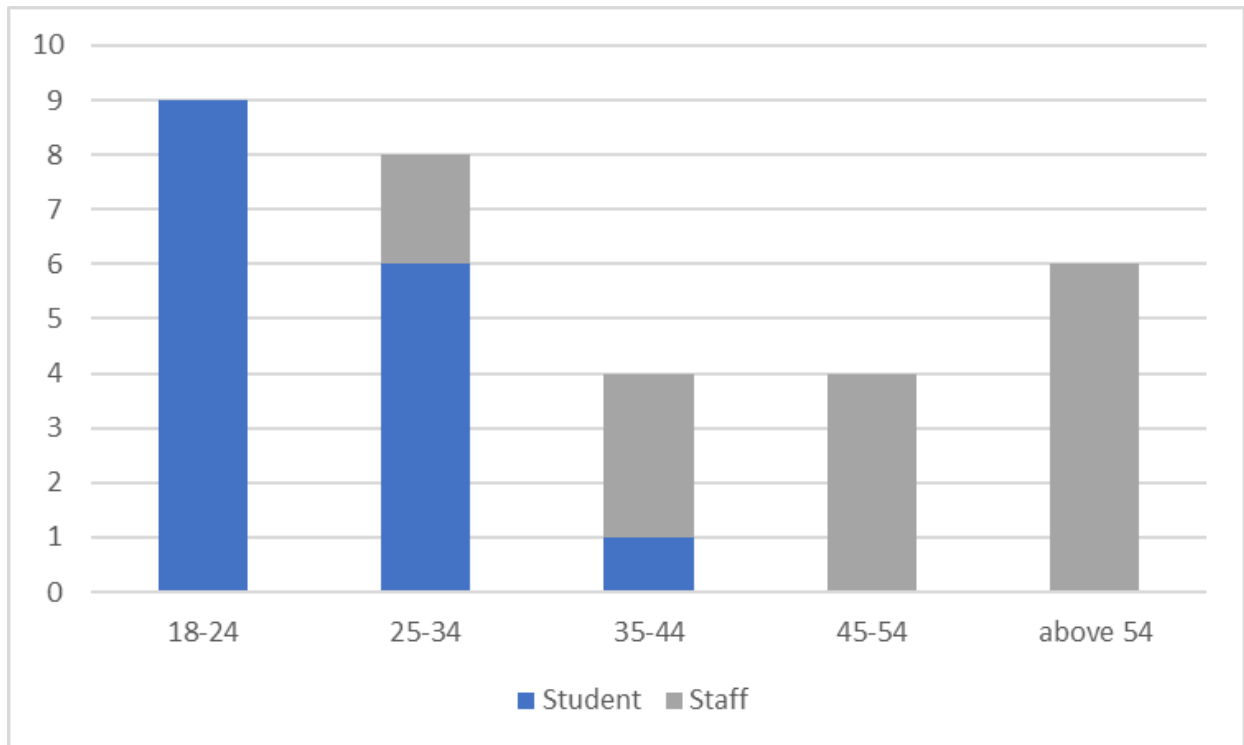
Figure 7. Question 2 – Please specify your age range (Author, 2023)

Most respondents were in the 18 to 24 age range. The group of individuals under 34 came next. The third age category included those beyond the age of 54. The lowest number was obtained from people between the ages of 35 and 54. It is important to note that, according to the data, everyone between the ages of 18 and 35 was a student, while anyone beyond the age of 35 included employees. Understanding potential age-related changes in replies or preferences within the survey data can benefit from this knowledge.
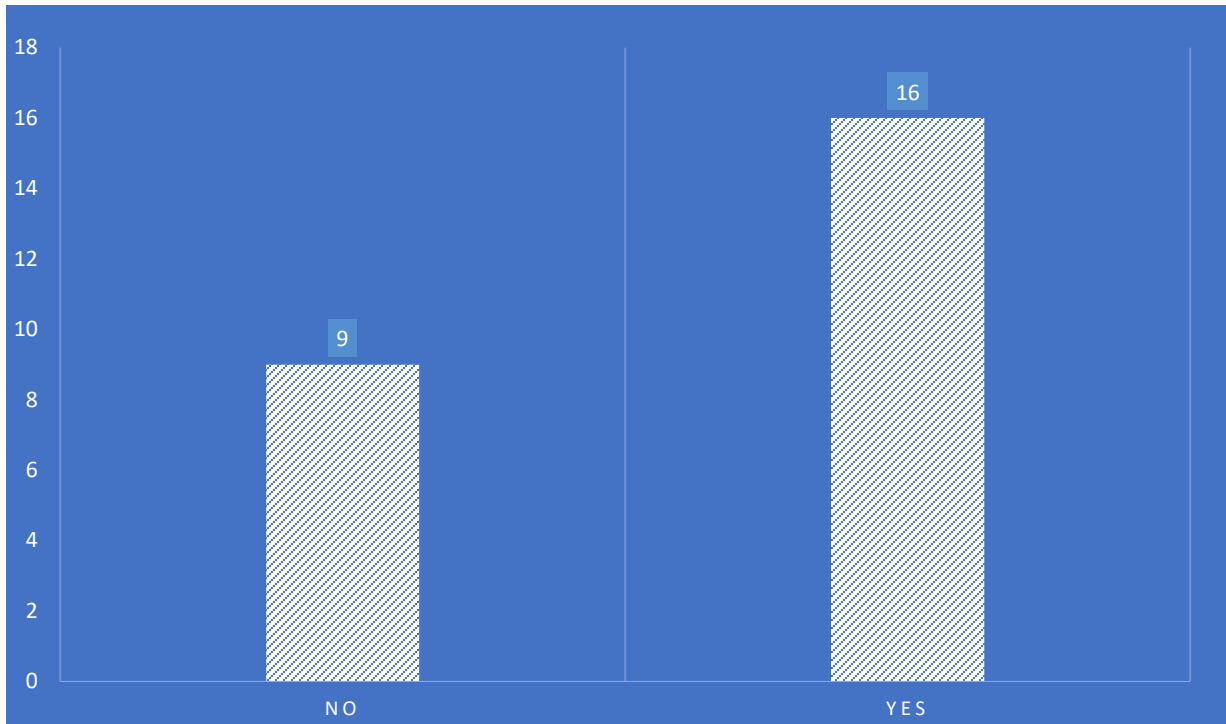
Figure 8. Question 3 – Are you native to Estonia? (Author, 2023)

This breakdown shows how the participants were divided up according to their nationality or place of origin. It shows that the majority of participants were Estonian citizens, with foreigners making up a lesser proportion of the group. The survey data may reflect a wider range of opinions and experiences as a result of the variety of nationalities.
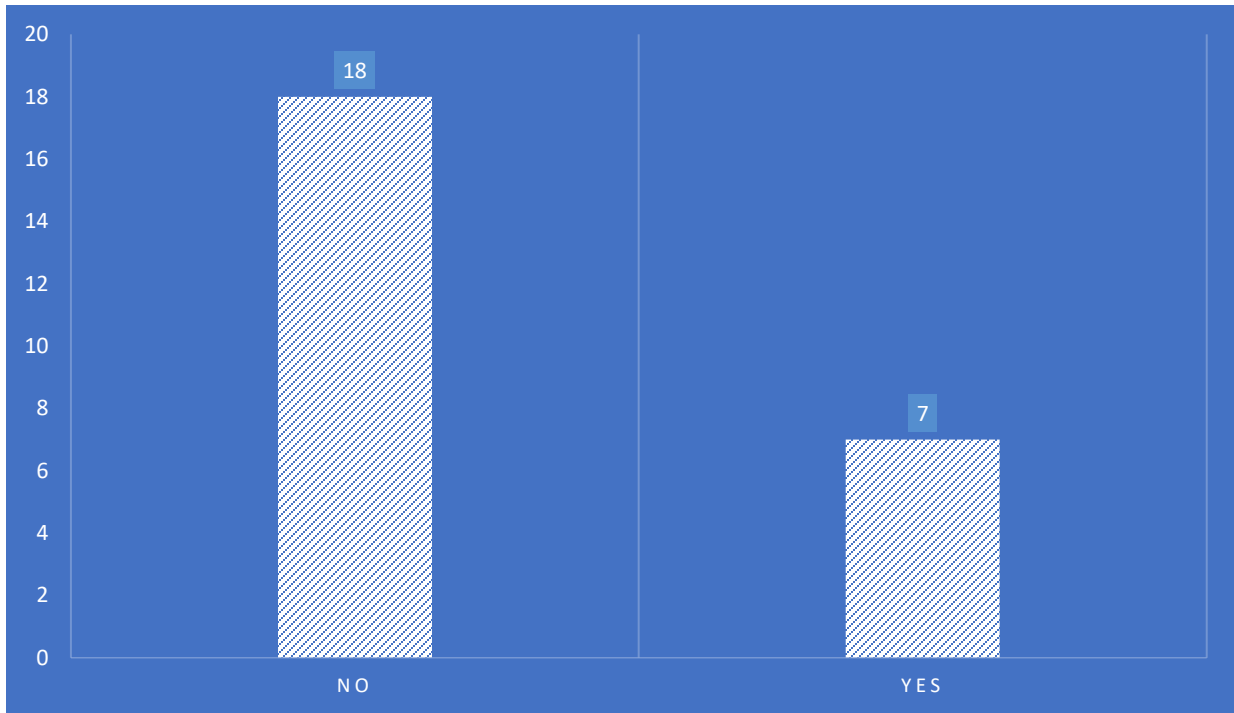
Figure 9. Question 4 – Are you native to Tartu? (Author, 2023)

Ideally, given the prior finding, it seems sense that 18 people, as opposed to the 7 locals, are non-natives of Tartu.   According to the preceding graph, that suggests 7 of the 9 individuals were from Tartu.
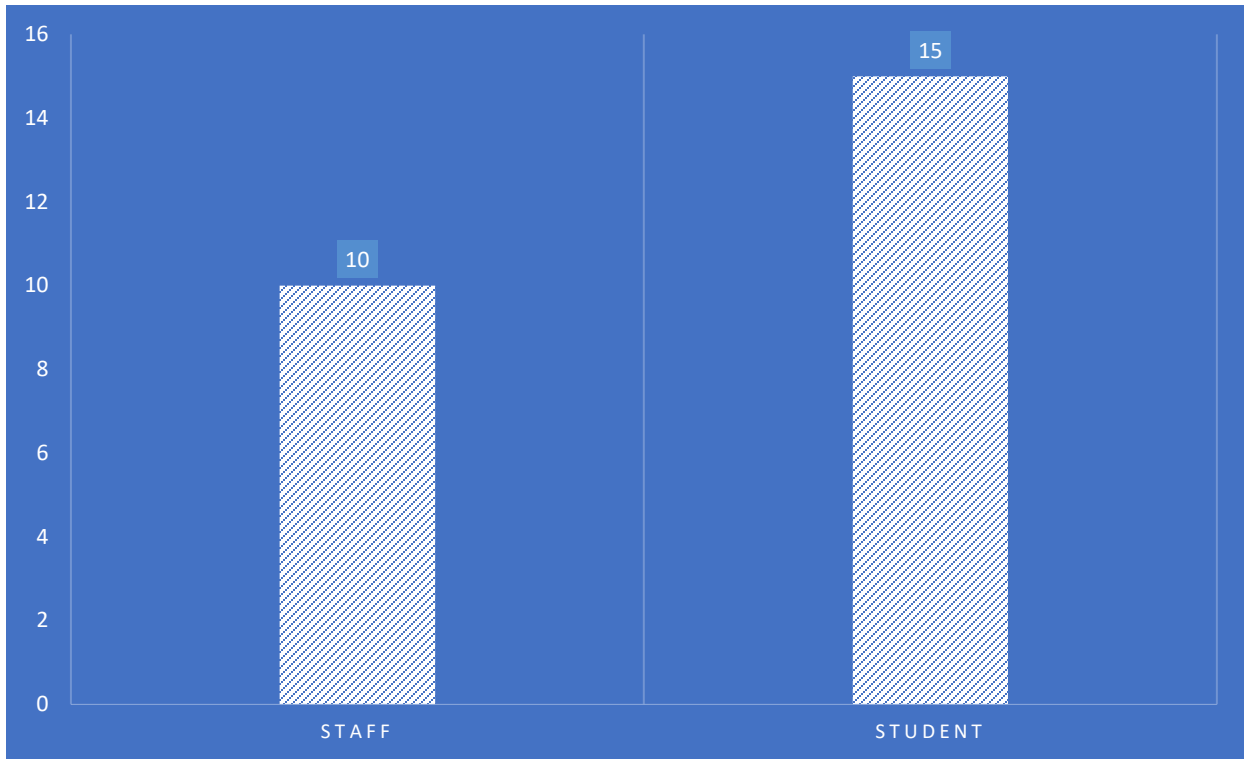
Figure 10. Question 5 – Please specify if you are a student or a staff (Author, 2023)

There were 15 students and 10 staff members who responded to the questionnaire. The presence of both staff and students shows that the demographic being polled showed a wider representation of viewpoints and experiences.

Figure 11. Question 6 – How satisfied are you with Tartu as a place to live and work? (Author, 2023)

Given that the majority of respondents reported satisfaction in some capacity, the distribution of responses shows an overall positive attitude. The similar percentage of respondents who chose "very satisfied" and "somewhat satisfied" implies that the participants in the study were generally quite content. To satisfy the requirements and expectations of Tartu residents and employees, there may be room for development or areas that require further attention, as suggested by the tiny percentage of respondents who expressed discontent or neutrality.
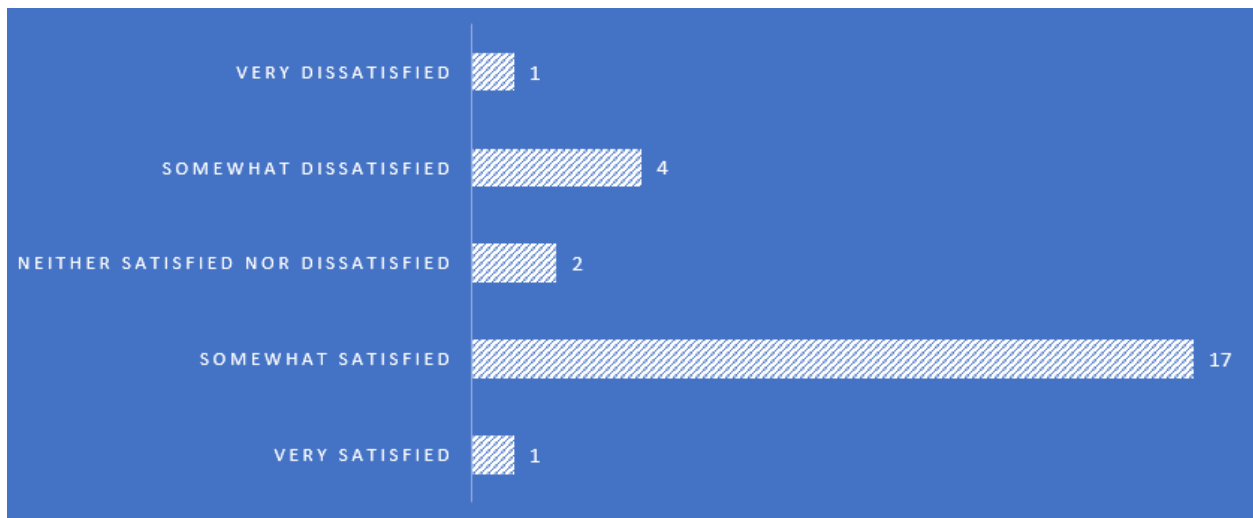
Figure 12. Question 7 – How satisfied are you with the EMU University environment? (Author, 2023)

According to the analysis, participants' opinions on the environment at EMU University were rather divided. While a sizable portion of respondents reported being content, with a mix of "very satisfied" and "somewhat satisfied" replies, there were also respondents who reported being dissatisfied to varied degrees. The presence of both "very dissatisfied" and "somewhat dissatisfied" replies indicates problems or places where the academic environment needs to be improved. The existence of respondents who do not express happiness or dissatisfaction also suggests a neutral viewpoint that may need more research or clarification.
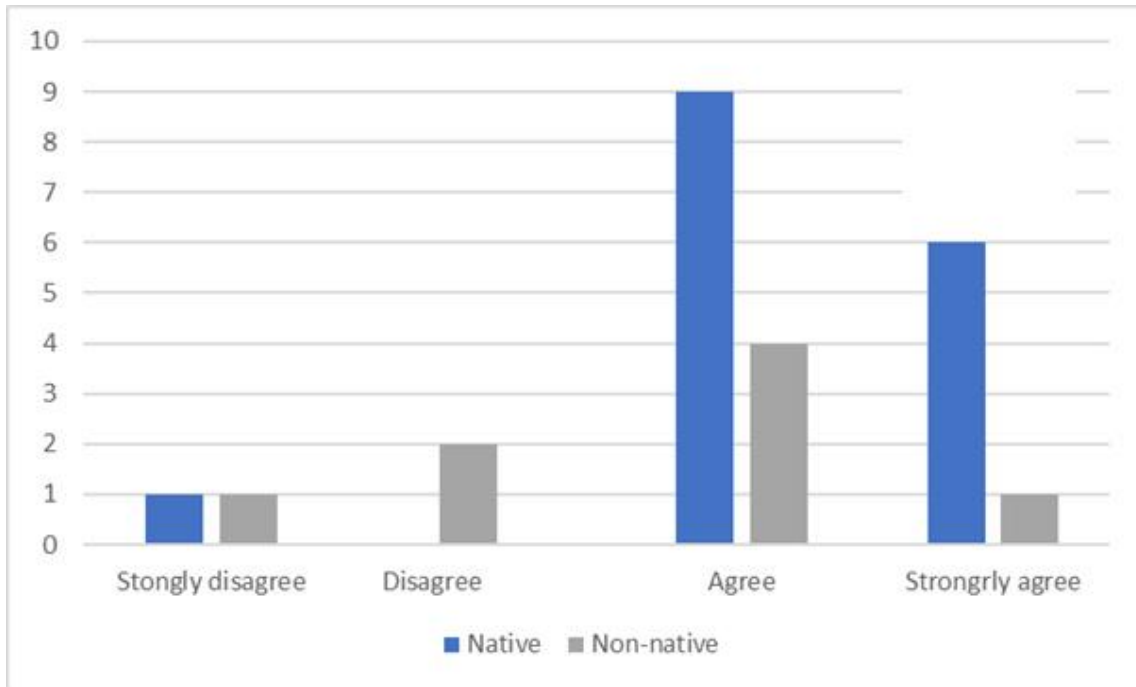
Figure 13. Question 8 – Does Tartu feel like home to you? (Author, 2023)

The analysis reveals that the participants had a wide range of ideas about what it meant to them to call Tartu home. Most people agree or strongly agree that Tartu feels like home, indicating a deep attachment and sense of belonging, but a smaller number disagree or express a lack of connection with this sentiment. The presence of people who strongly disagree and disagree suggests that Tartu does not elicit a sense of belonging for everyone. These varying answers might be impacted by things like individual experiences in Tartu, personal backgrounds, and the amount of time spent there. It might be helpful to create a more inclusive and welcoming environment for all inhabitants by comprehending these various perspectives.

Figure 14. Question 9 – To what extent do you use the same community spot at the university (for example outdoor seating area, café, riverside close to the university, green spaces on the campus, etc.) after COVID-19 that you used to do before the pandemic? (Please mention your favorite community places at the university before and after the Covid-19?) (Author, 2023)

The data show that most respondents continued to use the university's community park spaces at about the same rate they had before COVID-19. This implies some consistency in their chosen settings and routines. A lower proportion of respondents, however, indicated either an increase or reduction in their use of public spaces. This might be the result of different things, like adjustments to routines, the availability of locations, or individual preferences. Unfortunately, the presented data did not specify particular favourite community locations before and after COVID-19. Further insights into the participants' preferences and how those may have altered in reaction to the epidemic could be gained by compiling information on specific favourite locations. Overall, the analysis reveals that after the COVID-19 epidemic, certain people's usage habits persisted while others changed how they used the university's common spaces.

1. Campus: bridges over the pond between the main buildings and sports building/The city: riverside in Old Ihaste behind horse stables. /Elsewhere: town of Viljandi, Lake Peipsi coastline in Ida-Virumaa, Valaste waterfall, Paradise beach in Hiiumaa, Värska, town of Põlva.
2. The park between the main venue and Metsamaja, the river down from there. Used to be the balcony at Mõisamaja, but it's under reconstruction now
3. Toomemäe Park
4. The slope behind Metsamaja
5. The dendrogram in the EMÜ campus; the riverside, Delta building, and Tartu University library.
6. Emajogi side walk, DendroPark
7. endo-park
8. Between main the building and Metsamaja
9. the delta building platform
10. Bank of Emma Jogi
11. Toomemägi
12. Delta, around Tartu Library and the Kaubamaja area
13. Dendropark
14. Anne Kanaal
15. During the pandemic: Anywhere to be honest. Fewer people around equaled more enjoyable surroundings. After the pandemic: the same old
16. The Emajõgi riverside
17. My favourite place is near Viljandi, a city that's around 80 km from Tartu, where my home is
18. The whole river sides
19. I like the basketball/football area because it has no wind
20. Dendropark
21. behind sport building
22. Riversides with minimal man-made changes; areas with large and old trees in a public space (e.g. Tartu botanical garden, riverside)
23. laululava, Tähtvere park, Toomemägi
24. The flowering of EMU middle of the school courtyard
25. Dendropark

Table 1. Question 10 – What is your favourite landscape in the campus/ the city/ the places elsewhere during and after the pandemic? (Please mention the places) (Author, 2023)

Campus:

Bridges over the pond between the main building and the sports building.

The park between the main venue and Metsamaja (under reconstruction).

Toomemäe Park.

The slope behind Metsamaja.

DendroPark in the EMÜ campus.

Emajogi sidewalk.

Delta building platform.

Bank of Emma Jogi.

Delta, around Tartu Library and the Kaubamaja area.

Anne Kanaal.

The Emajõgi riverside.

Behind the sports building.

Dendropark.

The flowering of EMU in the middle of the school courtyard.

City:

Riverside in Old Ihaste behind horse stables.

Town of Viljandi (outside of Tartu).

Laululava, Tähtvere Park, and Toomemägi (specific locations within the city).

Elsewhere:

Lake Peipsi coastline in Ida-Virumaa.

Valaste waterfall.

Paradiisi beach in Hiiumaa.

Värska.

Town of Põlva.

Areas near Viljandi.

The study revealed a wide variety of preferred environments, both on campus and elsewhere. Favourite locations on campus include a variety of places like bridges, parks, riversides, and certain buildings. The city's favourite spots include parks, riverbank locations, and particular

landmarks. The favourite locations outside of Tartu feature scenic and seaside areas. It is important to note that participant preferences for particular landscapes differed greatly, highlighting the respondents' diverse backgrounds and passions. Overall, these favoured locations reflect the diversity of preferred landscapes in and around Tartu, exhibiting the range of natural and man-made habitats that appeal to the participants both during and after the pandemic.
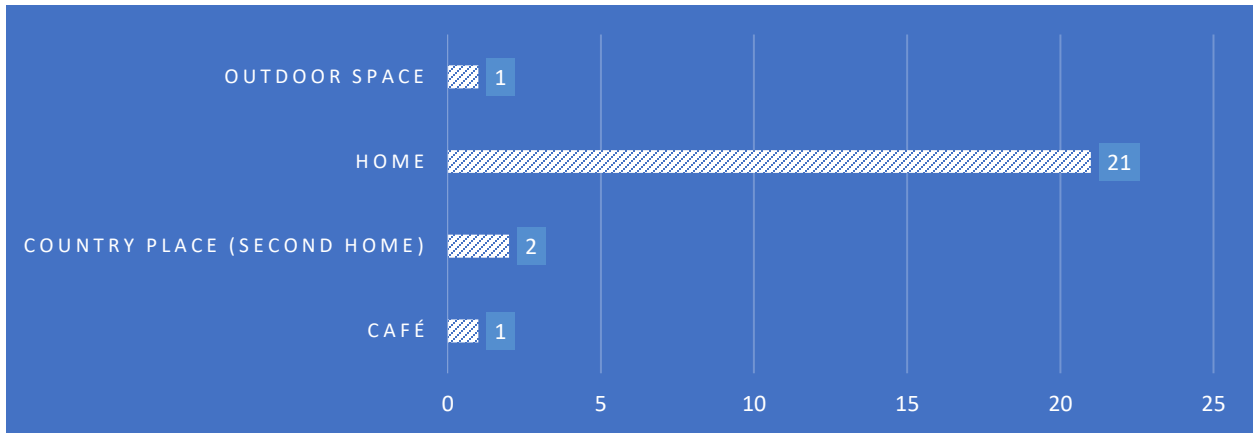
Figure 15. Question 11 – Where did you work remotely during the pandemic? (Author, 2023)

The data shows that, during the epidemic, the majority of participants (21 out of 25) worked remotely from their homes. In reaction to the pandemic restrictions, there has been a broad shift toward remote work, necessitating the establishment of home offices or workspaces. The replies also show that fewer participants selected alternative places for remote work. This comprises two people working from a rural location, which may be a second house or a rural retreat, one person choosing an outdoor spot, and one person working at a cafe. These various options for remote work settings demonstrate the adaptability provided by remote work configurations and the capacity to accommodate individual preferences and situations throughout the epidemic.
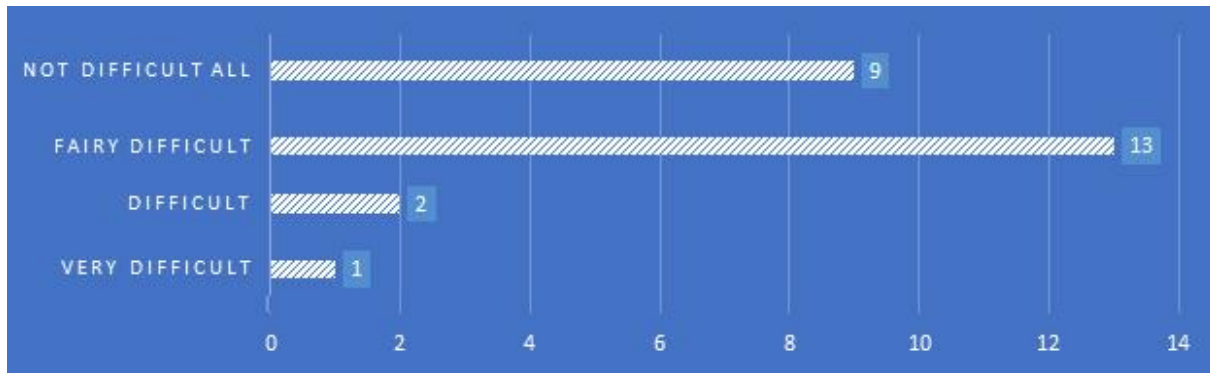
Figure 16. Question 12 – How difficult do you think it was to get back to work after the pandemic? (Author, 2023)

The findings show that participants' opinions on how simple it was to return to work following the pandemic were divided. While a small percentage of respondents said they had only minor difficulties or had no difficulty at all, a sizable portion of participants thought the process was difficult. This includes people who found it "very difficult" as well as people who found it "difficult." The various perceptions of difficulty may be influenced by several variables, such as the nature of their profession, adjustments to work routines or processes as a result of the pandemic, individual adaptability, and personal circumstances. Adaptations in workplace relationships, potential changes in job tasks or responsibilities, and the overall effects of the pandemic on the workplace environment may all contribute to the difficulties some people are experiencing. Understanding the perceived challenges can help organisations and employers offer the right assistance, resources, and tactics to help their workers return to work after the epidemic with less difficulty.

View on my way to the work
Green areas and trees (NB! The question format does not allow multiple answers for 14 and 12 unfortunately! Otherwise, I'd have 'home' and 'cafe' for 12.
View on my way to the work
Campus landscape
View on my way to the work
View from my office or workplace window
View on my way to the work
it was not related to the landscape at all
View on my way to the work
View from my office or workplace window
I wasn't here during the pandemic
View on my way to the work
All of these answers
View from my office or workplace window
Dendropark
Dendropark
View on my way to the work
View from my workplace, view on my way to school
We don't have much stuff here, only grass. IMO it's not that encouraging. But yes dendrogram is nice
View on my way to the work
nothing did encourage me
view from my office, view on my way to the work
View on my way to the work
Campus landscape
Campus landscape

Table 2. Question 13 – What aspects of the landscape encouraged you to go back to work after the pandemic? (Author, 2023)

According to the responses, the most frequently cited landscape feature that inspired people to go back to work after the epidemic was the view on the way to work. This shows that a key factor in encouraging people to return to their workplaces was the visual experience they had while commuting. Although to a lesser extent, other landscape components like trees, green spaces, campus landscapes, and views from office or workplace windows were also noted. These characteristics, which provide a sense of connection to nature and visual stimulation, probably contributed to a favourable and appealing work environment. It's interesting to note that some participants claimed that the surroundings did not influence their decision to return to work.

Overall, the data reveals that the landscape's visual components, particularly views on the way to work and from office or workplace windows, contributed to people's decision to resume working after the epidemic. These landscape features may contribute to a relaxing and motivating work atmosphere, potentially boosting productivity and employee well-being.

It has. I'm not visiting anymore my former favourite places in nature which got very popular during COVID: Taevaskoja, Meenikunno bog, Endla bog, etc.
I've always appreciated landscapes and even more so after COVID-19, which highlighted what matters in life - simple things like the space you have access to, and how lucky we are in Estonia to have plenty of outdoors for the population).
Appreciate outdoor spaces more
Yes, the public outdoors is something we often forget to value in cities as it forms the glue for our civil life, supplying social sustainability when all other functions go virtual.
No
I am more attracted to the green spaces
do not think so
no
yes, I started to appreciate it more
Yes
I wasn't here during the pandemic
I don't understand
I started positively value the possibility of the landscape
More appreciation for outdoor spaces
Nope. Only the fact of how the number of people IN the landscape affects the value of it. (for me)
I got to enjoy the outdoors more during the pandemic and discovered many new places that I enjoy visiting now.
Yes it has, I now can appreciate the landscape more than before
Yes, I treasure and appreciate it more
Not really, I have enjoyed landscape for a long time
No
it is more valuable
not really, I appreciate the outdoor space anyways, but I discovered some more hiking trails in RMK forests.
no
Yes a bit
Yes, it made me value more the use of the outdoors and the importance of the design used.

Table 3. Question 14 – Has your attitude towards the landscape changed due to the pandemic? (Mention how) (Author, 2023)

The data shows a variety of reactions in terms of how participants feel about the pandemic's effects on the environment. Some people described behavioural changes, such as avoiding well-known natural areas or showing greater appreciation for outdoor areas. Others emphasized the value of open spaces for fostering community and sustainability. However, a sizable portion of individuals claimed that their opinions regarding the environment had not changed, showing that they continued to value and appreciate outdoor areas. Overall, the pandemic seems to have had a variety of effects on individuals' perceptions of the environment. Some people noticed changes in their conduct and admiration, while others kept their pre-existing viewpoints. The comments reveal the various ways that people view and appreciate the environment, which is influenced by their particular perspectives and experiences throughout the pandemic.

I've suggested more than once a central square/amphitheatre with possibilities to have their events or outdoor learning. A solid square with a fountain, watchtower, and maybe a students/alumni house at the edge of the square.
more common shared spots for students to relax and study with co-students
More covered outdoor seating areas
all scenic seating/meeting places should be welcoming and contain something beautiful to trigger their use
Benches on the campus, some pavilions where you can just relax, fountains, flowers
Winding down areas where you sit in silence to have a break from work
brook valley through the campus
more recreation and sport area
the parks around the campus
Walkways
The plain grass spots could use some more variety in plants to improve the biodiversity
Cafeteria, outdoor space, and environment
Maybe add more places like Dendropark. Actually, in EMÜ we have a lot of free space for making something new and interesting
The area between the university building and the sports building
Places to chill. Larger, wider area with benches, etc. Option to "lay down" and enjoy the sun for 15 min between the studies.
There is a lot to improve because at the moment there aren't any spots to go and stay for a longer period. The campus needs seating spots that can be multi-used. And it would be nice to have more plants on the campus.
Maybe the park before the Metsamaja (where the apple trees grow)
I would like more cosy places
Seating areas
Green space around Metsamaja
Everything!
To have access to different biotopes which are appreciated by EMÜ; seating areas close to some interesting plants and good exposition towards the sun
more outdoor places to sit and chat
Some seating areas near the parking
Public structures like benches.

Table 4. Question 15 – What are the elements or community spots at the university you would like to see improved? (Please mention them) (Author, 2023)

The table shows that participants have a variety of suggestions for enhancing public spaces and features on the campus of the university. The establishment of a central square or amphitheatre for gatherings, the provision of more places to sit and study, the improvement of covered outdoor areas, and the inclusion of aesthetically pleasant elements like fountains and flowers are some suggestions. Other recommendations include enhancing green spaces, walkways, and parks as well as introducing various plant kinds to boost biodiversity. The requirement for nice and comfortable spaces, seating areas close to specific sites, and the availability of various biotopes for admiration were also emphasised by participants. The replies show a general desire for a more welcoming and pleasurable campus setting with well-planned gathering places that encourage unwinding, mingling, and contact with nature. These ideas can help the university community feel connected, comfortable, and a part of something larger.
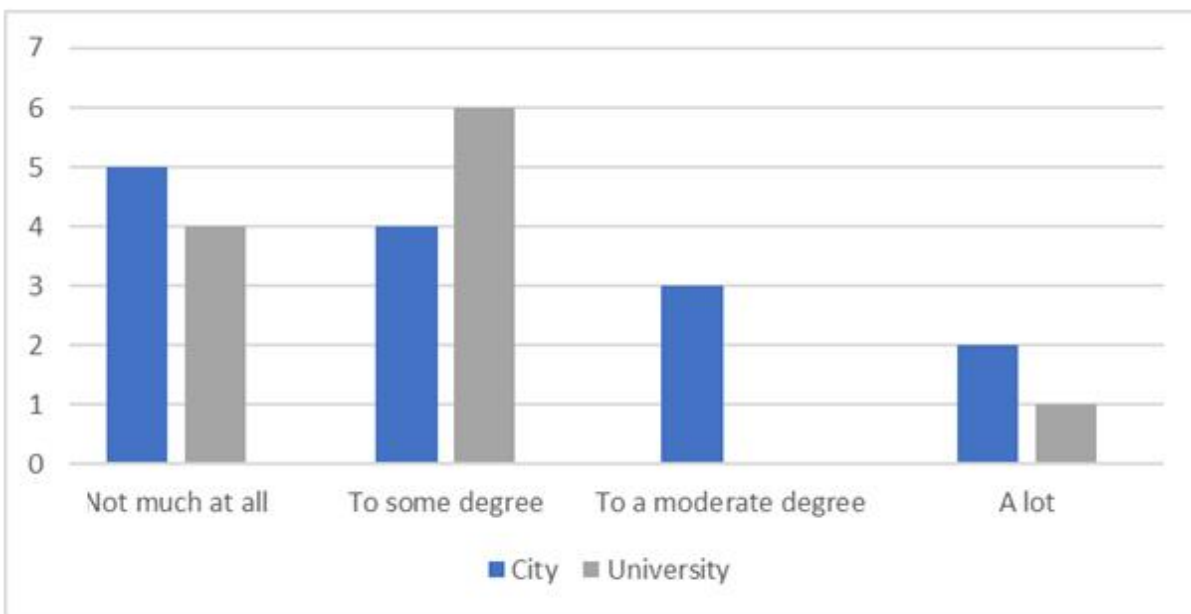
Figure 17. Question 16 – How much do you think the city and university have changed as a result of the pandemic? (In terms of landscape and common activities) (Author, 2023)

These replies indicate that while some participants experienced considerable or significant changes, the majority of participants felt that the city and institution underwent some degree of change as a result of the epidemic. It's vital to remember that the offered responses don not specify the details of these changes in terms of the environment or typical activities.

Aquarium with fish.
My dog and my big second screen :)
Comfy outdoor chair
a jigsaw puzzle
Small statues, flowers
flower pot
a park view from the window
meditation room
comfortable chair
More sitting space
Some statue
Social life and cafe environment
Forest and wild park (no people!)
Cactus and flower pots
Chair or desktop.
A comfy chair, coffee machine, wool socks.
Family pictures, my PS4, piano, guitar
Nothing, I don't need things from home to make me feel too comfortable. Otherwise, It would be difficult to be productive.
I would take my happiness, maybe also some book about philosophy
Flowerpot
plants
flower pot
a small figure
Flower
Plant

Table 5. 16. Question 16 – If you could bring one element from your home to your workplace, what would it be? (for example Flowerpot, family picture, Small statue, etc.). Please mention them (In terms of landscape and common activities) (Author, 2023)

These replies show that people would like to bring a variety of personal things and elements from their homes to their places of employment. The aforementioned things include both natural components like aquariums, flowers, and plants as well as individualised goods like family photos, musical instruments, and pastimes. It displays the preferences of the participants for establishing a cosy and unique working atmosphere.

Own garden, fishing on lakes/rivers, and mushroom picking in different forests, ice fishing on Peipsi, swimming in lakes, winter swimming in Emajõgi and Anne Canal, and other nature trails.
garden, forest, park, bog, lake, river
Home farm
bogs and forests
Mostly parks, forests, and rivers
forest, lake, and river
park, river, forest, lake, bogs
forest, lake
the Emajõgi river
Bog, River
Most of these
River and lakes
My garden, forests, lake, parks
City streets
The whole city was a recreational place thanks to the limitations. Places that usually were packed with people suddenly became nice and relaxing
Different parks, hiking trails in the forest, river, lake
Park, river, lake, forest
Trails in the city forest (Tallinn)
Bogs and forests, lakes,
Own garden
forests and bogs
private garden, RMK forest and bog trails, riverside, and river
own garden
River
Own garden, parks.

Table 6. Question 17 – What outdoor recreation places did you visit during the pandemic? (for example own garden, park, river, forest, lake, bogs, etc.). Please mention them. (Author, 2023)

These replies demonstrate that throughout the pandemic, people took part in a variety of outdoor activities and travelled to varied natural settings. The settings described include both private areas like gardens; and public areas like parks, forests, lakes, rivers, and bogs. This demonstrates a desire to respect the limitations and restrictions put in place during the epidemic while maintaining a connection to nature, participating in leisure activities, and enjoying the outdoors.

4.3. Focus Areas on the EMU Campus

4.3.1. Bridges over the pond between the main building and the sports building

Figure 18. Focus area 1 aerial photograph (Google Maps, 2023)

According to the results from the survey (figure 3) the two bridges from the main building towards the sport building are popular among the students and staff. Bridge number one connects the road towards the entrance of the sports building to the secondary entrance of the main building.

Figure 19. Focus area 1 picture (bridge number 1) (Used with permission of Shaik Muhammed Zubair Basheer Ahamed, 2023)

The second bridge is located behind the main building and sports building and connects a narrow path behind these buildings. The bridge gives a feeling of walking on a solid base together with walking on a water body with a view surrounded by greenery. Both bridges have barriers on two sides that protect pedestrians from falling.

The research finding supports that built landscapes can offer places where people can interact with nature, enhancing their general well-being (Majeed et al. 2020). A few design changes have been suggested to further improve this area and the user experience. The key concept is to provide seating areas at the entry of these bridges. The first bridge is a path to walk by fast, but the second one is to slow down the walking speed and enjoy the experience of being in nature. The main focus is on the second bridge which is known as a popular spot also is a spot that most shared with the staff and students since it is connecting the administrative building to the students buildings. Here

there is a potential to add flower beds with different varieties. One reason for this suggestion is can be the lack of plant variety on the pathways on the campus, according to the survey results (figure 3).
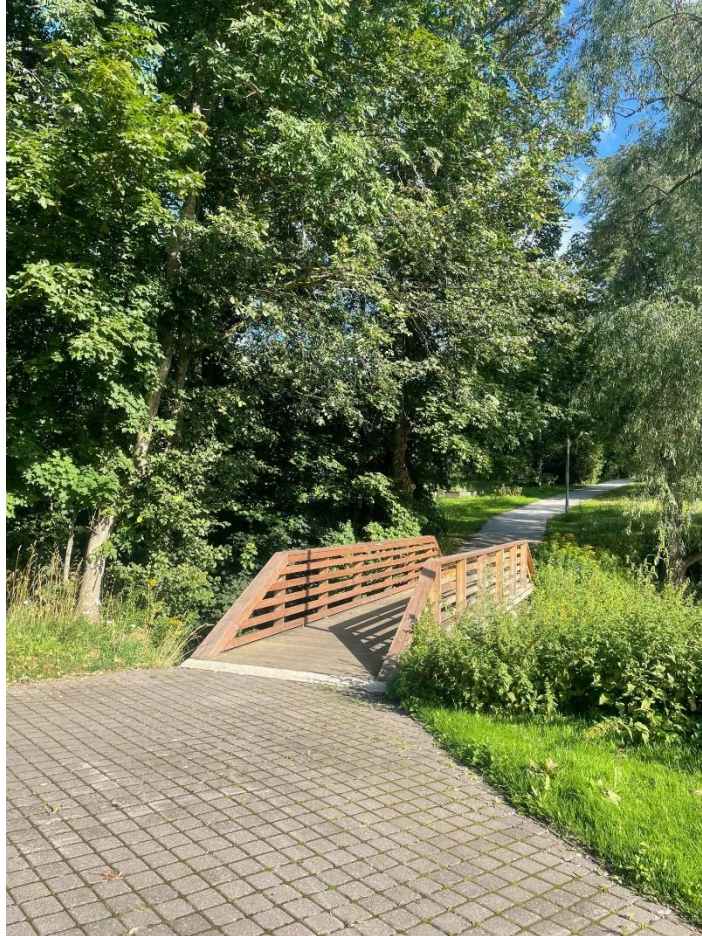

Figure 20. Focus area 1 picture (bridge number 2) (Used with permission of Shaik Muhammed Zubair Basheer Ahamed, 2023)

Figure 21. Focus area 1 picture (the bridge number 2) (Used with permission of Shaik Muhammed Zubair Basheer Ahamed, 2023)

Figur 22. Focus area 1 picture (the bridge number 2 collage proposal) (Author 2023)

4.3.2. Dendropark
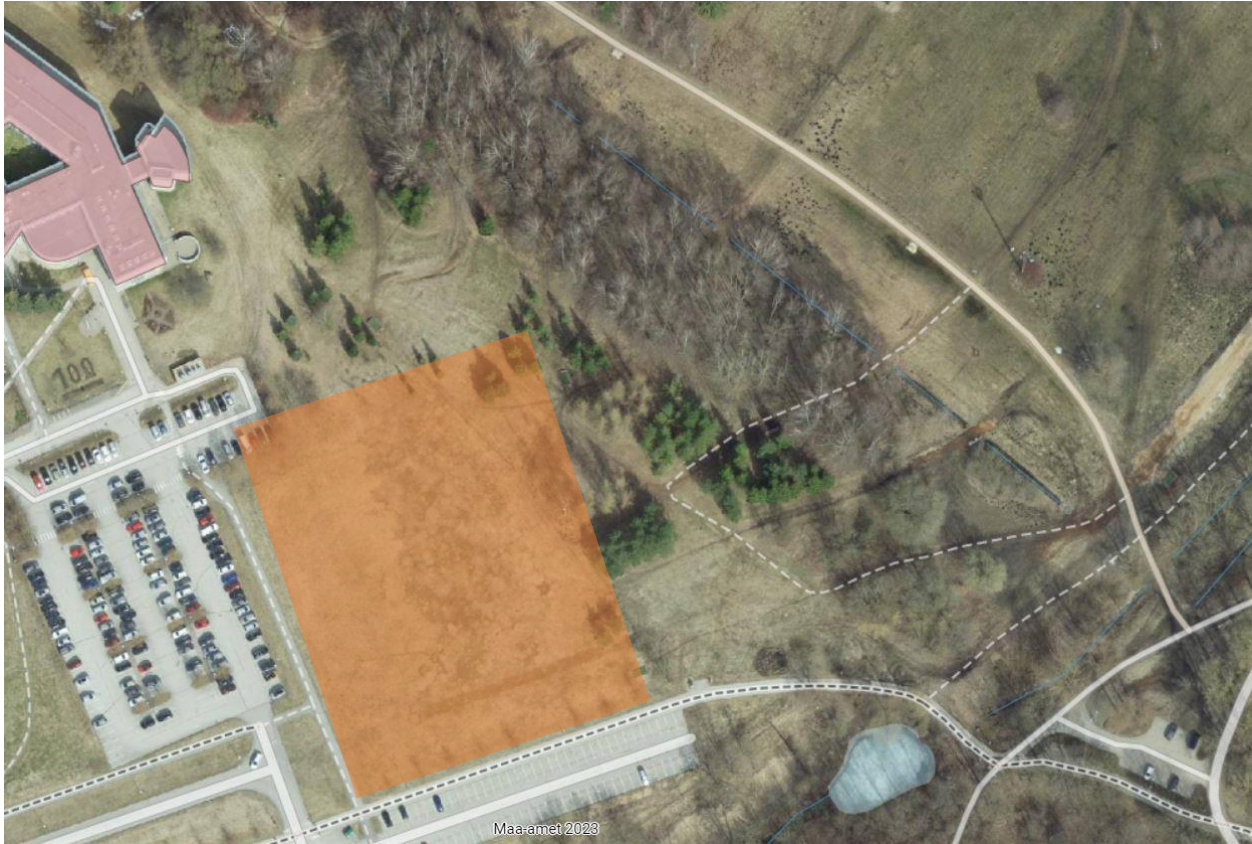
Figure 23. Focus area 2 aerial photograph (Google Maps, 2023)

The second location is called the Dendropark, a large area located at the back of the Metsamaja building. One of the most popular parts of this site is the one that is close to the campus buildings and the parking area of the Metsamaja. One of the reasons for the popularity of this area is that it is considered an open space between the campus and the Dendropark, which means it is closer and easier to access by the users. Also, it is an open vast place surrounded by trees which separate this area from the outside of the campus and creates a sense of security and protection.

According to the research result, one way to measure a person's sense of well-being is to look at how they interact with different aspects of their physical environment and how happy they are with their relationships with other people and their jobs (Addas and Maghrabi 2022). Taking this into consideration initiated the idea of creating a place where the outdoor interaction among the staff and students can be effective for improving their well-being. The first concept design for this spot

is to provide appropriate seating places with a table and canopy. The most appropriate location to place these seating areas is close to the Metsamaja building. The reason for that is because of a small pathway behind the building that is shared with a small restaurant as well as a small pond behind the building. The area has a good chance of encouraging people to congregate and connect.

Figure 24. Focus area 2 picture (Used with permission of Shaik Muhammed Zubair Basheer Ahamed, 2023)

Figure 25. Focus area 2 picture (The first design proposal collage proposal) (Author 2023)

Figure 26. Focus area 2 picture (The second design proposal collage proposal) (Author 2023)

The second concept provides a place for special occasions and outdoor gatherings for instance an option can be a small outdoor theatre.

4.3.3. Open area in front of the Metsamaja

Figure 27. Focus area 3 aerial photograph (Google Maps, 2023)

The green space in front of the Metsamaja is the first area that the users will experience when they reach the Metsamaja. A concrete seating area in front of the main door is provided that most people are not able to use due to their inefficient design. If the site is divided into 3 zones by their potential, the first zone has the most ability to embrace changes.

The literature illustrate that as a result of the epidemic, lack of access to urban parks became one of the key issues facing cities. Urban parks and green spaces are essential for preserving microclimates, improving soil fertility, promoting good mental and physical health, boosting resistance to disasters, preserving social links, and promoting social interaction. Urban green spaces both directly and indirectly improve people's quality of life, health, and well-being according to Addas and Maghrabi (2022), in result it leads to provides a good opportunity for the university to maximise the potential of its campus grounds for the benefit of the employees and local residents. The first zone the biggest one, has the potential to embrace different kinds of design strategies. The first design suggestion is for a welcoming space. It is appropriate to design the place with flowers as they are colourful and are a sign of welcome as well as having an effect on the people's health according to Addas and Maghrabi (2022). Besides the mentioned elements, the campus itself is lacking flowers in the outdoor place.

Figure 28. Focus area 3, zone 1 (Used with permission of Shaik Muhammed Zubair Basheer Ahamed, 2023)

Figure 29. Focus area 3, zone 1 (The first design proposal collage proposal) (Author 2023)

Figure 30. Focus area 3, zone 1 (The second design proposal collage proposal) (Author 2023)

The second proposal is scattered seating areas among the flowers and bushes giving the sense of privacy and freedom of choice to select where to sit whether with others or alone especially suitable for the pandemic crises and future pandemics.

Figure 31. Focus area 3, zones 2 and 3 aerial photographs (Google Maps, 2023)

As can be seen from the photo, zones number 2 and 3 are the smaller ones respectively. In front of the main entrance concrete seating place had considered (highlighted in the photo). These seating places are not used by staff and students since they are made out of uncomfortable material also their location is not private and comfortable for a gathering. According to the literature Zhang's (2015) research demonstrates a more pronounced attachment to green spaces and better mental health in areas where easily accessible and functional green spaces are more abundant (Zhang et al. 2015). The strategy for these areas is to keep them as dense places with different kinds of plants and greenery with a narrow road among them as a small sample of a botanical garden.

Figure 32. Focus area 3, zones 2 and 3 picture (Used with permission of Shaik Muhammed Zubair Basheer Ahamed, 2023)

Figure 33. Focus area 3, zones 2 and 3 (The design proposal collage proposal) (Author 2023)

5. CONCLUSION

5.1. Summary of Results

How has the pandemic affected the staff working environment?

According to the survey results, the pandemic's impact on the staff working environment was evident in the responses, where the visual aspects of the landscape played a crucial role in motivating people to return to work. Features like views on the commute, green spaces, and office window views contributed to a favourable and appealing work atmosphere, possibly enhancing productivity and well-being. Some participants didn't find the surroundings influential, while others appreciated unique landscape qualities.

How place attachment can affect people in their working place after and before a pandemic?

People's sentiments regarding their workplace are significantly influenced by place attachment both before and after a pandemic. The majority of the workforce, according to the survey's findings, have changed their attitudes regarding working in the office setting since the pandemic. The findings show that many employees found it challenging to return to work following the pandemic, and most of those who preferred remote work wished they could bring a memento of home to remind them to make their workspace cosy and give them a sense of home.

Based on the survey done, what are the best methods for enhancing the current landscape components?

The survey indicates that participants suggest enhancing the current landscape components on the university campus through methods such as establishing a central square or amphitheatre for gatherings, adding more study-friendly seating areas, improving covered outdoor spaces, and incorporating aesthetic elements like fountains and flowers. Other ideas include enhancing green spaces, walkways, and parks, and introducing a variety of plant species for increased biodiversity. Respondents emphasise the importance of creating comfortable spaces, providing seating near specific sites, and offering diverse biotopes for appreciation.

In summary, Place attachment has a big impact on how well-being feels for a person since it makes them feel happy, satisfied, and like they belong. It provides for more than just bare necessities and promotes sentiments of security, familiarity, and love. Place attachment promotes social connections, community trust, and the development of an individual's sense of self. Place attachment and general wellness, including life happiness and quality of life, are strongly correlated in studies. Due to routine changes, limited access to public spaces, and an increased reliance on virtual connections, the COVID-19 pandemic has altered people's sense of place attachment, which has a detrimental influence on well-being. Despite their critical role in boosting lifestyle, health, and biodiversity, limited access to urban parks and green spaces during the epidemic has made it difficult to preserve the quality of life in urban areas. The quality of the setting, familiarity, duration of the relationship, trust, contentment, identity, and sense of belonging are all factors that affect place attachment. Finally, enhancing place attachment through strategic modifications according to the designs proposal (figures 25, 26, 29, 30, 33) to the university environment can have a strengthening attachment to the university. These changes can foster a greater sense of satisfaction among staff and students, creating a positive cycle of feedback that promotes connection and well-being.

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APPENDIXES

Appendix 1. The online survey on EMU platform:

Place attachment after covid19 pandemic

* Required

1. I am Sana Vahdati, student from the Master's program of the Chair of Landscape Architecture at Eesti Maaülikool/Estonian University of Life Sciences focusing on how the environment can affect our day-to-day life and health, and to what extent can landscape architecture help to improve the quality of our lives. My case study area is the city of Tartu, Estonia, where I have lived for almost a year, as well as the University where I am currently doing my master's degree. During my stay I have been always curious about how comfortable people feel when returning to the university and work after living through a historic life changing pandemic. This encouraged me to compare our daily life before and after the Covid 19 lockdowns and to explore what elements have played a role in changing our perspective towards our surroundings.

This survey investigates Place attachment (the emotional bond between a person and place and is highly influenced by an individual and his or her personal experiences) after Covid 19. I am exploring the relationship of the staff and students to the university, including the campus, as their workplace or work-study area and how this connection and relationship has changed after Covid 19.

The collected results will only be used for this research project. The data will be anonymized and aggregated and after analysis the results will be shared with the university administration, in order to encourage them to take into account student and staff preferences for their surrounding environment. It will be helpful for EMU in order to understand what kind of environment is suited for retaining staff and how that has changed over time. Planners and designers, who are seeking to understand the impact of the environment on the people's behavior health, life and their motivation to change or accept their surrounding areas will also gain insights.

Please check the box below if you are agree to the terms and conditions. *

○ Agree

○ Disagree

2. Please specify your gender. *

○ Woman

○ Man

3. Please specify your age range. *

○ 18-24

○ 25-34

○ 35-44

○ 45-54

○ above 54

4. Are you native to Estonia? *

○ Yes

○ No

5. Are you native to Tartu? *

○ Yes

○ No

6. Please specify if you are a student or a staff? *

○ Student

○ Staff

7. How satisfied are you with Tartu as a place to live and work? *

○ Very satisfied

○ Somewhat satisfied

○ Neither satisfied nor dissatisfied

○ Somewhat dissatisfied

○ Very dissatisfied

8. How satisfied are you with the EMU University environment? *

○ Very satisfied

○ Somewhat satisfied

○ Neither satisfied nor dissatisfied

○ Somewhat dissatisfied

○ Very dissatisfied

9. Does Tartu feel like home to you? *

○ Strongly disagree

○ Disagree

○ Agree

○ Strongly agree

10. To what extent do you use the same community spot at the university (for example: outdoor seating area, café, river side close to the university, green spaces on the campus etc.) after Covid 19 that you used to do before the pandemic? (Please mention your favourite community places at the university before and after the Covid 19?)

*

○ More than before Covid

○ The same amount

○ Less than before Covid

11. What is your favorite landscape in the campus/ the city/ the places elsewhere during and after the pandemic? (Please mention the places) *

Enter your answer

12. Where did you work remotely during the pandemic? (All that apply) *

   ○ Home

   ○ Café

   ○ Outdoor space

   ○ Library

   ○ Country place (second home)

   ○ Other (please mention)

13. How difficult do you think it was to get back to work after the pandemic? *

   ○ Not difficult all

   ○ Fairy difficult

   ○ Difficult

   ○ Very difficult

14. What aspects of the landscape encouraged you to go back to work after the pandemic? (All that apply) *

   ○ View from my office or workplace window

   ○ View on my way to the work

   ○ Campus landscape

   ○ Dendropark

   ○ Other

15. Has your attitude towards the landscape changed due to the pandemic? (Mention how) *

Enter your answer

16. What are the elements or the community spots at the university you would like to see improved? (please mention them) *

Enter your answer

17. How much do you think the city and university has changed as a result of the pandemic? (in terms of landscape and common activities) *

○ Not much at all (City)

○ To some degree (City)

○ To a moderate degree (City)

○ A lot (City)

○ Not much at all (University)

○ To some degree (University)

○ To a moderate degree (University)

○ A lot (University)

18. If you could bring one element from your home to your workplace, what would it be? (for example: Flower pot, family picture, Small statue etc.). Please mention them. *

Enter your answer

19. What outdoor recreation places did you visit during the pandemic? (for example: own garden, park, river, forest, lake, bogs etc.). Please mention them. *

Enter your answer

20. *I appreciate your participation in the thesis study survey.*

To be able to evaluate the data more precisely, I will also gather some personal information about you in addition to your opinion, such as your state of residence as a student or staff member and your nationality, whether you are a native or not.

Until the end of spring 2023, when the research time is complete, this data will be retained on the Estonian University of Life Sciences server.

I will never sell or disclose this information to any third parties since I value your trust and respect your right to privacy.

By submitting this form, you consent to the processing of your data in accordance with the official privacy policy of Microsoft forms .

If you have any questions or change your mind, contact my academic email vahdati@emu.ee *

○ Agree (Please check the box below if you are agree to the terms and conditions. If, having read the introduction you do not wish to proceed then please leave the survey)

○ Disagree

Submit

Appendix 7. Non-exclusive licence for depositing the final thesis (indefinite restriction) and the supervisor's (supervisors') confirmation for allowing the thesis for the defence.
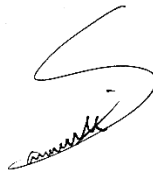
Hereby I,   Sana Vahdati

                 01/02/1996

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Author of the final thesis   Signature (digitally signed)

In Tartu, 18/08/2023

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This is to confirm that the final thesis is allowed for defence.

………………………………………………   …………………………………..

Supervisor's name and signature (digitally signed)   Date