

# **Supporting the Mental Wellbeing of University Students by Building Social Connectedness**

Shalom Pinto (they/them)

A thesis submitted to Auckland University of Technology in partial fulfilment of the requirements for the degree of Master of Design

2022

Department of Design and Creative Technologies  
School of Art + Design

# Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the Acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

*21/10/2022*

# Ethics Approval

Formal ethical approval for this research was given by AUTECH on 15 November 2021 (No: 21/286) for this research

# Acknowledgements

I could not have gone through this research journey without the support of my excellent supervisors, Dr Amabel Hunting and Dr Anna Jackson. Their guidance, feedback and expertise pushed me beyond my comfort zone and made me a better researcher and designer.

This research would not have been possible without the student participants who openly shared their personal experiences with me and guided this project. Furthermore, I would like to thank the students who expressed their interest in the study but could not be chosen. Your enthusiasm and desire for change mean the world to me.

A special thanks to the team at DNA Design for being supportive of my academic responsibilities and journey.

Additionally, I would like to express my most profound appreciation to my parents for encouraging me to pursue education and continual learning. I would not have these opportunities if not for your sacrifice and love.

I'm incredibly grateful for my partner, Zach and my best friend, Miles, who kept me grounded during this rollercoaster of a journey. Thank you for your emotional support and proofreading skills.

# Abstract

This practice-led research project explored how universities might better support the mental well-being of tertiary students studying in Tāmaki Makaurau (Auckland). Before the COVID-19 pandemic, university students in Aotearoa (New Zealand) experienced moderate levels of psychological distress (New Zealand Union of Students' Associations 2018). As a result of the ongoing global pandemic, students' mental well-being has declined, as 65% experienced low or extremely low levels of well-being (Dodd et al. 2021). A hybrid methodology of Appreciative Inquiry (Ai) and Design Thinking (DT) was utilised to engage students in the design process, gain an understanding of students' experiences of university services, and generate a design response that addresses students' unmet needs. The Appreciative Inquiry process is a strength-based model that draws from the science of positive psychology to enhance what already works (Whatworks n.d.). This methodology follows five stages: Define – Discover – Dream – Design – Deliver (Priest et al. 2013). The Design Thinking process is similar to Appreciative Inquiry, encompassing a range of methods, tools and mindsets that have been applied in this project.

In the Define stage of the project, assumption mapping, a contextual review, and an investigation of services informed the research design and question. In the Discover stage, semi-structured interviews were conducted with nine students from three major universities in Tāmaki Makaurau to learn about their experiences with university services. Seven primary themes were generated from a thematic analysis of these interviews, and opportunities for change were identified. In the Dream stage, a speculative future scenario was generated to explore what might be in response to these insights and opportunities. The Design stage of this process proposes what should be by presenting a potential service design response. Finally, the last stage, Deliver, aims to produce an events application alongside a recommendations guide to illustrate how AUT can implement these initiatives.

# Contents

<b>Abstract</b>	<b>06</b>
<b>Introduction</b>	<b>11</b>
<b>Contextual Review</b>	<b>13</b>
<b>Research Question</b>	<b>20</b>
<b>Methodology</b>	<b>21</b>
Hybrid Methodology: Appreciative Inquiry + Design Thinking	22
Research Design	24
Data Collection: Participant Interviews	26
Data Analysis: Reflexive Thematic Analysis	28
Ethics Process and Considerations	30
<b>Documentation of Practice</b>	<b>31</b>
Phase One: Define	32
Phase Two: Discover	38
Thematic Analysis Insights	39
Reframing of the Research	48
Phase Three: Dream	55
Phase Four: Design	58
Phase Five: Deliver	64
<b>Discussion</b>	<b>66</b>
Limitations	69
Recommendations for further study	70
<b>Conclusion</b>	<b>71</b>
<b>References</b>	<b>72</b>
<b>Appendices</b>	<b>82</b>

# List of Figures

Figure 1. Diagram based on Sriharan et al. (2021)	23
Figure 2: Participant Annotations	28
Figure 3: Developing, Refining and Defining Themes	29
Figure 4: Assumption Mapping	33
Figure 5: Investigation of Services / AUT	34
Figure 6: Investigation of Services / UoA	35
Figure 7: Investigation of Services / Massey University	36
Figure 8: Empathy Map	50
Figure 9: Persona	52
Figure 10: Point-Of-View Statement	53
Figure 11: Brainstorm	58
Figure 12: Dark Side Brainstorm	59
Figure 13: Service Design Blueprint ( <a href="https://tinyurl.com/25j76vc8">https://tinyurl.com/25j76vc8</a> )	61

# List of Tables

Table 1: Participant Demographics

28

# Special Note

*All names used in this thesis have been changed*

# Positioning of the Researcher

I have been interested in User Experience (UX) design since my undergraduate studies in Creative Technologies. In my final year of study, I collaborated with HELP Auckland to understand how they might better support survivors of sexual assault. I facilitated co-design workshops with psychotherapists, executives and youth members to identify how we might create an effective support model to enable survivors in their healing journey. I synthesised responses from these sessions and designed a mobile application to be used in conjunction with therapy to provide users with tools and resources to manage triggers and complex emotions. Working with the team at HELP Auckland to generate a meaningful concept showed me how design could be used to foster positive change for individuals, organisations and communities.

During the final year of my undergraduate degree, I experienced a traumatic event that made me consider dropping out of university. I received a lot of support from friends, a mentor in the Creative Technology faculty, and mental health professionals outside of the university. However, I did not receive any assistance or resources from AUT to help me through this difficult time. I was privileged enough to have access to services outside of AUT that aided me in navigating this challenging period and completing my degree.

While completing my Master's studies, I began working as an Experience Designer at a human-centred design agency, DNA Design, where I have been able to craft my research skills further. In this role, I have worked alongside large financial organisations, security companies and national government agencies to understand, analyse and synthesise the needs and goals of users.

These experiences inspired me to conduct my own research into students' mental health and further improve my design capabilities. Students should be able to access resources and support, especially during COVID. During this research, I have had to adapt my design practice to respond to the COVID-19 lockdowns, vulnerable students, and organisational barriers. I hope my research will help tertiary education institutions assess their support services and improve students' personal, professional, academic and social outcomes.

# Introduction to the Research

Students entering university encounter unfamiliar experiences throughout their study that can significantly impact their mental health, educational achievement and coping abilities. Before the COVID-19 pandemic, students' mental health was already poor, impacting their academic performance and reducing their resilience (New Zealand Union of Students' Associations 2018). In addition, the unprecedented COVID-19 pandemic negatively impacted students' lives, resulting in extremely low levels of satisfaction (Dodd et al. 2021). As a result, university services are overworked, making it challenging for students to access support.

However, research indicates that examining and addressing the broader student experience can relieve the burden on support systems and reduce environmental stressors impacting their mental well-being (Baik, Larcombe, and Brooker 2019). When asked to make recommendations to improve their mental health, students provided diverse responses, from empathetic teaching staff to increased awareness of support services. These findings provide significant insight into the student experience and affirm that all factors of university life contribute to student mental health.

There is an opportunity to improve the student experience by broadly investigating their needs and experiences with existing support services, leading to an improved service design outcome.

During this research, I used a hybrid framework combining Appreciative Inquiry and Design Thinking to engage with students and respond to the research question:

**How might we support university students in Tāmaki Makaurau (Auckland) to improve their mental wellbeing?**

The exegesis that follows is divided into four parts. First, the contextual review will define mental health and well-being, investigate students' mental health, and determine the role of human-centred design. The methodology section follows, illustrating the hybrid framework used throughout this process and the methods

used to analyse, develop, and generate concepts. The documentation of research chapter will demonstrate how these methods were applied and their respective findings. The exegesis concludes with a discussion of the design outcome, limitations, and recommendations for further research.

# Contextual Review

New Zealand has one of the highest youth suicide rates in the OECD. For all deaths among individuals aged 15-24, suicide contributed to 27% of male deaths and 42% of female deaths (OECD 2019). Correspondingly, tertiary students exhibit moderate levels of psychological distress and disorder and increased distress levels when faced with academic stress or adjusting to university life (New Zealand Union of Students' Associations 2018). This research project explores how we might support university students in Tāmaki Makaurau (Auckland) to improve their mental wellbeing. In this contextual review, I will discuss the state of student mental health and how human-centred design can be used to improve overall well-being and support services.

## **Mental Wellbeing vs. Mental Health**

Defining the difference between mental well-being and mental health is critical because this project seeks to focus on subjective well-being rather than mental disorders. However, it is important to understand mental health conditions to obtain a comprehensive understanding of the existing field of research. The World Health Organization (1948) defined health as “a state of complete physical, mental, and social well-being, rather than simply the absence of disease or infirmity”. In this model, well-being and disorders are related by different elements that contribute to an individual’s overall health (Keyes, Shmotkin, and Ryff 2002; Manderscheid et al. 2010). The ability to form interpersonal relationships with others, develop capabilities and work productively defines an individual’s state of well-being (World Health Organization 2004). In contrast, mental disorders are characterised by distressing thoughts, emotions, behaviours and relationships (World Health Organization 2001). As these two factors exist on two independent, but correlated spectrums, the dual continua model of health affirms that the absence of disorders does not imply the presence of well-being (Galderisi et al. 2015; Keyes et al. 2002). The WHO recently defined mental health as a state of well-being in which individuals can realise their abilities, cope with daily stresses, work productively, and contribute to their community (World Health Organization 2018). This definition is consistent with eudemonic and hedonic approaches, which seek to improve cognitive abilities, social skills, emotional regulation, empathy, and flexibility to improve overall subjective well-being (Deci and Ryan 2008). While this study focuses on mental well-being through this new conceptualisation, literature on mental health will be cited because these two factors illustrate a comprehensive understanding of this complex topic.

## **Mental Well-being of Students**

Students starting university encounter unfamiliar experiences that fundamentally alter their perspective and behaviour (Cleary, Walter, and Jackson 2011).

Academic responsibilities, navigating university life and altering support systems can adversely impact students’ mental health and educational attainment (Bayram and Bilgel 2008). These unfamiliar stressors can overwhelm students’ coping abilities, resulting in negative experiences and emotions (Wynaden et al. 2014). The New Zealand Union of Students Association (NZUSA) investigated the mental health of tertiary students in Aotearoa (New Zealand Union of Students’

Associations 2018). The report, Kei Te Pai, investigated the factors impacting students' mental health and their experiences with support services at their respective tertiary institutions. Participants completed a Kessler Psychological Distress Scale (K10) assessment, a tool used to determine an individual's well-being and the severity of a mental disorder (Transport Accident Commission n.d.). Psychological distress is "a state of emotional suffering associated with daily stressors and demands that are difficult to manage" (Arvidsdotter et al. 2016). This concept closely aligns with factors outlined in the definition of mental health but does not encompass all factors that contribute to an individual's overall well-being. Participants in this study reported a mean Kessler score of 28.1, indicating moderate levels of psychological distress and disorder. The NZUSA found a strong relationship between psychological distress and poor academic outcomes. Likewise, students with a low number of people they could rely upon also exhibited high K-10 scores. More than half of the participants reported increased distress levels when faced with academic stress or adjusting to university life. These stressors were exasperated by financial difficulties, feelings of loneliness and uncertainty about future employment. This report demonstrates that many aspects of university life can be challenging for students and detrimental to their mental well-being. Because this study was conducted before COVID-19, it is vital to understand the more recent impact of the pandemic on students' experiences.

### **Mental Well-being of Students during COVID**

The unprecedented Coronavirus (COVID-19) pandemic exacerbated the mental health of tertiary students. To ensure the safety of all students, universities suspended on-campus learning, cancelled social events, restricted student accommodation, and provided financial assistance to those who required support. Research has been conducted on the impacts of COVID-19 and the disruption to students' education and well-being. A study by Dodd et al. (2021) in Australia found that more than 60% of participants reported low and very low satisfaction levels. Students attributed this decline in happiness to difficult living conditions, financial stress, loneliness and anxiety (Merry et al. 2020). These difficult circumstances significantly impacted 86% of students' learning experiences. Students were dissatisfied with online learning and found it challenging to interact with their peers, impeding their academic progress (Li, Hafeez, and Zaheer 2021). Similar findings are reflected in the student population of New Zealand, where 80% of students felt more anxious about the future, and 87% reported an increase in stress regarding academic responsibilities (New

Zealand Union of Students' Associations 2020). These studies demonstrate the decline in student mental health during the pandemic and the ongoing stressors that hinder well-being and academic attainment.

### **Impact of Poor Mental Well-being**

Evidence shows a significant relationship between low levels of mental well-being and poor academic performance (New Zealand Union of Students' Associations 2018). The NZUSA (2018) discovered a link between psychological distress and self-evaluated academic success in the Kei Te Pai survey. Students who rated their academic success as very poor (M=35) reported severe psychological distress, whereas students who rated their academic success as excellent reported significantly less (M=25.8). Similarly, more than half of the participants considered dropping out of their tertiary studies due to mental health issues and an inability to cope with academic pressures. According to research, students who are depressed are more likely to have poor academic performance and completion, and this relationship is even more substantial for students who exhibit signs of anxiety (Eisenberg, Golberstein, and Hunt 2009). In contrast, students with good mental health are more likely to be motivated, persistent, and resilient in their studies (Holdsworth, Turner, and Scott-Young 2018), resulting in greater confidence in their ability to complete their degrees (Lipson and Eisenberg 2018). According to the findings of these studies, students' academic performance and personal outcomes are severely impeded by poor mental health. There is an opportunity to better understand the environmental stressors that influence student mental health and to promote protective factors in the university setting.

### **The Student Experience**

Students are exposed to unfamiliar environmental, social, and economic experiences during their tertiary education, which significantly impacts their mental health. Researchers can gain a critical understanding of the educational context by identifying and responding to these stressors. The importance of understanding the student experience is demonstrated in a study conducted by Baik et al. (2019), where students discussed their experiences at university,

provided insight into their mental health and made various recommendations for improving overall well-being. For 37% of students, academic staff and teaching practices were crucial, emphasising the importance of staff being approachable, empathetic and communicative. Furthermore, 27% of students commented on student services and support, citing the need for increased service awareness and promotion. These findings provide significant insight into the student experience and affirm that all factors of university life contribute to student mental health.

To investigate the student experience, researchers must first understand the academic learning and engagement, social connection, mental health, and cognitive development skills students need to succeed. Mann (2020) argues that a whole-institution approach is required, recognising the importance of faculties, service providers, academic teaching staff and students. Responding to mental well-being needs through this broad perspective ensures that support services are equitable, effective, and student-first (Batchelor et al. 2020; Buultjens and Robinson 2011). However, there are many challenges and limitations to implementing an institutional, holistic approach into the university system.

## **Support Services**

*“Mental Health is a foundation for the well-being and academic success of students, all colleges and universities” (Cleary et al. 2011, p. 253).*

Universities provide a unique, integrated environment that includes academic, professional, social, and health services to support students' mental well-being (Hernández-Torrano et al. 2020). Students can receive academic assistance, counselling and mental health support, disabled services, and specialised aid for international students and those from diverse communities (Auckland University of Technology n.d.).<sup>1</sup> As a result of this complex proposition and increased participation, higher education institutions have recently struggled to meet the demands of student mental health, resulting in high demand, long wait lists, and limited sessions (Broglia, Millings, and Barkham 2018). Students who want to use these services are often unable to do so, and those who have never used campus mental health services are discouraged due to the long wait times and high costs (New Zealand Union of Students' Associations 2018). This overburdened system

---

<sup>1</sup> A detailed investigation into the support services provided by the Auckland University of Technology (AUT), University of Auckland (UoA) and Massey University will be outlined in the documentation of the research practice chapter.

stigmatises mental health even more because students avoid seeking help because they believe other students have more significant mental health needs.

In addition to traditional support services, higher education institutions are evaluating the overall student experience and alternative forms of support in order to reduce the burden on existing support systems. For example, peer support has been shown to improve students' sense of belonging (McBeath, Drysdale, and Bohn 2018). Feelings of acceptance within the university lead to increased engagement and motivation, which improves overall mental health. This alternative form of support improves social engagement and life satisfaction while decreasing pressure on mental health services (Batchelor et al. 2020; Sani et al. 2012). Universities are considering how they can better support students differently. They have begun implementing human-centred design processes alongside students to develop services that address critical areas of concern (University of Auckland 2021).

## **Human-Centred Design**

Human-Centred Design (HCD) is a methodology that enables designers to interact and empathise with participants to better understand their experiences, needs and challenges (Giacomin 2014). This approach allows researchers to create solutions for users' problems that existing paradigms cannot address (Baker and Moukhliiss 2020). Designers can tailor the research design and respond to participants' needs using various methods such as observation, ideation, prototyping, development and testing (Norman and Stappers 2015).

The University of Melbourne has used an HCD framework to ensure that students' voices are embedded in the design, development, and delivery of experiences and services. One of their projects aimed to identify at-risk students with poor academic outcomes. Using the double-diamond method, researchers found that students experience inconsistent academic responsibilities across faculties, subjects and year levels. Similarly, students are only offered support after it is too late, and they do not always trust services. Researchers used these findings to develop a peer-to-peer advising programme that proactively identified students needing support and regularly assisted them throughout the school year. Although scaling this intervention was not feasible for the university, the insights

guided the University of Melbourne on how to invest in more extensive pilot programmes to support student academic progress.

Understanding how HCD can facilitate the exploration of student mental well-being is essential. Due to increased psychological distress, this project's theoretical perspective, research design and methods must be sensitive to participants' challenges.

### **Knowledge Gap**

There is an opportunity to improve the student experience by investigating their needs and experiences with existing support services. The ongoing COVID-19 pandemic has significantly impacted student mental health and the future of higher education (Li et al. 2021). Researchers need to understand the current student perspective, environmental factors and support services to improve student mental health (Baik et al. 2019). This research aims to understand the needs of students and their experiences with support services and use these insights to create an improved service design outcome. This research can inform academic institutions on how to build on top of existing initiatives and provide alternative forms of support that university students find appropriate for their social and cultural values.

# Research Question

As this research question will inform the structure of participant interviews, it is vital to create an open-ended statement that facilitates a discussion about the student experience. This question will be reframed throughout the design process to reflect insights uncovered in previous phases.

## **How might we support university students in Tāmaki Makaurau (Auckland) to improve their mental well-being?**

### **Aims:**

1. Gain an understanding of the student experience through the ongoing pandemic.
2. Investigate students' support needs and their experiences with services at the university.
3. Develop a service design response that communicates student needs and improves mental wellbeing.

This contextual review examined the current state of student mental health and the ongoing effects of COVID-19 on this population. Research demonstrates that students are experiencing low levels of mental well-being, which hinders academic performance and reduces resilience. As a result, university services are overburdened, making it difficult for students to access support effectively. However, studies show that investigating and responding to the broader student experience can alleviate pressure on support systems and reduce environmental stressors impacting their mental health. This study fills a knowledge gap by investigating students' experiences during the ongoing pandemic, identifying their needs, and evaluating their experiences with existing support services.

# Methodology

As outlined in the contextual review, the COVID-19 pandemic caused significant disruption in tertiary students' personal and academic lives. This practice-led research required a methodology that could respond to the complexities of student mental well-being. This chapter will discuss the methodological approach that guided my research design and methods. In addition, I will comment and reflect on the ethical considerations I made to ensure the respect, partnership and protection of the research participants.

## **Hybrid Methodology: Appreciative Inquiry and Design Thinking**

For this research, I chose a hybrid framework combining Appreciative Inquiry and Design Thinking to explore how universities in Tāmaki Makaurau (Auckland) can better support the mental well-being of tertiary students. This human-centred approach engages participants in the design process to gain an understanding of their experiences. In response to their needs, I will create a design outcome that improves students' experiences of university services.

The Appreciative Inquiry (Ai) process is a strength-based model that draws from the science of positive psychology to enhance what already works (Cooperrider, Whitney, and M. Stavros 2008). Deviating from deficit-based design approaches (Reed 2006), this methodology encourages the exploration of existing strengths and affirms the successes of people and systems to elicit new possibilities (Cooperrider and Whitney 2007). The process of Ai follows five stages: Define – Discover – Dream – Design – Deliver (Priest et al. 2013). Defining the focus and scope of the project is the first phase of this inquiry. This phase is accomplished by collecting relevant information and identifying people to collaborate with (Tocino-Smith 2021). This initiates the discovery phase in which participants are asked to share positive experiences through introspective reflection and appreciation, identifying the best of what is (Cooperrider et al. 2008). Key insights are extracted from these interactions to envision a Dream of what might be (Trajkovski et al. 2013). The design phase focuses on articulating and presenting propositions for what should be an ideal outcome (Hung et al. 2018). Lastly, the Deliver phase seeks to sustain positive changes that have been implemented and involves evaluating strengths and maximising performance (Cooperrider et al. 2008).

Design Thinking (DT) is a human-centred approach that focuses on collaboratively solving complex problems using design tools such as visualisation, brainstorming, and rapid concept prototyping (Tschimmel 2012). This systematic process highlights the significance of people's lived experiences to generate sustainable and appropriate engagement strategies that improve their lives (Van der Westhuizen et al. 2020).

Ai and DT share a similar design process, including problem identification, reframing insights, and responding to insights. I combined these two approaches

to create a hybrid methodology that responds to the complexities of student mental well-being and enables me to develop design outcomes rapidly. The first three stages follow the Ai model to define an area of focus, discover the best of what is, and dream of what might be. This strength-based framework was required at the start of the research process to ensure that students could discuss their mental well-being without being triggered or harmed. The fourth phase, Design, utilises rapid ideation tools to generate concepts that respond to the insights uncovered in the previous three phases. The last phase, Deliver, seeks to produce, and implement the concepts uncovered in the Design phase. DT was used in the final two phases because it provided various tools better suited for ideation and concept generation.

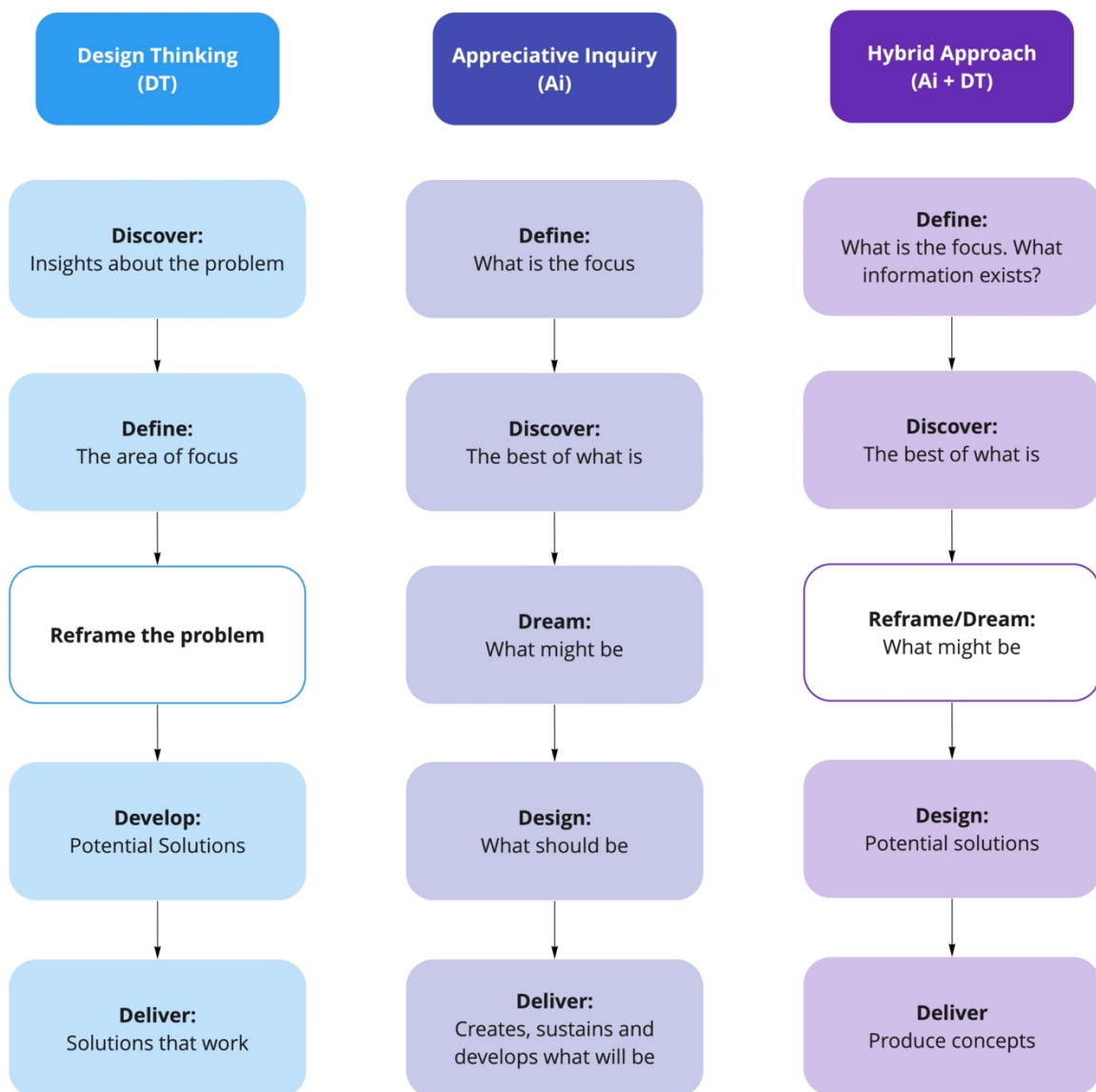


Figure 1. Diagram based on Sriharan et al. (2021)

## **Research Design**

This research design section will provide a brief overview of the process undertaken during this project. The documentation of research chapter will present a more detailed discussion of how the methods were used.

### **Phase One: Define**

The first phase of this research project was to define the focus and scope of this inquiry (Tocino-Smith 2021). This study's design was influenced by insights discovered during the contextual review, ethics approval procedure and investigation of services. Additionally, I completed an assumption map to identify my unconscious bias about the research topic.

### **Phase Two:**

The discovery phase of this research seeks to identify, analyse, and communicate the best of what is (Cooperrider et al. 2008). Through semi-structured participant interviews, students identify positive experiences within the university that made them feel supported. I conducted interviews with students using this structure because it allows for reflexivity during the interview, producing credible data through deeper reflection about the student's experiences. I then analysed this data using a reflexive thematic analysis to gain insights into their experiences (Braun and Clarke 2019). This information was then condensed and synthesised through an empathy map, persona and point of view statement.

### **Phase Three: Dream**

The Dream phase of this project envisions a future where all the persona's needs are met and illustrates what this looks like through a fictional journal entry written from the persona's point of view. This reframing strategy enables me to explore a different perspective, resulting in creative design outcomes.

### **Phase Four: Design**

The Design phase of this research project focuses on articulating and presenting offerings that bring us closer to achieving this ideal future (Hung et al. 2018). Using methods and processes such as the dark side brainstorm tool and service design blueprint, I was able to generate insights and design outcomes that could improve students' mental well-being.

### **Phase Five: Deliver**

The final phase, Deliver, aims to produce the concepts generated in the Design stage and provide AUT recommendations on implementing these initiatives (Tschimmel 2012). I will create an events application alongside a guide to illustrate how AUT can deliver socially connected events.

## **Data Collection: Participant Interviews**

Participant interviews enabled me to gain an in-depth understanding of students' experiences, perspectives, opinions and motivations (Turner III and Hagstrom-Schmidt 2022). These conversations with participants can be structured in various ways to achieve a range of outcomes. The semi-structured interview requires the researcher to prepare a list of open-ended questions and topics to discuss during the interview. Participant interviews will be semi-structured to allow for reflexivity during the interview, resulting in reliable and credible data (Creswell and Creswell 2017)

### **Participant Recruitment**

Due to the uncertain COVID-19 lockdown periods, recruitment had to shift from physical posters to social media posts. The social media post in Appendix 3 illustrates the messaging I used to recruit university students for this project. University students wishing to share their study experiences were asked to email me. All participants in this study were required to be at least 18 years old and currently enrolled at the Auckland University of Technology (AUT), University of Auckland (UoA) or Massey University, with adequate English comprehension. Four students from UoA, three from AUT and two from Massey University were interviewed to represent the general student population. I selected participants on a first-come, first-served basis due to the large number of students who wished to participate in this study. Successful candidates were given an information sheet and consent form that explained the purpose of this research, what was expected of them, and how their data would be used. Before the interview, participants could either return their consent form in writing or provide verbal consent. The Information Sheet in Appendix 3, and the Consent Form in Appendix 2 outline the purpose of this research and participants rights.

### **Participant Interviews**

Students participated in a semi-structured, one-on-one, online interview to share

positive experiences of university life that made them feel supported. These responses included stories of peer support, helpful university services, and compassionate university staff. In addition, students were asked to suggest offerings they would like to see at their university. I asked follow-up questions to help them review, reflect and elaborate on their feelings and thoughts. The Interview Protocol in Appendix 4 provides further details on the types of questions that were asked.

## Participant Demographics

Variable	Category	Number of Participants
<b>Gender</b>	Female	6
	Male	3
<b>Age</b>	18-21	4
	22-25	2
	26-30	2
	41-4	1
<b>Ethnicity</b>	Pākehā / NZ European	4
	Asian	3
	Middle Eastern	1
	Māori	1
<b>Education</b>	Undergraduate	7
	Post-Graduate	1
	Doctoral	1

Table 1: Participant Demographics

## Data Analysis: Reflexive Thematic Analysis

Thematic Analysis is a qualitative analytic technique that enables researchers to examine patterns across data sets and define codes into core organising concepts (Braun and Clarke 2006). I used the Reflexive Thematic Analysis developed by (Braun and Clarke 2019) in this research process. In this method, reflexivity refers to the practise of identifying and challenging assumptions regarding the project, the code, or the theme. This process highlights the subjectivity of researchers as a resource, recognises their role in knowledge production, and accepts their influence on the outcome. This creative process consists of (1) Data Familiarisation; (2) Systemic Data Coding; (3) Generating Initial Themes; (4) Developing and Reviewing Themes; (5) Refining and Defining Themes, and; (6) Reporting the Research (Braun and Clarke 2021). For this method to be successful, researchers must communicate their interpretive analysis of the data throughout the data analysis and report writing phases. Thematic analysis recognises the value of the participant's experiences and provides researchers with an understanding of their unique perspectives and worldview (Castleberry and Nolen 2018). This thematic analysis was not employed to generate definitive results or conclusions but to gain insight into the experiences of university students

### Data Familiarisation

As the primary researcher, I was familiar with the data because I conducted the interviews, made notes, and transcribed the audio recordings. Individual transcripts were annotated to highlight essential pieces of information expressed by students. These annotations were placed on a single sticky note and colour-coded for each participant on Miro.



Figure 2: Participant Annotations

## Developing, Refining and Defining Themes

I then analysed this large data set and grouped annotations into codes. I loosely labelled these codes to keep track of ideas and justify my decisions. Throughout this process, I have allowed the data to guide me by intuitively grouping sticky notes based on nuanced emotions, feelings, or thoughts that underpin the annotation. My initial set of themes was too granular and did not reflect patterns across the dataset but reflected a single concept. I continued to group, combine, and build upon codes until they captured a meaningful pattern in the data, at which point I developed my themes (Braun and Clarke 2019). As a result of this interpretative approach, I generated seven key themes that underpin the current student experience.<sup>2</sup>



Figure 3: Developing, Refining and Defining Themes

<sup>2</sup> A detailed analysis of the thematic analysis insights will be outlined in the documentation of the research practice chapter.

## **Ethics Process and Considerations**

This research project required approval from the Auckland University of Technology Ethics Committee (AUTEC) to conduct participant interviews. Completing this procedure ensured that this research respects partnership, protection and student participation resulting in beneficial outcomes for student well-being. Due to the increased distress levels caused by the pandemic, the AUTEC was concerned about researching student mental health. In response to this feedback, I conducted this research using an Ai framework. Students' participation through this strength-based approach ensured that the design process elevated their lived experiences and allowed them to foster positive change while removing the possibility of undue stress, harm or disclosure. Using this framework also protected me, the researcher, from harm.

The emphasis on positive interactions during the process improved the participant's resiliency, coping abilities, positive emotions and positive talk (Fredrickson 2001), resulting in generative action (Bushe 2007). Collaborating with students in this generative approach allowed them to foster sustainable innovation for others and their community leading to improved motivation, engagement and partnership (Huang et al. 2020).

# Documentation of Practice

In this chapter, I will provide a reflective perspective on my practice as it progressed through the five phases of Define, Discover, Dream, Design and Deliver. The first phase of this research project, Define, focuses on narrowing the scope of this inquiry. The Discover stage seeks to identify, analyse, and reframe students' experiences using a variety of approaches to communicate the best of what is. The Dream phase of this project envisions a future where all the person's needs are met, while the Design phase focuses on the concepts that need to be generated to meet this future. In the final phase, Deliver, I will create an events application alongside a guide to illustrate how AUT can deliver socially connected events. I will outline the methods and tools used in each stage, reflect on the decision-making process, and then present the findings.

## **Phase One: Define**

The first phase of this research project was to define the scope and focus of this inquiry. I narrowed down the topic of this project through the contextual review and ethics approval process. To determine the scope of this investigation, I researched existing university services to identify what support is currently provided to students. In addition to this inquiry, I completed an assumption map to uncover my unconscious bias about the research topic.

### **Assumption Mapping**

The purpose of assumption mapping is to deconstruct unconscious bias regarding a concept, product, or service. This method is completed by placing information on a scale from known to unknown and important to unimportant (Schoups 2017). In Miro, assumptions regarding student mental health, higher education institutions, and support services were written on digital sticky notes. A single note contained a single statement about one of these core topics. I attempted to identify my unconscious biases by noting down pre-existing assumptions about the project and potential outcomes. These sticky notes were then ranked (important-unimportant/known-unknown) and placed in the appropriate location. As a student conducting this research, it is important to acknowledge my experience and uncover my beliefs about university support and education to prevent me from influencing the results. Uncovering these unconscious beliefs resulted in greater empathy with student participants, allowing me to generate more effective outcomes.

After completing the assumption map, I recognised that I brought several pre-existing biases to this project. After experiencing a traumatic event during the last year of my undergraduate studies, I personally felt unsupported by AUT and developed a negative perception of universities and the services they provide. At the start of this project, I assumed that education institutions did not provide enough support for students due to limited resources and capabilities and, therefore, could not improve their services. This led me to believe that students did not have access to support and did not know where to find resources. Subsequently, I assumed that universities could do more to aid students during the pandemic. Completing this assumption map prompted me to investigate the

university services to challenge my assumptions and learn more about the offerings they give to students.

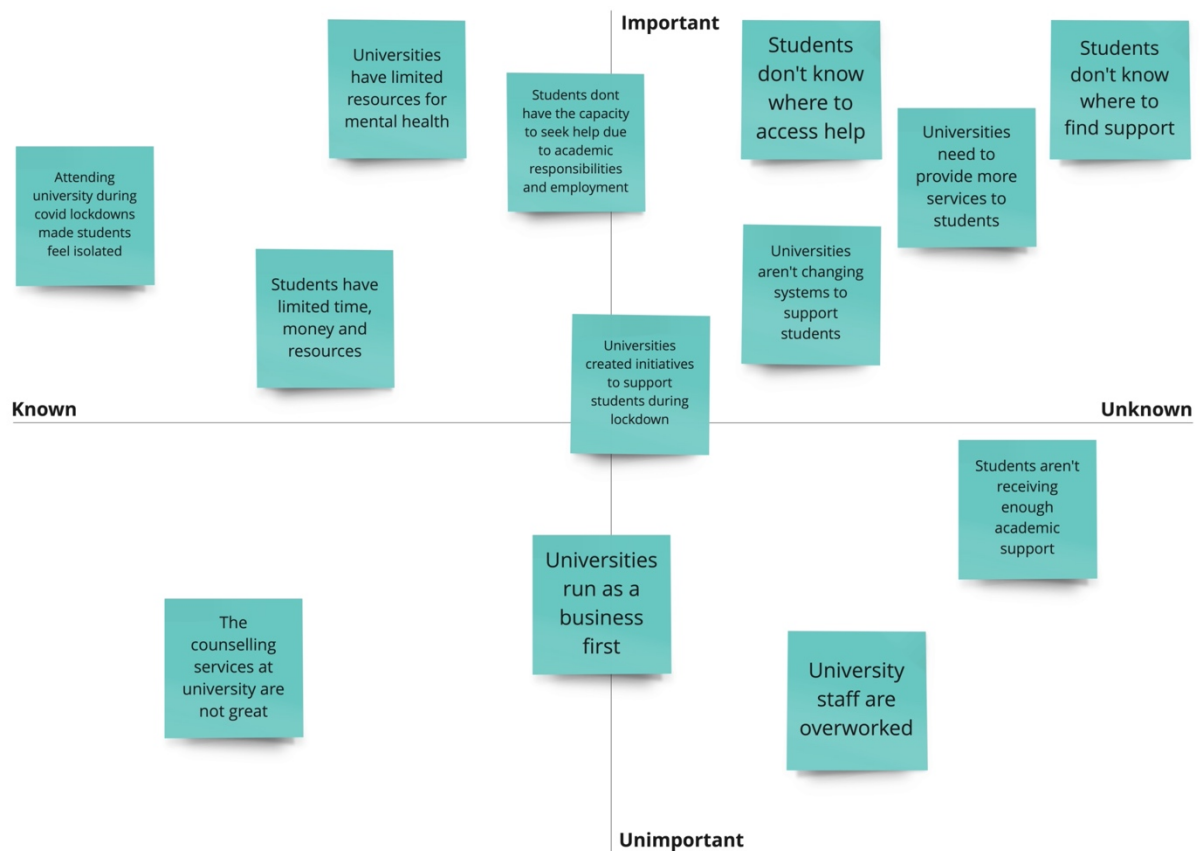


Figure 4: Assumption Mapping

## Investigation of Services

To understand the range of options open to students, I examined the support services provided by Auckland University of Technology (AUT), University of Auckland (UoA), and Massey University. By researching university websites, I could build awareness of resources and understand how students can access them. As an AUT student, I could access comprehensive information on the services provided at AUT. However, I could not get as in-depth an understanding of those offered at UoA and Massey University.

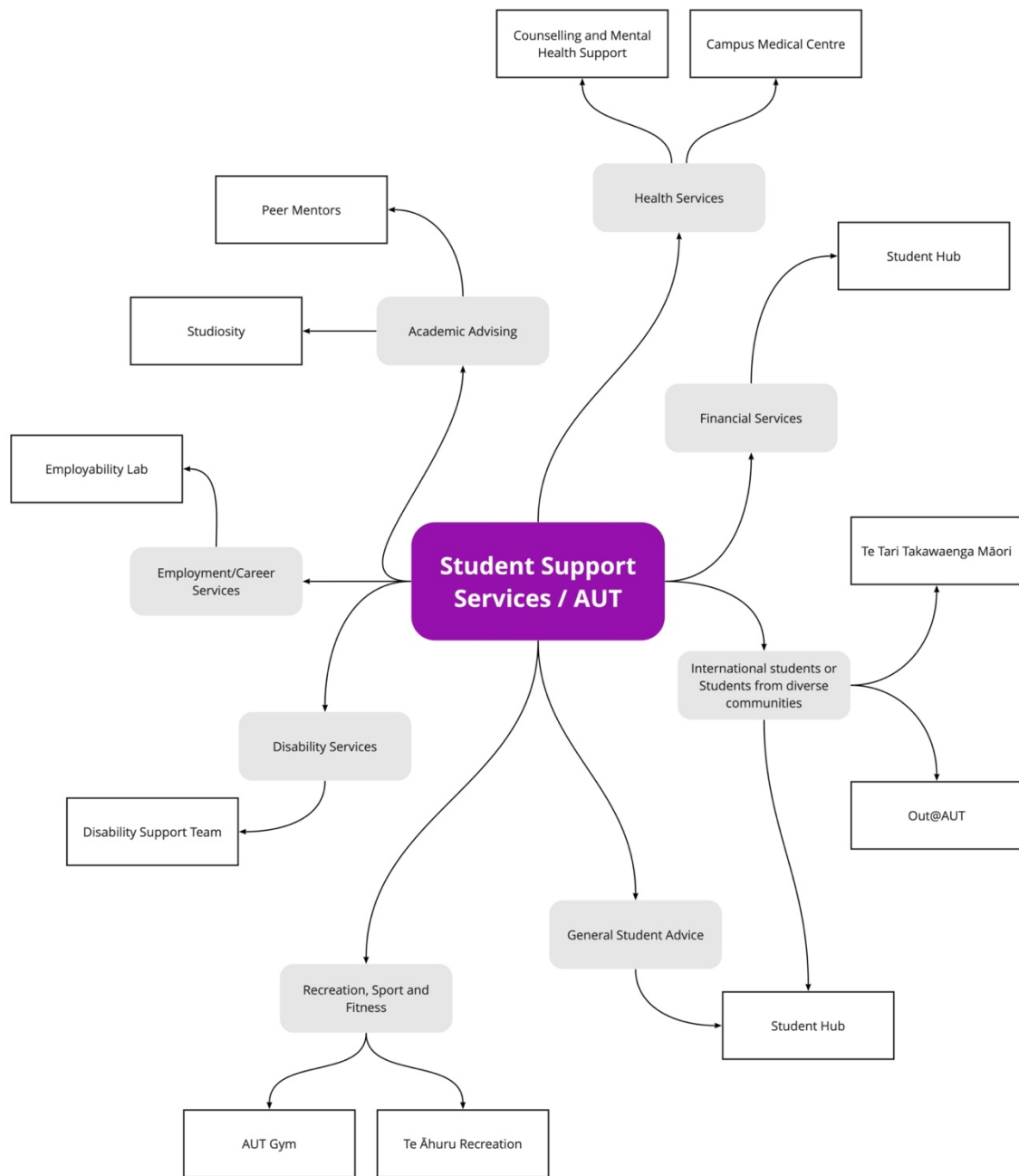


Figure 5: Investigation of Services / AUT

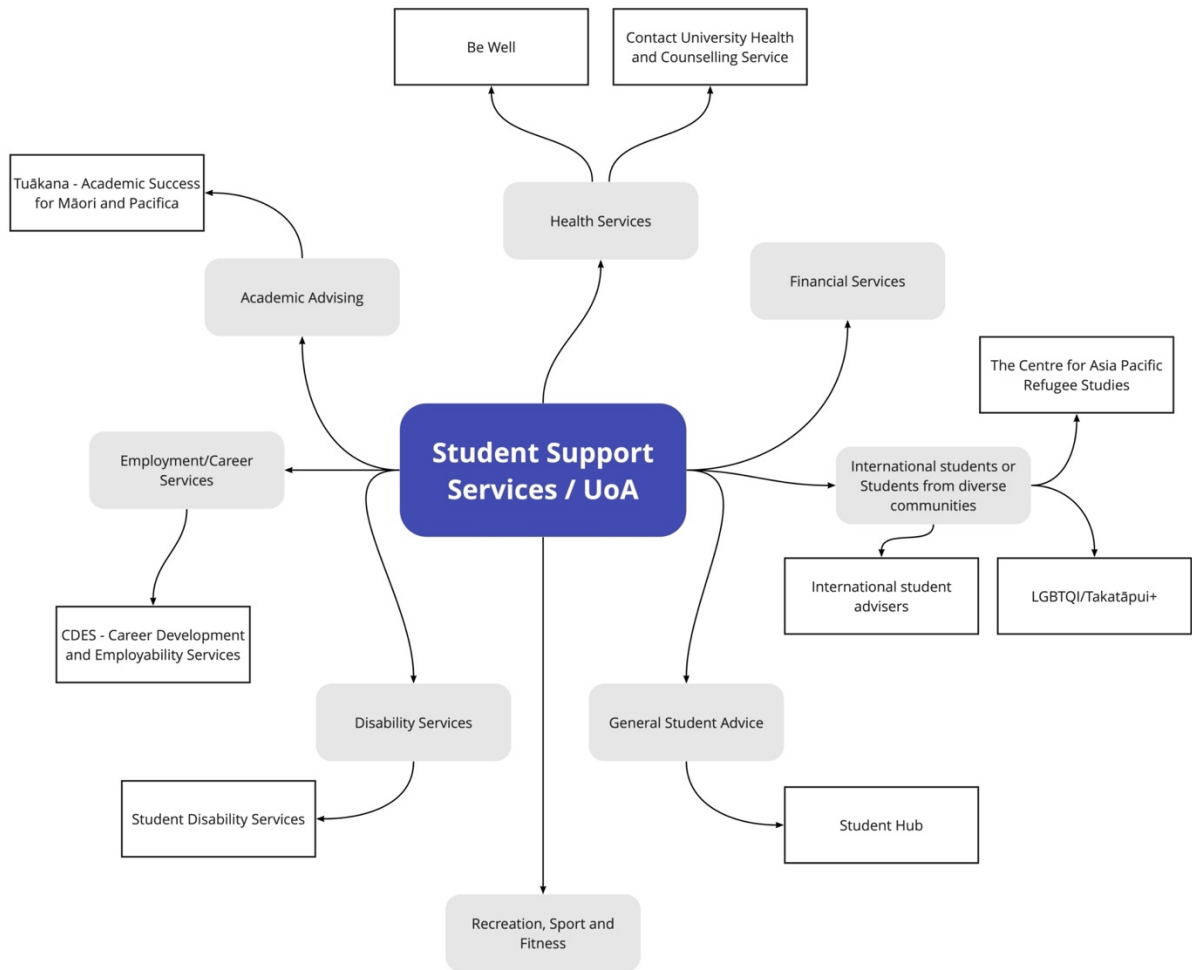


Figure 6: Investigation of Services / UoA

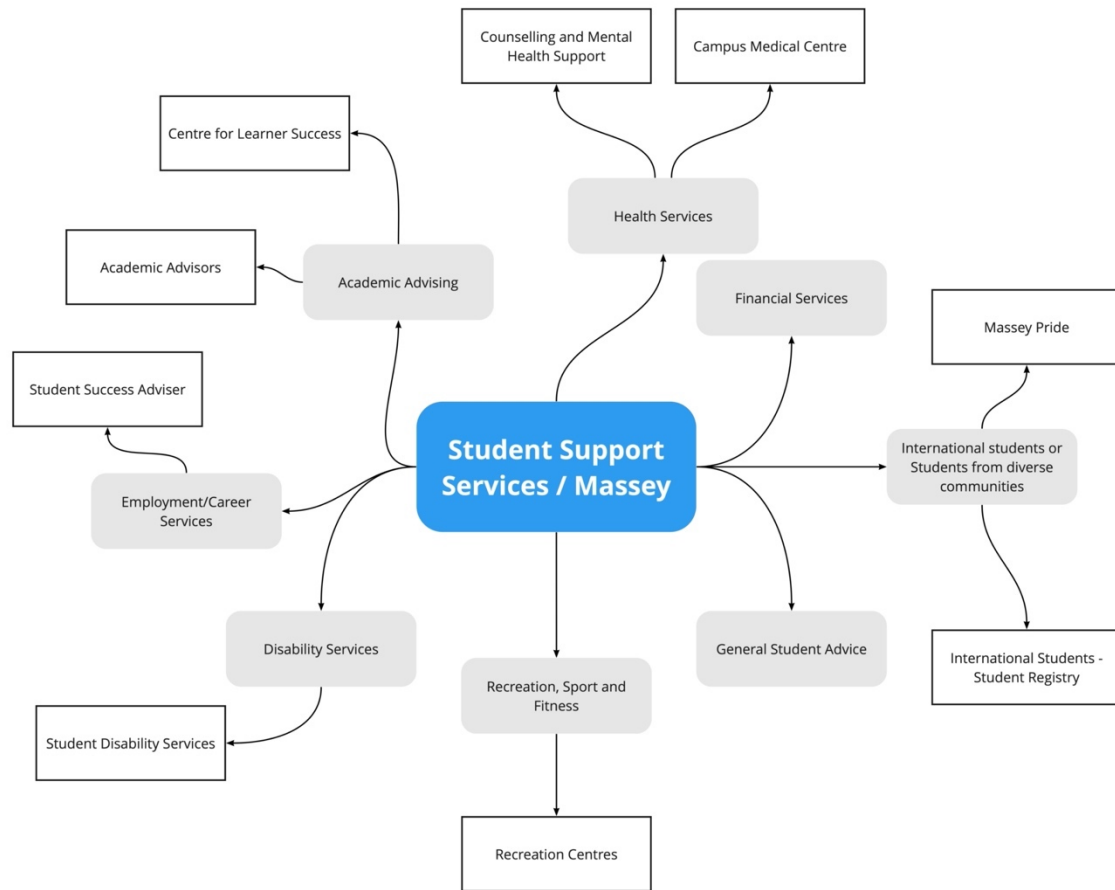


Figure 7: Investigation of Services / Massey University

This review revealed that universities provide students with extensive personal, academic, and professional development opportunities. All institutions offered academic advising, disability services, international student and diverse community resources, health services, and employment resources. Peer-to-peer, academic support was offered by AUT, while UoA developed a service specifically for Māori and Pasifika students. In order to help students advance their careers, all universities offer employability or career support. These services helped students write resumes, apply for jobs, network with organisations, and upskill their capabilities. All universities offered medical care, mental health services and active recreation opportunities to maintain good health during their study period. The only institution that offers financial assistance to students experiencing financial hardship is AUT. Every institution provides students with the opportunity to join clubs and societies. However, there are not many other programmes that are specifically aimed at fostering social connections. Examining the range of services provided by higher education institutions revealed the support available

to students. It gave me context for the services they may discuss in one-on-one interviews.

In this Define phase, I examined university services alongside a contextual review and ethics approval process to define the focus and scope of my study. As a result of my investigation into university support services, I uncovered that AUT, UoA and Massey university provides students with a broad range of personal, academic, and professional opportunities. This was contradictory to my initial beliefs about resources at higher education institutions, which were outlined through assumption mapping. I had previously thought universities did not provide students with enough support or resources. By investigating university services and mapping my assumptions, I could identify my bias through this project and what exists. These methods provided context for the services students may discuss during this project's discovery phase.

## **Phase Two: Discover**

The 'Discover' phase of this research seeks to identify, analyse, and communicate the best of what is. I interviewed student participants through an Ai approach to identify positive experiences that made them feel supported. I then analysed their responses and collated these insights into themes using a reflexive thematic analysis. This information was then communicated through an empathy map, persona and point of view statement.

### **Participant Interviews**

Students participated in a semi-structured, one-on-one, online interview to discuss the positive experiences of university life that made them feel supported. Participants frequently brought up negative experiences to illustrate how the university environment could be improved or how they were supported during this difficult time. It was important as the interviewer, using an Appreciative Inquiry approach, to acknowledge that these negative experiences had a significant impact on the students but not dwell on them. Instead, I asked participants about how they received support, how they felt when people helped them, and what could be done differently in the future. Reframing challenging circumstances in this manner acknowledged students' lived experiences, alleviated unnecessary stress, and identified the best of what is and what could be. These interviews revealed deep insights into the lives of university students and uncovered moments of strength, support, and positive interactions within the university environment. Elements of positivity can then be implemented into existing services, building on top of what works.

# Thematic Analysis Insights

As a result of the thematic analysis, I generated seven key themes that underpin the current student experience. The first three themes centre around institutional support provided by lecturers and broader university staff: educators are in a unique position to support students because they are often the first point of contact, students value building connections with teaching staff, and lecturers must understand the student experience in order to provide effective support. The fourth theme addresses inclusion in higher education institutions: universities must be inclusive of people with diverse identities, cultures and disabilities. The fifth theme focuses on the impact of peer feedback on students' willingness to use support services. The final two themes examine social connectedness: the gap between university students' expectations and experiences due to COVID-19 and how universities can facilitate social opportunities to help students build relationships with others.

## **1. University teaching staff are in a unique position to support students because they are often the first point of contact for struggling students**

Participants discussed the significance of teaching staff, who are frequently viewed as the first point of contact when students struggle with personal or academic issues. As Daisy stated:

*“It’s really important for me to know whether or not I can reach out to a lecturer and be like – Hey, I’m really struggling, can you point me to where to get help. Or if you really need an extension. Because you know, life is just chaotic, and to know that the option is there”.*

Students value university teaching staff whom they can turn to for help. However, many students felt that lecturers could not provide this kind of support due to limited capacity and time. As Lara mentioned, *“lecturers always say you can come talk to us, but you can’t say that to 200 students and not make them feel like they are just a statistic”*. This perceived limitation makes students feel like a burden when they require extra support or accommodations. Hamish explained that he’s not *“really the type to reach out to [his] mentor”* as he does not want to burden them by asking for support. Josh suggested that it would be nice for educators to be proactive, so it does not feel one-sided but he was uncertain about their capacity to do that due to perceived limitations on resources.

University teaching staff (lecturers, tutors, mentors, and supervisors) are uniquely positioned to be the first point of contact for students struggling with academic responsibilities, which may be related to poor mental well-being (Farrer et al. 2015). Gulliver et al. (2018) investigated the experiences of teaching staff concerning their ability to respond to students’ mental health needs. Approximately 56% of university teaching staff have been approached by a student to discuss their mental health. Most educators reported feeling confident in their ability to provide students with emotional support – discussing their problems, listening to them and offering reassurance. However, they cited the need for formal training on specific mental health concerns, how to refer students to appropriate services and which organisations might be helpful. This does not mean that teaching staff must exceed their role as educators and provide students with mental health support (Baik et al. 2019). However, there is an opportunity for staff to identify unmet needs, connect students with services and reduce the stigma around accessing support. University staff need to connect with and care for students, and have a broad understanding of the student experience to be an effective point of contact.

## **2. Students value teaching staff who build a connection with them because it makes them feel cared for**

Students need to have a connection and rapport with their lecturer if they see them as someone they can trust. As Sabrina stated:

*"I think when the lecturers really show that they're taking an interest in you, in your achievement – when they take an interest in your learning. I think, is really nice. It makes you feel a bit more, that you're not just a number or – that you are wanted in the university, that they actually care"*

Many participants believed that stronger connections and relationships with teachers lead to better academic results. According to Alysha, *"if you have a really good teacher, if you feel like they care, you're more likely to do well"*. Similarly, Amy stated that classes are more engaging if you have a good relationship with your lecturer and *"you really enjoy their teaching style or personality"*. However, because students have many different educators throughout their degree, it is difficult for them to form these bonds. Similarly, larger class sizes may make it more difficult for students to connect. As Sabrina highlighted, smaller classes are more *"personal and the allowed everyone to get to know each other"*.

The educational experience fosters the development of relationships between university faculty and students due to an innate need for human connection (Giles 2011). Students value educators who cultivate a personal and academic rapport with them. In their study, Jorgenson et al. (2018) identified that students felt connected to teaching staff when they perceived that the educator cared about them as individuals. University faculty who relate to students through shared experiences and communicate and maintain appropriate boundaries foster positive student relationships (Karpouza and Emvalotis 2019). Establishing a relationship with faculty improves students' study skills, capacity to adapt to academic responsibilities, comprehension of professors' expectations and utilisation of university services (Delaney 2008).

### **3. University staff must have a broad understanding of the student experience to provide students with empathetic and effective support.**

Broader university staff must understand the student experience to meet their needs effectively. Josh stated that he wanted service providers to *“intuitively have that awareness and meet my needs according to that situation and the context I’m in”*. These qualities are illustrated through a story told by Leilani. She had heard that her degree requirements would change, adding a year to her studies. She approached the Māori student association for support after *‘freaking out’* about this change. She did not know whom to talk to as the information was in the form of gossip from friends. She says:

*“They’re very nice people, very helpful. They were going to call the Dean, and they called like three different people for me, and then found out what was actually happening. They said no, they’re not going to change it until 2022 so anyone doing it now can still do [class]... I was so relieved”.*

This is supported by Amy, who stated that it is crucial to *“have the right people involved. Have people who are not only interested but passionate about what the service is. Just kind of warm, inviting, and knowledgeable”*. In order to improve students’ overall educational experience, broader university staff must be aware and responsive to their needs. As Tan, Muskat, and Johns (2019) investigated, empathy was demonstrated to be a crucial component of the student service experience. Personalised responses from service providers were valued by both students and faculty, leading to an overall positive learning experience. Given that the COVID-19 crisis exacerbated existing systemic inequalities in higher education, providing individualised support is particularly important. The current pandemic presents an opportunity for university staff to evaluate the role of student support networks and consider how best to support the student experience.

### **4. Universities must be inclusive of diverse experiences, cultures, disabilities, and identities**

All students emphasised the importance of higher education institutions as an inclusive and diverse environment. For Leilani, this idea was fundamental and she explained:

*“Consider that not everyone is 50 kilos and can fit into a tiny little seat. I think just designing a space that that can be used by everyone, not just a select few people. I want a university or country that inclusive everyone, not leave people behind, not excuse people. I think that’s quite bad for mental wellbeing”.*

“You can’t have a one model fits all”, as Lara put it. There must also be representation on the team, so those requesting the service feel comfortable. Given Tāmaki Makaurau’s cultural richness, all students voiced a need for inclusive and diverse support. In order to be aware of students’ circumstances and recognise their unconscious bias, Alysha believes that university staff must have extensive cultural competency training. Daisy went on to discuss cultural barriers for Black, Indigenous and People of Colour (BIPOC), saying:

*“Accessibility is really big especially for BIPOC as well. Counselling is like a massive cultural barrier, I would say. It is quite difficult to ask for help when I think it’s still quiet taboo talking about mental health. [It would be good to] break down those barriers, and have more communications and messaging directed to minority groups”.*

Amy agreed with this sentiment, stating that “we need to have services that are tailored for people who are queer, BIPOC, people who have access needs or disabilities”. After WW2, New Zealand universities evolved from small, elite establishments to socially diverse institutions (Roper 2018). The globalisation of education diversified student populations, allowing individuals from marginalised and under-represented groups the opportunity to attain a qualification (Ciobanu 2013). Approximately 330,000 students were enrolled into tertiary institutions in 2020, with Māori, Pacific people, Asian and other ethnic groups contributing to 52% of this population (Education Counts 2020). National surveys report that 1 in 20 adults identify as LGBTQIA+, and approximately 25% of all New Zealanders have a physical, sensory, learning, mental health, or other impairment (Office for Disability Issues 2013; Stats NZ 2021). Higher Education Institutions must support social inclusion and engage with diverse groups for all students to achieve positive personal, societal and educational outcomes (Karimi and Matous 2018; Tienda 2013).

## **5. Friends' experiences with university services have a significant impact on students' perceptions of those services since they rely on their friends for support and feedback.**

Students learn about university services from recommendations made by their peers. Positive feedback from close friends encourages students to seek support from those services. Similarly, negative reviews will prevent students from reaching out. Hamish sought out a university service as a last resort after experiencing a challenging, personal circumstance, but he was given underwhelming and bland support. He stated, *"maybe a bit of bias too because I've heard from everyone that it kind of sucks. Everyone tells me that \*\*\*\*\* at university sucks"*. Lara's response highlights the significance of positive peer referrals and support: *"I don't know if you know about \*\*\*\*\* which is a Māori and Pasifika admissions. It's like specific for Māori and Pasifika which is really good – like my friends love it, and I think it's so good"*. Due to her Asian descent, she has never utilised the Māori and Pasifika admissions, but she speaks strongly about their services.

The significance of peer support is highlighted in a study by Reavley, McCann, and Jorm (2012) that investigated the help-seeking behaviours of students and faculty at a tertiary education institution. 82% of university students reported speaking with a close friend to receive support about their problems. Broglia, Millings, and Barkham (2021) suggest that students require time to contemplate using a service and are concerned about the resources required to access that support. This may explain why students' referrals of services are central to service identification. There is a need to foster social support across ages, cultural identities and educational levels to improve academic, social and emotional adjustment (Jindal-Snape 2009) and student confidence (Awang, Kutty, and Ahmad 2014).

## **6. There is a mismatch between the expectations of university students and their actual experiences due to the impacts of the COVID-19 pandemic**

Students attending university during the COVID-19 pandemic experienced unprecedented disruption in their academic and social experiences. Daisy

identified that “*university clubs help to create a better environment*”, and it’s a great way to make friends. Unfortunately, Lara could not participate in club activities due to the COVID lockdown. She explained, “*my friends go to the dessert club every month and try a million desserts. They tried to get me to go but COVID happened, and they had to cancel it like URGH*”. As highlighted by Hamish, “*in high school, we have this idea that once you hit university, it’s going to be all parties and having fun, even though it’s really not... it’s a lot of studying, staying at home, postponed plans, COVID*”. Many students believed that attending university would lead to more friends, better social outcomes, life experiences and fun activities, yet COVID substantially hindered these goals. Likewise, students’ academic experiences were also drastically different to what they expected. As Kevin described:

*“From my point of view, in our physical class, there are more eye-to-eye interactions between students and teachers. When it shifted to online, they mostly faced the monitor but not exactly where the camera is positioned. From my point of view, online courses really discouraging students from that interaction”.*

The gap between students’ expectations and their actual university experience was significantly greater than before COVID (Jorgenson et al. 2018). Students initially anticipated making more friends, speaking with peers with similar interests, and expanding their social activities. Instead, students experience isolation, uncertain lockdowns, online learning and postponed social events (Grubic, Badovinac, and Johri 2020). This mismatch of experiences, according to Pather and Dorasamy (2018), causes students to feel disconnected from the institution, leading to academic failure and dropping out. Fostering belonging and identity to the institution, peers, and faculty is an essential experience that shapes how people exist and interact with the world (Meehan and Howells 2018).

## **7. Students would like to see social opportunities facilitated by the university because they find it difficult to make connections on their own.**

The COVID-19 pandemic and the evolution of technology have permanently altered how we interact with others. Participants in this study expressed a desire for university-facilitated social opportunities. As Daisy described:

*“It’s really difficult to make friends, especially if you’re more of a quiet person. I think lots of us don’t know where to look, where to start, or maybe we just don’t have the resources or time to be able to partake in community building”.*

Similarly, Hamish described his feelings about making friends at university: *“I feel like there are thousands of students when you’re on campus and you can’t really make friends on campus because it’s kind of weird, just like approaching someone, asking if they want to be my friend”.* Many participants described that making connections and friendships with other university students is challenging, citing that their relationships are formed through activities rather than directly approaching other students. Attending club events and university activities, flatting with other students, and meeting mutual friends were common ways students developed friendships during university. This process is more complicated if university campuses are closed due to lockdowns, students do not know where to find these social opportunities, or they do not have the time or money to participate in these events.

Fostering a sense of belonging in social and academic communities is integral to the university experience. When students feel cared for, they experience feelings of acceptance and belonging, resulting in richer interpersonal attachment and reassurance with peers (King, McQuarrie, and Brigham 2021). These qualities enhance students’ sense of community, leading to greater resilience and academic outcomes (Buote et al. 2007). According to Holdsworth et al. (2018), university clubs and societies are important strategies for improving belonging and reducing loneliness. Students’ social networks are facilitated by the relationships formed through these activities and, more broadly, throughout the university. Cheng (2004) argues, however, that communities are created not only by groups of friends with shared personal interests but through effective programming and organised social opportunities.

From this thematic analysis, I discovered seven key themes that underpin the current student experience. University teaching staff are uniquely positioned to assist students because they are frequently the initial point of contact for students struggling with academic responsibilities. Students appreciate teachers who build a connection with them because it makes them feel cared for. To provide students with empathic and effective support, university personnel must broadly understand the student experience. Universities must accommodate

varied experiences, cultures, disabilities, and identities. Since students rely on their friends for support and feedback, the experiences of friends with university services substantially impact students' impressions of services. Due to the effects of the COVID-19 pandemic, there is a mismatch between the expectations of university students and their actual experiences. Students would like to see social opportunities facilitated by the university because they find it challenging to make connections on their own. The first three themes centre around institutional support provided by lecturers and broader university staff. The fourth theme discusses inclusion in higher education institutions. The fifth theme focuses on the impact of peer feedback on students' willingness to use support services. The final two themes examine social connectedness.

# Reframing of the Research

During this thesis, I reframed the focus of this project to produce a service design outcome that addresses the seventh theme by responding to the following question:

## **How might the university facilitate community-building opportunities for students?**

I have chosen to focus on facilitating social connectedness because students are unaware of the events and activities at their respective universities. Instead, the participants relied heavily on their university friends for information about events. *"I literally found everything through friends. I probably wouldn't have gone to any of these events, if I didn't have someone to go with"* said Leilani. Initiatives that promote social connectedness must be given the same priority as those for personal, academic, and professional development. Increasing awareness of these social activities and effectively organising new initiatives would improve student mental health (McIntyre et al., 2018; Turki et al., 2018). The focus of my design is on building these initiatives for students so that they can feel a sense of belonging within their community. The impact of COVID-19 on the university experience has significantly diminished these opportunities for students, and there is a need to reevaluate students' unmet needs and develop concepts that facilitate connections. To provide a well-rounded student experience, I will incorporate key characteristics discussed in the other themes. Correspondingly, this theme enables me to use my skills as an experience designer to determine how effective organisation and programming could facilitate social opportunities for students. To generate an understanding of students' social needs, I constructed an aggregated empathy map to communicate these behaviours.

## Empathy Mapping

An Empathy Map is a visualisation tool used to convey information about a specific user. It externalises information about students in an empathic and tangible manner to illustrate their fundamental needs and desires (NN Group 2018). An Empathy Map consists of four quadrants – says, thinks, does, feels – with the user in the middle. This method consolidates the experiences of multiple users and communicates the attitudes and behaviours that drive them. I reflected on the participant data and created a single, aggregated empathy map that synthesises information across multiple students. Data points that expressed opinions about the facilitation of social connectedness were placed into one of the four segments. This method differs from Thematic Analysis in that it focuses on generating an understanding of user needs to develop a persona that will be crucial to this design process.

As outlined in the seventh theme of the thematic analysis insights, making friends with other university students is a complex process. Students claim that while they were initially excited about forming connections with other students, they realised that they needed to be 'creative' in how they made those bonds. This is particularly challenging as the lockdowns prevented people from attending campus events, making it difficult to have consistent interactions that form friendships. Some students believe that the institution could do more to help them make friends. One student mentioned that the university has many resources and events, but they go underutilised since few people are aware of them. Most students cite feeling anxious about approaching other students. Likewise, uncertainty around social opportunities makes students feel confused and unclear about where to find resources. To combat this ambiguity, most people focus on building relationships with classmates and attending campus events with them. This action eases their anxiety and makes them more confident to reach out to others. Others seek social opportunities by joining clubs and using social media platforms. In order to provide students with adequate social opportunities, unmet needs from these four quadrants must be addressed. I synthesised this data into a persona to better illustrate how these factors influence students' motivations, experiences and emotions.

# Says

"You have to find more creative ways of making friends. A lot of the times its social events outside of university that you meet university students"

"A lot of us don't know where to look, where to start or maybe we just don't have the resources or the time to partake in community building"

"I grew up in a small town so I think I'm just really excited to be surrounded by lots of different people and, just like making friends, partying."

Students didn't have the opportunity to build connections due to the lockdown

"I didn't really make a lot of friends, because when I started university, the pandemic was ongoing, I still tried to talk to people but lockdowns happened so the interactions were inconsistent"

# Thinks

"I don't really see any interaction between students that is supported by the university. Most of them are for discussing academic but not for social"

Having a support system around you to help you is really important

"I think it's having someone to talk to. Even talking it out can make you feel better"

Students think they will be able to take part in social offerings a lot more than they actually did

"When you like actually start you university, you realise you actually don't have that much time to commit to all of these clubs. I thought I was going to join like five or six clubs, but it did not end up happening."

Students value inclusivity

"If they want people to join their service or their group or something, not making it limited to certain people and trying to make it appeal to everyone."

Students aren't aware of the events, services, offerings that universities provide

"I feel like theres a lot of things that the do university does offer that I didn't know, and still don't know about. I just think theres a lot of services that go - underutilised just because people don't know about them"

Students want to create an inclusive society where people feel happy and accepted

# Does

Students attend the club expo

"At the start of the year, they had a Club Expo. That was pretty high because you get exposed to everything"

Students don't deliberately check the university website, facebook page or similar websites

Students check the department email newsletter for information about services, clubs or jobs

"I've more used the service because I've seen that it's there, rather than asking 'Is there a 'this' service' and gone and found it. It's been more 'Oh I see this one here I'll go use it.'"

Students have made social media groups outside of university with classmates

"We've also got like a Facebook group that we made, and chat group as well, which was really good to talk about assignments and stuff outside of university"

Students join clubs but aren't sure of the events taking place

"I think I joined like one or two clubs, but there wasn't actually that many events in those clubs that I joined. So there wasn't that much opportunity to like do things with those clubs"

Due to inconsistent lockdowns, university students haven't had the chance to physically attend university.

"When I started my degree, I think it was all like lockdown time. Lockdown was just go in and out. I think I've been at uni for like maybe - like physically like half a semester. So I haven't really had a chance to have a 'gander'"

Students wouldn't go to social/club events unless they had someone to go with

"I probably wouldn't have gone to any of these events if I didn't have someone to go with"

Students find out about social or club events through friends

"I literally found everything through friends. So if you don't have friends at university... I don't know."

# Feels

It's weird to make friends on campus

"I feel like thousands of students, when you're on campus you can't really make friends on campus because, like well because it's kind of weird just like approaching someone, asking if they want to be my friend."

Students are uncertain of social offerings

"I have noticed that there is there isn't really a place for students to talk to each other for the young people's to get interactive. And maybe there are, I just didn't find them but I didn't find any one"

Students are frustrated that events had to be cancelled due to COVID

"Oh, there's like a desserts club at UniA. My friends go to it and they like meet up every month and have like a million desserts it looks. No my friend tried to get me to go, but the COVID happened they had to cancel it like UNIG"

University classes are more enjoyable when you feel connected to your peers

"Just your fellow classmates make a big difference as well when everyone's friendly and it's easy, you feel comfortable around the students that makes life, going to lectures, a lot more enjoyable yeah"

The uncertain lockdowns made people feel unhappy, and isolated

Students are sad that they have to sacrifice social opportunities for academic responsibilities

"Last semester, there was an activity for foreign students I registered but didn't get a chance to go there, so that's that's pretty sad. Because, after a while I found it's conflicting with my lectures, so I have to go to the lecture"

It feels good to have a lot of friends

"I think it just comes down to human desire, just to be wanted. When you're young and also in university, it just feels good having a lot of friends, just feels really good, really good"

Figure 8: Empathy Map

## Persona

A persona is an in-depth description of the target user created to represent the essence of a larger user group. This multipurpose tool conveys complex user data such as their needs, wants, behaviours, goals, age and gender identity (NN Group 2015). Personas can be utilised at various points of the design process to foster empathy and ensure that all design decisions are user-centric.

I consolidated the context, background, needs and goals of all student participants into a single persona to represent my target user. The characteristics and circumstances of my participants influenced the background of this persona. In my study, most students identified as women and used she/her pronouns. Similarly, participants were Auckland residents aged 18 to 21 years old, in the middle of their undergraduate degrees, and employed part-time. As a variety of participants took a gap year between high school and higher education, I chose to give this persona a similar gap. In this study, most participants talked about how the unpredictability of lockdown impacted their ability to make friends during their tertiary education. From the empathy map data points, I wrote a descriptive narrative reflecting the student experience, how they feel, and their needs:

*Clara enrolled at AUT in 2021 amidst the uncertainty of lockdowns and could not maintain consistent interactions with people in her degree. She made a few friends when she returned to in-person classes, but she felt the need to put herself out there, expand her connections, and try out new hobbies as she could not fulfil this experience during COVID. Clara could not attend the club expo because it was cancelled, so she turned to AUT's social media platforms for more information about activities. She hopes that something will pique her interest and allow her to build relationships with other students and have exciting new experiences.*

Clara needs someone to help her develop social connections with other students, as well as offerings that are easy to find. Students who described their experiences building relationships felt anxiety due to the COVID-19 pandemic, or a lack of skills to foster relationships. To pinpoint Clara's fundamental needs and driving motivations, I distilled these findings into a point of view statement.

## Background

Clara (She/They)	2nd Year Law Student at AUT	From Auckland
Working Part Time	21 years old	Took a gap year

## Goals

Develop relationships with other students	Take part in new experiences
--	------------------------------------

## Needs

An offering that helps facilitate social connections	To be able to find these offerings easily
---	--

## Clara's Story

Clara joined university in 2021 during the uncertainty of lockdowns

They had some opportunities to attend university classes physically but had to shift towards online learning due to government/university restrictions. Their interactions with peers were inconsistent and she would like to be able to develop deeper relationships with her classmates

While Clara has made a few friends at university, she wants to put her self out there and expand her social relationships and try out new hobbies to make close friends.

Clara is has seen information about university clubs and is interested in joining one

She doesn't know of many other social offerings at the university. This motivates her to seek out information on AUT's website, social media, and through recommendations from friends

She finds it difficult to make friends outside of class so she hopes that she can find other ways to build relationships with other people



Figure 9: Persona

## Point-Of-View Statement

A Point of View (POV) statement synthesises insights into a single, actionable statement that captures information about the user, their needs and their motivations (Dam and Siang 2020). This statement should be used as a reference point for ideation and development, ensuring that the user's needs are central to the design process.



Figure 10: Point-Of-View Statement

I referred to the goals and needs listed in the persona to determine Clara's needs. Many of the statements outlined in that resource identified ways to solve the problem Clara was experiencing. In order to create a POV statement that captures key behaviours and observations about a user, I had to zoom out and identify her overall need. I determined that Clara requires support in her journey to building social connections. The insight part of this sentence was quite challenging to articulate. Although it was obvious that students were anxious and overwhelmed, it was challenging to identify the underlying cause of those emotions. Were they afraid of rejection? Did they not know what to say? Did they not know how to approach people? It became clear from these examples that students lack the confidence to forge connections independently. I will use this statement as a north star to guide my thinking in the design phase of this research.

In summary, during the Discovery phase, I interviewed students through an Ai approach to identify the best of what is. Subsequently, I analysed these comments using a reflexive thematic analysis and identified seven major themes of the student experience. Based on these themes, I recognised that there is an opportunity to evaluate students' unmet needs and create university-facilitated programmes for students to connect socially. In order to create a solid POV statement, I first aggregated students' experiences into an empathy map and then defined their goals and needs through a persona. In the Dream phase, I will continue to build on Clara's story through a future-state, written narrative that describes a future where her needs are met.

## **Phase Three: Dream**

The Dream phase of this project envisions a future in which all of the persona's needs are met and shows this through a written narrative. I created an original contribution by adopting a User Experience (UX) story into a diary entry to identify and communicate the range of complex emotions felt by my persona through their journey. This reframing strategy allowed me to investigate a new perspective, leading to creative design outcomes.

### **User Experience (UX) Story**

A UX story is a detailed account of the user experience through an event. It focuses on the needs and behaviours of customers, the environment they are navigating, interactions along a timeline and an insight into the user (Gibbons 2017b). Gibbons (2017b) explained that UX stories focus on character and plot development instead of describing a journey through a specific activity. In order to envision a future where Clara's needs are met, I would need to illustrate their behaviours, needs, and emotions as they navigate a specific moment in the journey. I created an original contribution by adapting UX stories into a journal-style narrative that illustrates a future-state event through the perspective of a student who wants to expand social connections but does not know how to. Through this journal entry, we follow the life of Clara and understand her environment, context, and emotions as she tries to navigate making friends.

Dear Diary,

13<sup>th</sup> July 2023

*I want to make some friends, but I find it hard to talk to people. I saw some information about a movie club on the AUTSA Instagram page, but I'm too scared to look into it alone. I thought I could reach out to my classmates and ask them if they want to come, but I don't know if they're interested in a movie club. I think I'll leave it for now. It's just too stressful to think about.*

Dear Diary,

17<sup>th</sup> July 2023

*AUTSA posted an event the movie club is doing. They're holding a screening of "Inception" in the club room on campus. I love that movie, and I really want to go. I saw that they have a range of food provided too. I feel like I should just try it out and see how it goes. I'm really anxious about it, but people seemed really excited about the screening and posted a bunch of positive comments on the Instagram post. Maybe I'll be okay. Everyone seems friendly and kind. I just have to put myself out there and try harder to make friends outside of class. I think I'll check it out.*

Dear Diary,

29<sup>th</sup> July 2023

*I went to the Movie Club screening, and it went great! I was really nervous at first, so I got there a bit early to make sure I don't miss out on anything. It was a bit awkward being there alone while people waited with their friends. I just went on Tik Tok to kill time. The organiser came by and greeted everyone. They seemed super kind and warm, which was comforting. They welcomed everyone into the club room, put on some music and set the table with food. The club space was really cool. They had a bunch of led lights, bean bags, murals, and some physical games to play. There was so much to see and take in. The food looked really good too. It wasn't your usual trashy domino's pizza – they had a bunch of sandwiches, small finger food and drinks too. I was a bit shy to grab anything to eat, so I waited for someone else to get food before I did. The food was really good too. I heard AUT provides food and resources for people to host things now.*

*The organiser, Andy, was really bubbly and onto it. He made sure to walk around, talk with everyone, and see how they're doing. He suggested that we play a little game before the movie started. They split the whole group in half and talked us through this Māori game called Whanowhano. You face someone, jump and arrange your legs in a specific position. If you mirror the other person, you call out "HI" and win the round. He also suggested using your arms instead if you*

*couldn't jump to get into position. It was a really good way to break the tension and have a yarn with the person opposite you. After a couple of rounds, he got us to introduce ourselves to our teammate and say our favourite movie. I was paired with a guy called Robert, who studied Civil Engineering and loved the movie Django Unchained. I thought the choice was a bit pretentious, but he seemed cool. He liked the director and suggested some other stuff to watch, which was nice. We had some snacks from the table, grabbed a bean bag and watched the movie. Overall, it was a really cool time. I didn't really talk much with Robert, but it was nice to meet someone new and watch a movie with a group of people. I grabbed Robert's Instagram before I left so we could come to the movie club more often. I would definitely want to do this more often.*

This diary entry demonstrates that Clara experienced anxiety during multiple stages of their journey. She initially felt overwhelmed about attending the event because she could not think of anyone who would come with her. She felt anxious when she first arrived at the club room. However, the positive comments on the AUTSA post, the club room's relaxing atmosphere and the facilitator's warm attitude alleviated her anxiety, boosting her self-confidence. Through this method, I learned that it is essential to create small moments during the overall journey that give students the confidence to develop relationships. Visualising an ideal future of what could be through this Dream phase enabled me to design solutions and interventions that could lead to this envisaged outcome. In the following phase, Design, I will explore opportunities that accomplish this.

## Phase Four: Design

In the Design phase of this process, I focused on ideating concepts that can build social connectedness between students. Using methods such as dark side brainstorming and service design blueprint, I can generate theoretical concepts that can facilitate social opportunities for students.

### Brainstorm

Using the future-state diary entry as a foundation for this method, I asked myself, "What needs to be created to bring Clara to a future where her needs are met?". With my supervisor, I generated ideas rapidly, using the question to guide my thinking.



Figure 11: Brainstorm

After evaluating, grouping, and refining the ideas, we identified three significant areas of interest for further development. The first group focused on providing facilitators with training and resources to organise events, including cultural competency training, a budget to manage activities, and the opportunity to manage clubs as part of their degree. The second concentrated on creating inviting physical environments that promote connectivity through ambience and student-led initiatives. The third group focused on introducing students to one another in advance of events so they could go together. Due to the complexity of social connectedness and facilitation, it was quite challenging to generate these ideas. My supervisor and I decided to use the Dark Side method to brainstorm ideas to reframe my thinking and allow me to approach this nuanced topic from a different angle.

### Dark Side Brainstorm



Figure 12: Dark Side Brainstorm

The Dark Side Ideation method promotes creativity by encouraging negative thinking (Mischief Makers n.d.). Instead of focusing on how we might help Clara to build social connections, we focus on how we might hinder social connections. Together with my supervisor, I generated ideas rapidly, using the question to guide my thinking.

After evaluating and refining these notes, we identified three additional opportunities for improvement. The first theme revolved around barriers to accessing these events: making students fill out registration forms, holding costly activities, limiting event information, failing to promote events limit students' opportunities to build relationships. Similarly, lack of peer-led initiatives and large group events prevents students from developing mutual support and community with one another. Approaching this topic from a different perspective allows me to transform these negative concepts into positive ideas. I will create a future service design blueprint based on these concepts to demonstrate how these ideas can be used to create a positive student experience.

## **Key Concepts**

I built on top of the narrative outlined in the Dream phase by integrating several concepts from brainstorming sessions to determine how AUT could support these initiatives. The key concepts will be outlined in this section, and the service design blueprint will detail Clara's actions throughout the journey.

One of the main ideas in this journey was to create a physical space where students could connect with peers. Almost all students who participated in the one-on-one interviews recommended that the university create a designated social space for students to hang out – a comfortable and engaging area filled with board games, activities and music. A waiting area showcases student artwork to foster a sense of belongingness and prompts that help students engage with others. Since conducting this research, AUT has created a recreational space for students to hang out, with the option to book rooms for large events (AUT 2021). In the service design blueprint, I will outline how students could interact with this space through other initiatives and uncover additional opportunities to enable social connectedness in this recreational space. The second key concept centred on enabling student organisers to gain practical

experience and academic credits through event planning. They would be guided by knowledgeable staff to help them learn and receive cultural competency training to facilitate accessible activities. Student facilitators could also book the club room to hold events and activities. The third key concept focuses on developing an AUT events app that displays all social opportunities available to students. Clubs can promote their events on the app without requiring students to purchase a membership or sign up before the event. Removing these barriers will enable students to participate in activities without hesitation. The service design blueprint will articulate Clara’s interactions with all these key concepts and how AUT might support these initiatives.

## Future State Service Design Blueprint

A Service Design Blueprint visualises different processes and interactions that create a service. It illustrates a customer's journey through support processes and, frontstage and backstage employee actions (Alter 2013). Creating a comprehensive understanding of the service, along with the layers, process, and touchpoints will help the university understand what they could do to meet students' needs (Gibbons 2017a). I have used the POV statement defined in the discovery phase to generate ideas and identify how I might support students in building relationships.

**POV Statement: Clara needs support to build social connections because she wants to develop relationships with other university students but doesn’t have the confidence to do this on their own.**

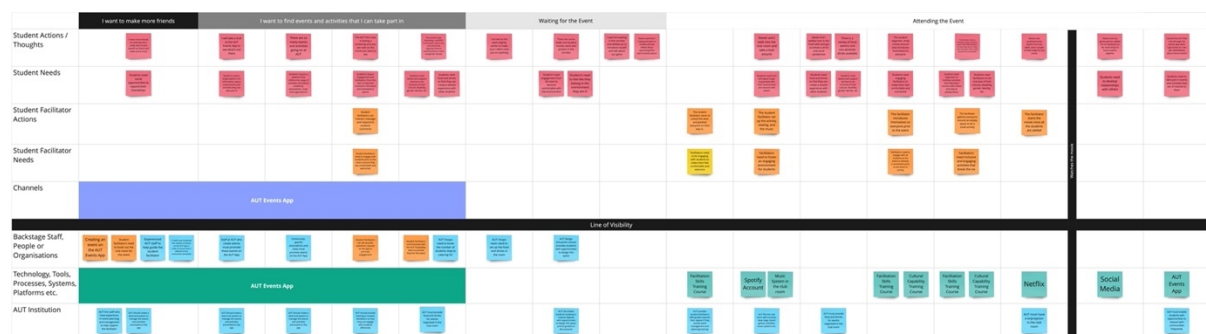


Figure 13: Service Design Blueprint (<https://tinyurl.com/25j76vc8>)

I built on top of the narrative created in the Dream phase to identify small moments during Clara's journey that are critical points in her experience. Likewise, I identified the journey of the student organiser, Andy, to understand how AUT might support students in planning events and facilitating connections. The first stage of creating a service design blueprint was to outline the high-level phases in the journey. It begins with a moment of realisation. Clara already has some friends at the university, but she wants to reach out and create more. The second phase focuses on discovering events and activities she could attend. She waits for the AUT event to start once she has decided to go to the event. The next phase follows her as she attends the event and reflects on her experience.

Throughout these stages, I defined the key activities and needs of Clara and the facilitator Andy and the channels they used during their experience. I designed the front-stage actions in this way to better understand how students using the service engage with the facilitator. In addition, I highlighted facilitator activities in the backstage interactions to expand on how they might connect with other staff and understand the tools they require to organise student events. These processes and relationships must be supported by AUT through internal initiatives to empower student organisers in their journey to run events.

While all phases of the journey are necessary to consider, a critical touchpoint prior to attending the event must be effectively addressed so that students can participate in activities and connect with others. Students who have the confidence to attend social events will feel comfortable putting themselves out there and attending events that interest them. In contrast, those who experience anxiety may struggle to build the confidence to participate in activities, even if they have identified activities they want to join. Event organisers can help build students' confidence by engaging with them through relevant channels. These strategies could involve setting up quizzes, replying to messages on social media posts, or introducing themselves on online platforms.

Additionally, I identified four internal initiatives AUT could take to promote social connectivity:

1. Experienced event management staff who work alongside the student facilitator to support and guide them in creating student events.
2. Technical teams at AUT must own the events app, manage activities on the platform and monitor students according to the institution's regulations and code of conduct. This is to ensure that all students using the app are safe and that the

activities promoted on the app correspond to those organised by clubs and associations.

3. When student facilitators utilise the club room, AUT can provide students the opportunity to connect with catering to make the process easier.

4. AUT provides students with a budget and makes use of existing resources when organising events and activities.

I will build on top of these activities in the Deliver phase, create design outcomes and demonstrate the key steps required to enable this change.

## **Phase Five: Deliver**

The primary outcome of this research is an AUT Events app, alongside a guide that demonstrates how the university can facilitate social events. As described by students in this study, many struggled with discovering events at their institution and often relied on friends for information. The mobile platform enables students to discover the breadth of university activities and provides facilitators with the opportunity to build connections with students prior to the event. Simultaneously, the AUT guide demonstrates how facilitators and staff may support social opportunities during these events. I created two outcomes to demonstrate what an integrated social experience looks like. Without the platform, students will struggle to discover events, but without the guide, students would not be supported in developing friendships. These two outcomes must function collaboratively to foster positive relationships.

### **Guide to Socially Connected Events**

This resource will describe the key findings of this study, the positive impact of belongingness, and the benefits of implementing these initiatives. I will discuss values important to students and demonstrate how these might be translated into tangible actions. Then, I will examine the role of a facilitator and demonstrate how they can foster a sense of belonging. In addition, I will describe the function of AUT and how its staff and resources may support these social opportunities. I will outline how AUT can improve access and enable marginalised communities to participate in these events. Distilling key insights and opportunities from this study into a digestible, tangible format will assist higher education institutions in understanding how to enable events and activities that will increase social connectivity.

### **AUT Events App**

The AUT events app is a mobile platform for students to explore university events and activities. This application showcases the variety of activities available at AUT

by aggregating all university club, student association and faculty activities on a single platform. Before attending the event, students can establish a social connection with event organisers and peers who will also be present. Students are not restricted by sign-up forms or club membership costs, and can participate in events prior to joining a club. Similarly, event organisers can communicate with guests before the event to determine their interests, tailor the activity to their needs and facilitate accessible events. Combining the features of the AUT events app into the current AUT app would provide students with a seamless experience, allowing them to access both general university information and details about social activities within one platform. Creating this integrated application with the guide will enable AUT to understand how they might promote, facilitate and organise socially connected events for students.

# Discussion

This study aimed to understand how we might support university students in Tāmaki Makaurau (Auckland) to improve their mental well-being. The three main aims of this research were to understand the student experience and investigate students' support needs with services at university to develop a service design response that improves mental well-being. From this project, I learned that student mental health is an incredibly complex topic that can be aggravated by many university-related factors. This period of uncertainty can fundamentally alter students' perspective behaviours (Cleary et al. 2011) and exceed their coping abilities if they cannot navigate new found independence, part-time work and academic responsibilities (Bayram and Bilgel 2008). Additionally, fostering significant relationships with peers, moving away from home and altering existing support systems can result in loneliness, a significant predictor of mental distress (McIntyre et al. 2018).

This study's findings indicate that fostering a sense of belonging in the university environment through peers, educators, and boarder staff influences student mental health. All themes generated from the thematic analysis speak to the significance of social connectedness in higher education institutions. Students value personable teaching staff who can support them in their academic and personal development. To connect with others and feel included in the university experience, they want their identity and culture to be acknowledged by the university and catered for. Students want to maintain strong relationships with others and seek advice about resources to help them in their journey. Fostering belonging is especially important because many students feel isolated from friends and family due to COVID-19 (Point & Associates 2022). Existing literature confirms these findings, indicating that social support is protective, reducing distress and mitigating long-term effects on students' mental health (Charles, Karnaze, and Leslie 2022). Furthermore, a study conducted by Tompkins et al. (2016) suggests that because friends and family are more likely to encourage students in all aspects of life, students value their support more than faculty members. Similarly, McIntyre et al. (2018) stated that university friends are a significant social group that protects students from depression, anxiety and paranoia symptoms.

Results from this study suggest that universities must facilitate social opportunities to decrease negative mental well-being and improve academic outcomes. Through an investigation into support services, it is clear that higher education institutions provide students with extensive personal, academic, and professional development opportunities. Initiatives that solely promote social connectedness, on the other hand, are not given the same priority or resources. Tertiary education institutions can improve student mental health by increasing awareness and promoting social events (McIntyre et al. 2018), organising new initiatives effectively (Turki et al. 2018), and involving students in the design process to develop programmes that are suited to their needs (University of Auckland 2021).

## **Reflection on the Appreciative Inquiry Process**

During this research process, I developed a methodology that combines appreciative inquiry and design thinking to address the increase in student vulnerability. I was initially hesitant to reframe my research approach using this

perspective because I was unfamiliar with the framework and lacked confidence in my ability to complete this project successfully. I needed a lot of time and academic resources to understand how I might shift towards this strength-based perspective. Challenging myself through this perspective shift has helped me with my own mental health journey, enabling me to have a more positive outlook in my personal life. Likewise, embedding this optimistic perspective in my design practice has helped me reframe how I communicate the value I bring, identifying *what could be* rather than *what isn't working*.

Reflecting on my research project, I discovered unexpected insights regarding students' mental health. I had no idea when I started this project that it would shift from focusing on mental health to focusing on social connectedness. I did not give this aspect of well-being much thought and was surprised when I realised it was a significant theme in my research. Without this strength-based approach, I would not have achieved these results. Asking participants to describe moments of support in this positive framing revealed profound and meaningful emotions attached to these stories, allowing me to identify deeply rooted values that describe the most important to them. Framing questions through this strength-based perspective enabled participants to share these stories with me, fostering vulnerability and trust. This resulted in participants disclosing traumatic experiences they have had during university. However, I responded with empathy, fostering a deeper level of trust between the students and me. From these interviews, I understood how students received support and embedded these core values in the outcome of my design project.

By utilising principles of empathy, storytelling, and strength-based language that I learned through using Appreciative Inquiry in my research project, I have gained invaluable insights that directly apply to my current role as an Experience Designer at DNA Design. Through this framework, I can build stronger connections with clients and gain deeper insights into their needs and experiences. The positive and empathetic approach that Appreciative Inquiry fosters helps me respond to clients with greater sensitivity and effectiveness, resulting in more successful projects and meaningful relationships.

## **Reflection on the thesis presentation**

During my thesis presentation, one of the examiners asked me to identify the messiest part of my design process. I candidly acknowledged that the process as a whole was messy and unknown, particularly during my thematic analysis, where there were multiple interpretations of the data. To overcome this uncertainty, I utilised my research questions, objectives, and insights as guides to determine how to form insights. Through analysing the themes in an iterative process, I developed well-rounded and relevant insights that made the process clearer. While some of the research methods may not have been strictly necessary, such as the empathy map or the persona page, they allowed me to navigate the iterative journey of discovering, understanding, and making sense of information. Reflecting on the discussion with the examiners during my presentation, I recognise that the messiness of the process is a key aspect of the design journey and one that I have come to appreciate even more.

Reflecting on my Masters of Design journey following the presentation of my final outcome, I realised that the User Experience (UX) Story during the Dream phase proved to be the most valuable tool for my project. This method inspired me to adapt my practice from a design thinking perspective into a more emotive and narrative-based mindset, enabling me to delve deeply into the complex emotions and experiences of students. In contrast, the methods I had used previously only provided surface-level insights, which made it difficult for me to understand the nuances and intricacies of social belongingness and connection. By incorporating this creative approach into my research, I was able to practice deep empathy and gain a comprehensive understanding of the complex emotions that students experience, ultimately resulting in a final outcome that genuinely reflected the complexity of social connectedness.

## **Limitations of the Research**

Prior to this proposed study, I wanted to conduct interviews with AUT faculty and students to determine how the university could better support its students. The AUTECH rejected my suggestion, as well as the chance to embed employees as experts in my project. These restrictions prevented me from understanding organisational insights and embedding these valuable experiences into my

service delivery outcome. Nonetheless, this study can serve as a paradigm for improving students' mental health in higher education institutions. This research is a future state project, working outside organisational limitations and barriers to envision a future of what could be. Through this design process, I uncovered prescriptive details such as student values and exploratory elements that describe what this future experience can look like. Using the design outcome, universities can understand how they might change their internal processes and priorities to enable socially connected events and activities.

### **Recommendations for Further Study**

Future research can engage with university staff and students through a co-design approach to identify opportunities for improvement and generate concepts to meet these needs. Using this methodology to facilitate a design approach would allow students to use their voices and affect change for those around them. Similarly, university staff could gain a deeper understanding of students' needs and develop a shared vision with this approach. The University of Auckland has started asking students for their opinions on support services to involve them in the design process. However, students must be involved throughout the process to design with them rather than for them.

# Conclusion

Despite the development of research on the mental health and well-being of university students, this field of study has not yet reached maturity and will continue to evolve in the future (Hernández-Torrano et al. 2020). This study confirms that all aspects of university life impact mental well-being, in line with other studies about the student experience (Baik et al. 2019). Results from this study indicate that fostering a sense of belonging in the university environment through peers, educators, and boarder staff are significant factors impacting student mental health. Universities must build upon this research and develop social opportunities to improve mental health and academic outcomes. These programmes will enable students to feel supported throughout their education, resulting in academic, personal, and professional success.

# References

- Alter, Steven. 2013. 'Value Blueprint and Service Design Space for Facilitating Value Creation'. 11.
- Arvidsdotter, Tina, Bertil Marklund, Sven Kylén, Charles Taft, and Inger Ekman. 2016. 'Understanding Persons with Psychological Distress in Primary Health Care'. *Scandinavian Journal of Caring Sciences* 30(4):687–94.
- Auckland University of Technology. n.d. 'What Support Is Available to Students at University?' *What Support Is Available to Students at University?* Retrieved (<https://www.aut.ac.nz/parents-hub/support/what-support-is-available-to-students-at-university>).
- AUT. 2021. 'Te Āhuru Recreation Centre'. Retrieved (<https://student.aut.ac.nz/around-campus/te-ahuru-recreation-centre>).
- Awang, Mohd Mahzan, Faridah Mydin Kutty, and Abdul Razaq Ahmad. 2014. 'Perceived Social Support and Well Being: First-Year Student Experience in University'. *International Education Studies* 7(13):p261. doi: 10.5539/ies.v7n13p261.
- Baik, Chi, Wendy Larcombe, and Abi Brooker. 2019. 'How Universities Can Enhance Student Mental Wellbeing: The Student Perspective'. *Higher Education Research & Development* 38(4):674–87.
- Baker, Fredrick W., and Sarah Moukhliiss. 2020. 'Concretising Design Thinking: A Content Analysis of Systematic and Extended Literature Reviews on Design Thinking and Human-Centred Design'. *Review of Education* 8(1):305–33. doi: 10.1002/rev3.3186.
- Batchelor, Rachel, Emma Pitman, Alex Sharpington, Melissa Stock, and Eilidh Cage. 2020. 'Student Perspectives on Mental Health Support and Services in the UK'. *Journal of Further and Higher Education* 44(4):483–97. doi: 10.1080/0309877X.2019.1579896.
- Bayram, Nuran, and Nazan Bilgel. 2008. 'The Prevalence and Socio-Demographic Correlations of Depression, Anxiety and Stress among a Group of University Students.' *Social Psychiatry and Psychiatric Epidemiology* 43(8):667–72. doi: 10.1007/s00127-008-0345-x.

- Braun, Virginia, and Victoria Clarke. 2006. 'Using Thematic Analysis in Psychology'. *Qualitative Research in Psychology* 3(2):77–101. doi: 10.1191/1478088706qp063oa.
- Braun, Virginia, and Victoria Clarke. 2019. 'Reflecting on Reflexive Thematic Analysis'. *Qualitative Research in Sport, Exercise and Health* 11(4):589–97. doi: 10.1080/2159676X.2019.1628806.
- Braun, Virginia, and Victoria Clarke. 2021. 'One Size Fits All? What Counts as Quality Practice in (Reflexive) Thematic Analysis?' *Qualitative Research in Psychology* 18(3):328–52. doi: 10.1080/14780887.2020.1769238.
- Broglia, Emma, Abigail Millings, and Michael Barkham. 2018. 'Challenges to Addressing Student Mental Health in Embedded Counselling Services: A Survey of UK Higher and Further Education Institutions'. *British Journal of Guidance & Counselling* 46(4):441–55. doi: 10.1080/03069885.2017.1370695.
- Broglia, Emma, Abigail Millings, and Michael Barkham. 2021. 'Student Mental Health Profiles and Barriers to Help Seeking: When and Why Students Seek Help for a Mental Health Concern'. *Counselling and Psychotherapy Research* 21(4):816–26. doi: 10.1002/capr.12462.
- Buote, Vanessa M., S. Mark Pancer, Michael W. Pratt, Gerald Adams, Shelly Birnie-Lefcovitch, Janet Polivy, and Maxine Gallander Wintre. 2007. 'The Importance of Friends: Friendship and Adjustment Among 1st-Year University Students'. *Journal of Adolescent Research* 22(6):665–89. doi: 10.1177/0743558407306344.
- Bushe, Gervase R. 2007. 'Appreciative Inquiry Is Not About The Positive'. *OD Practitioner* 39(4):33–38.
- Buultjens, Melissa, and Priscilla Robinson. 2011. 'Enhancing Aspects of the Higher Education Student Experience'. *Journal of Higher Education Policy and Management* 33(4):337–46. doi: 10.1080/1360080X.2011.585708.
- Castleberry, Ashley, and Amanda Nolen. 2018. 'Thematic Analysis of Qualitative Research Data: Is It as Easy as It Sounds?' *Currents in Pharmacy Teaching and Learning* 10(6):807–15.
- Charles, Susan T., Melissa M. Karnaze, and Frances M. Leslie. 2022. 'Positive Factors Related to Graduate Student Mental Health'. *Journal of American College Health* 70(6):1858–66. doi: 10.1080/07448481.2020.1841207.

- Cheng, David X. 2004. 'Students' Sense of Campus Community: What It Means, and What to Do About It'. *NASPA Journal* 41(2):216–34. doi: 10.2202/1949-6605.1331.
- Ciobanu, Alina. 2013. 'The Role of Student Services in the Improving of Student Experience in Higher Education'. *Procedia – Social and Behavioral Sciences* 92:169–73. doi: 10.1016/j.sbspro.2013.08.654.
- Cleary, Michelle, Garry Walter, and Debra Jackson. 2011. "Not Always Smooth Sailing": Mental Health Issues Associated with the Transition from High School to College'. *Issues in Mental Health Nursing* 32(4):250–54.
- Cooperrider, David, and Diana D. Whitney. 2007. *Appreciative Inquiry: A Positive Revolution in Change*.
- Cooperrider, David, Diana Whitney, and Jacqueline M. Stavros. 2008. *Appreciative Inquiry Handbook: For Leaders of Change*. 2nd Edition. Berrett-Koehler Publishers.
- Creswell, John W., and J. David Creswell. 2017. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
- Dam, Rikke Friis, and Teo Yu Siang. 2020. 'What Is Design Thinking and Why Is It So Popular?' *Interaction Design Foundation*. Retrieved 20 September 2021 (<https://www.interaction-design.org/literature/article/what-is-design-thinking-and-why-is-it-so-popular>).
- Deci, Edward L., and Richard M. Ryan. 2008. 'Hedonia, Eudaimonia, and Well-Being: An Introduction'. *Journal of Happiness Studies* 9(1):1–11.
- Delaney, Anne Marie. 2008. 'Why Faculty–Student Interaction Matters in the First Year Experience'. *Tertiary Education and Management* 14(3):227–41. doi: 10.1080/13583880802228224.
- Dodd, Rachael H., Kevin Dadaczynski, Orkan Okan, Kirsten J. McCaffery, and Kristen Pickles. 2021. 'Psychological Wellbeing and Academic Experience of University Students in Australia during COVID-19'. *International Journal of Environmental Research and Public Health* 18(3):866.
- Education Counts. 2020. 'Tertiary Participation'. *Participation in Tertiary Education in New Zealand*. Retrieved 15 August 2021 (<https://www.educationcounts.govt.nz/statistics/tertiary-participation>).

- Eisenberg, Daniel, Ezra Golberstein, and Justin B. Hunt. 2009. 'Mental Health and Academic Success in College'. *The B.E. Journal of Economic Analysis & Policy* 9(1).
- Farrer, Louise, Amelia Gulliver, Kylie Bennett, and Kathleen Griffiths. 2015. 'Exploring the Acceptability of Online Mental Health Interventions among University Teaching Staff: Implications for Intervention Dissemination and Uptake'. *Internet Interventions* 2(3):359–65. doi: 10.1016/j.invent.2015.07.006.
- Fredrickson, Barbara L. 2001. 'The Role of Positive Emotions in Positive Psychology'. *American Psychologist* 56(3):218.
- Galderisi, Silvana, Andreas Heinz, Marianne Kastrup, Julian Beezhold, and Norman Sartorius. 2015. 'Toward a New Definition of Mental Health'. *World Psychiatry* 14(2):231.
- Giacomin, Joseph. 2014. 'What Is Human Centred Design?' *The Design Journal* 17(4):606–23. doi: 10.2752/175630614X14056185480186.
- Gibbons, Sarah. 2017a. 'Service Blueprints: Definition'. *NN/g – Nielsen Norman Group*. Retrieved 8 October 2021 (<https://www.nngroup.com/articles/service-blueprints-definition/>).
- Gibbons, Sarah. 2017b. 'UX Stories Communicate Designs'. *UX Stories Communicate Designs*. Retrieved 18 July 2022 (<https://www.nngroup.com/articles/ux-stories/>).
- Giles, David. 2011. 'Relationships Always Matter: Findings from a Phenomenological Research Inquiry'. *Australian Journal of Teacher Education* 36(6). doi: 10.14221/ajte.2011v36n6.1.
- Grubic, Nicholas, Shaylea Badovinac, and Amer M. Johri. 2020. 'Student Mental Health in the Midst of the COVID-19 Pandemic: A Call for Further Research and Immediate Solutions'. *International Journal of Social Psychiatry* 66(5):517–18. doi: 10.1177/0020764020925108.
- Gulliver, Amelia, Louise Farrer, Kylie Bennett, Kathina Ali, Annika Hellsing, Natasha Katruss, and Kathleen M. Griffiths. 2018. 'University Staff Experiences of Students with Mental Health Problems and Their Perceptions of Staff Training Needs'. *Journal of Mental Health* 27(3):247–56. doi: 10.1080/09638237.2018.1466042.

- Hernández-Torrano, Daniel, Laura Ibrayeva, Jason Sparks, Natalya Lim, Alessandra Clementi, Ainur Almukhambetova, Yerden Nurtayev, and Ainur Muratkyzy. 2020. 'Mental Health and Well-Being of University Students: A Bibliometric Mapping of the Literature'. *Frontiers in Psychology* 11:1226.
- Holdsworth, Sarah, Michelle Turner, and Christina M. Scott-Young. 2018. '... Not Drowning, Waving. Resilience and University: A Student Perspective'. *Studies in Higher Education* 43(11):1837–53. doi: 10.1080/03075079.2017.1284193.
- Huang, Peter H., Anne M. Brafford, Debra S. Austin, and Martha Knudson. 2020. 'Positive Institutions: Organizations, Laws, and Policies'. in *The Oxford Handbook of Positive Psychology*, edited by C. R. Snyder, S. J. Lopez, L. M. Edwards, and S. C. Marques. Oxford University Press.
- Hung, Lillian, Alison Phinney, Habib Chaudhury, Paddy Rodney, Jenifer Tabamo, and Doris Bohl. 2018. 'Appreciative Inquiry: Bridging Research and Practice in a Hospital Setting'. *International Journal of Qualitative Methods* 17(1).
- Jindal-Snape, Divya. 2009. *Educational Transitions: Moving Stories from around the World*. Vol. 33. Routledge.
- Jorgenson, Derek A., Laura C. Farrell, Julie L. Fudge, and Andrew Pritchard. 2018. 'College Connectedness: The Student Perspective'. *Journal of the Scholarship of Teaching and Learning* 18(1):75–95. doi: 10.14434/josotl.v18i1.22371.
- Karimi, Faezeh, and Petr Matous. 2018. 'Mapping Diversity and Inclusion in Student Societies: A Social Network Perspective'. *Computers in Human Behavior* 88:184–94. doi: 10.1016/j.chb.2018.07.001.
- Karpouza, Eleni, and Anastassios Emvalotis. 2019. 'Exploring the Teacher-Student Relationship in Graduate Education: A Constructivist Grounded Theory'. *Teaching in Higher Education* 24(2):121–40. doi: 10.1080/13562517.2018.1468319.
- Keyes, Corey LM, Dov Shmotkin, and Carol D. Ryff. 2002. 'Optimizing Well-Being: The Empirical Encounter of Two Traditions.' *Journal of Personality and Social Psychology* 82(6):1007.
- King, Alyson E., Fiona A. E. McQuarrie, and Susan M. Brigham. 2021. 'Exploring the Relationship Between Student Success and Participation in Extracurricular Activities'. *SCHOLE: A Journal of Leisure Studies and Recreation Education* 36(1–2):42–58. doi: 10.1080/1937156X.2020.1760751.

- Li, Hui, Hira Hafeez, and Muhammad Asif Zaheer. 2021. 'COVID-19 and Pretentious Psychological Well-Being of Students: A Threat to Educational Sustainability'. *Frontiers in Psychology* 11.
- Lipson, Sarah Ketchen, and Daniel Eisenberg. 2018. 'Mental Health and Academic Attitudes and Expectations in University Populations: Results from the Healthy Minds Study'. *Journal of Mental Health* 27(3):205–13.
- Manderscheid, Ronald W., Carol D. Ryff, Elsie J. Freeman, Lela R. McKnight-Eily, Satvinder Dhingra, and Tara W. Strine. 2010. 'Peer Reviewed: Evolving Definitions of Mental Illness and Wellness.' *Preventing Chronic Disease* 7(1).
- Mann, Catherine. 2020. 'Advising by Design: Co-Creating Advising Services With Students for Their Success'. *Frontiers in Education* 5:99. doi: 10.3389/feduc.2020.00099.
- McBeath, Margaret, Maureen T. B. Drysdale, and Nicholas Bohn. 2018. 'Work-Integrated Learning and the Importance of Peer Support and Sense of Belonging'. *Education + Training* 60(1):39–53. doi: 10.1108/ET-05-2017-0070.
- McIntyre, Jason C., Joanne Worsley, Rhiannon Corcoran, Paula Harrison Woods, and Richard P. Bentall. 2018. 'Academic and Non-Academic Predictors of Student Psychological Distress: The Role of Social Identity and Loneliness'. *Journal of Mental Health* 27(3):230–39. doi: 10.1080/09638237.2018.1437608.
- Meehan, Catherine, and Kristy Howells. 2018. "'What Really Matters to Freshers?": Evaluation of First Year Student Experience of Transition into University'. *Journal of Further and Higher Education* 42(7):893–907. doi: 10.1080/0309877X.2017.1323194.
- Merry, Sally N., Tania Cargo, Grant Christie, Liesje Donkin, Sarah Hetrick, Terry Fleming, Chester Holt-Quick, Sarah Hopkins, Karolina Stasiak, and Jim Warren. 2020. 'Debate: Supporting the Mental Health of School Students in the COVID-19 Pandemic in New Zealand – a Digital Ecosystem Approach'. *Child and Adolescent Mental Health* 25(4):267–69.
- Mischief Makers. n.d. 'Ideation: The Dark Side'. *Facilipedia | Ideation: The Dark Side*. Retrieved 24 July 2022 (<https://www.mischiefmakers.co/facilipedia/ideation-dark-side>).
- New Zealand Union of Students' Associations. 2018. *Report on Student Mental Health in Aotearoa*. Wellington, New Zealand: New Zealand Union of Students' Associations.

- New Zealand Union of Students' Associations. 2020. *COVID-19 and Tertiary Students: The Impact on the Wellbeing, Finance, and Study of Students at Tertiary Institutions in Aotearoa New Zealand*. New Zealand Union of Students' Associations.
- NN Group. 2015. 'Personas Make Users Memorable for Product Team Members'. *Nielsen Norman Group. World Leaders in Research-Based User Experience*. Retrieved (<https://www.nngroup.com/articles/persona/>).
- NN Group. 2018. 'Empathy Mapping: The First Step in Design Thinking'. *Nielsen Norman Group. World Leaders in Research-Based User Experience*. Retrieved (<https://www.nngroup.com/articles/empathy-mapping/>).
- Norman, Donald A., and Pieter Jan Stappers. 2015. 'DesignX: Complex Sociotechnical Systems'. *She Ji: The Journal of Design, Economics, and Innovation* 1(2):83–106. doi: 10.1016/j.sheji.2016.01.002.
- OECD. 2019. 'Suicide Rates (Indicator)'. Retrieved 16 October 2022.
- Office for Disability Issues. 2013. *Annual Report*. Minister for Disability Issues.
- Pather, Subethra, and Nirmala Dorasamy. 2018. 'The Mismatch between First-Year Students' Expectations and Experience alongside University Access and Success: A South African University Case Study'. *Journal of Student Affairs in Africa* 6(1). doi: 10.24085/jsaa.v6i1.3065.
- Point & Associates. 2022. *People's Inquiry into Student Wellbeing*.
- Priest, Kerry L., Eric K. Kaufman, Kelsey Brunton, and Megan Seibel. 2013. 'Appreciative Inquiry: A Tool for Organizational, Programmatic, and Project-Focused Change'. *Journal of Leadership Education* 12(1):16.
- Reavley, Nicola J., Terence V. McCann, and Anthony F. Jorm. 2012. 'Actions Taken to Deal with Mental Health Problems in Australian Higher Education Students: Mental Health Problems in Higher Education Students'. *Early Intervention in Psychiatry* 6(2):159–65. doi: 10.1111/j.1751-7893.2011.00294.x.
- Reed, Jan. 2006. *Appreciative Inquiry: Research for Change*. Sage Publications.
- Roper, Brian. 2018. 'Neoliberalism's War on New Zealand's Universities'. *New Zealand Sociology* 33(2):9–39.
- Sani, Fabio, Marina Herrera, Juliet R. H. Wakefield, Olga Boroch, and Csilla Gulyas. 2012. 'Comparing Social Contact and Group Identification as Predictors of

Mental Health: *Social Contact and Group Identification as Predictors of Mental Health*. *British Journal of Social Psychology* 51(4):781–90. doi: 10.1111/j.2044-8309.2012.02101.x.

Schoups, Annelise. 2017. 'An Introduction to Assumptions Mapping with David J. Bland: Webinar Recap'. *An Introduction to Assumptions Mapping with David J. Bland: Webinar Recap*. Retrieved (<https://www.mural.co/blog/intro-assumptions-mapping>).

Sriharan, Abi, Tina Smith, Christine Shea, and Whitney Berta. 2021. 'Using Design Thinking and Appreciative Inquiry to Modernize Curriculum and Transform Student Learning'. 12.

Stats NZ. 2021. '1 in 20 Adults Identify as LGBT+ in Major Social Survey'. Retrieved (<https://www.stats.govt.nz/news/1-in-20-adults-identify-as-lgbt-in-major-social-survey>).

Tan, Adrian Heng Tsai, Birgit Muskat, and Raechel Johns. 2019. 'The Role of Empathy in the Service Experience'. *Journal of Service Theory and Practice* 29(2):142–64. doi: 10.1108/JSTP-10-2018-0221.

Tienda, Marta. 2013. 'Diversity ≠ Inclusion: Promoting Integration in Higher Education'. *Educational Researcher* 42(9):467–75. doi: 10.3102/0013189X13516164.

Tocino-Smith, Juliette. 2021. 'How to Apply Appreciative Inquiry: A Visual Guide'. *Positive Psychology.Com*. Retrieved 6 October 2021 (<https://positivepsychology.com/appreciative-inquiry-process/>).

Tompkins, Kelley A., Kierra Brecht, Brock Tucker, Lucia L. Neander, and Joshua K. Swift. 2016. 'Who Matters Most? The Contribution of Faculty, Student-Peers, and Outside Support in Predicting Graduate Student Satisfaction.' *Training and Education in Professional Psychology* 10(2):102–8. doi: 10.1037/tep0000115.

Trajkovski, Suza, Virginia Schmied, Margaret Vickers, and Debra Jackson. 2013. 'Using Appreciative Inquiry to Transform Health Care'. *Contemporary Nurse* 45(1):95–100.

Transport Accident Commission. n.d. 'Kessler Psychological Distress Scale (K10)'.

Tschimmel, Katja. 2012. 'Design Thinking as an Effective Toolkit for Innovation'. in *ISPIM Conference Proceedings*.

- Turki, Fared Jdaitawi, Malek Jdaitawi, and Hani Sheta. 2018. 'Fostering Positive Adjustment Behaviour: Social Connectedness, Achievement Motivation and Emotional-Social Learning among Male and Female University Students'. *Active Learning in Higher Education* 19(2):145–58. doi: 10.1177/1469787417731202.
- Turner III, Daniel W., and Nicole Hagstrom-Schmidt. 2022. *Howdy or Hello? Technical and Professional Communication*.
- University of Auckland. 2021. 'Student Services Function Review'. *Student Services Function Review*. Retrieved 2 July 2022 (<https://www.auckland.ac.nz/en/on-campus/life-on-campus/latest-student-news/student-services-function-review.html>).
- Van der Westhuizen, Donné, Nailah Conrad, Tania S. Douglas, and Tinashe Mutsvangwa. 2020. 'Engaging Communities on Health Innovation: Experiences in Implementing Design Thinking'. *International Quarterly of Community Health Education* 41(1):101–14. doi: 10.1177/0272684X19900880.
- Whatworks. n.d. 'Appreciative Inquiry'. *Appreciative Inquiry | What Works*. Retrieved 7 October 2021 (<https://whatworks.org.nz/appreciative-inquiry/>).
- World Health Organization. 1948. 'Preamble to the Constitution of the World Health Organization as Adopted by the International Health Conference, New York, 19–22 June, 1946; Signed on 22 July 1946 by the Representatives of 61 States (Official Records of the World Health Organization, No. 2, p. 100) and Entered into Force on 7 April 1948'.
- World Health Organization. 2001. *Mental Health: New Understanding, New Hope*.
- World Health Organization. 2004. *Promoting Mental Health: Concepts, Emerging Evidence, Practice: Summary Report*.
- World Health Organization. 2018. 'Mental Health: Strengthening Our Response'.
- Wynaden, Dianne, Margaret McAllister, Jenny Tohotoa, Omar Al Omari, Karen Heslop, Ravani Duggan, Sean Murray, Brenda Happell, and Louise Byrne. 2014. 'The Silence of Mental Health Issues Within University Environments: A Quantitative Study'. *Archives of Psychiatric Nursing* 28(5):339–44. doi: 10.1016/j.apnu.2014.08.003.

# Appendices

Appendix 1 - Ethics Application 21/286

Appendix 2 - Consent Form

Appendix 3 - Information Sheet and Social Media Post

Appendix 4 - Indicative Questions

## Appendix 1. Ethics Application 21/286



### Auckland University of Technology Ethics Committee (AUTECH)

Auckland University of Technology  
D-88, Private Bag 92006, Auckland 1142, NZ  
T: +64 9 921 9999 ext. 8316  
E: [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)  
[www.aut.ac.nz/researchethics](http://www.aut.ac.nz/researchethics)

15 November 2021

Amabel Hunting  
Faculty of Design and Creative Technologies

Dear Amabel

Re Ethics Application: **21/286 Supporting the Mental Wellbeing of Tertiary Student's through Positive Psychology**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTECH).

Your ethics application has been approved for three years until 15 November 2024.

#### Non-Standard Conditions of Approval

1. Please ensure and advise that potential participants respond to the social media advertisement by personal message and that comments are disabled.

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTECH before commencing your study.

#### Standard Conditions of Approval

1. The research is to be undertaken in accordance with the [Auckland University of Technology Code of Conduct for Research](#) and as approved by AUTECH in this application.
2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
4. Any amendments to the project must be approved by AUTECH prior to being implemented. Amendments can be requested using the EA2 form.
5. Any serious or unexpected adverse events must be reported to AUTECH Secretariat as a matter of priority.
6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTECH Secretariat as a matter of priority.
7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard and that all the dates on the documents are updated.
8. AUTECH grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

Please quote the application number and title on all future correspondence related to this project.

For any enquiries please contact [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz). The forms mentioned above are available online through <http://www.aut.ac.nz/research/researchethics>

{This is a computer-generated letter for which no signature is required}

The AUTECH Secretariat  
Auckland University of Technology Ethics Committee

Cc: [hsq1749@autuni.ac.nz](mailto:hsq1749@autuni.ac.nz); Anna Jackson

## Appendix 2 – Consent Form



### Consent Form

Project title: **Supporting the Mental Wellbeing of Tertiary Student's through Positive Psychology**

Project Supervisor: **Amabel Hunting**

Researcher: **Shalom Pinto**

- I have read and understood the information provided about this research project in the Information Sheet dated November 2021
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one):      Yes  No

Participant's Signature: .....

Participant's Name: .....

Participant's Contact Details:

.....

.....

.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 15<sup>th</sup> November 2021 AUTEK Reference number 21/286

Note: The Participant should retain a copy of this form



### Oral Consent Protocol

Project title: **Supporting the Mental Wellbeing of Tertiary Student's through Positive Psychology**

Project Supervisor: **Amabel Hunting**

Researcher: **Shalom Pinto**

The participant joins the videoconference

- Do you agree to my recording your consent to participate?

If they agree, then the record function will be activated, and they will be asked the following:

- Have you read and understood the information provided about this research project in the Information Sheet dated Nov 2021?
- Do you have any questions about the research?
- Do you understand that notes will be taken during the interviews and that the interview will also be audio-recorded and transcribed?
- Do you understand that taking part in this study is voluntary (your choice) and that you may withdraw from the study at any time without being disadvantaged in any way.?
- Do you understand that if you withdraw from the study then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used? However, once the findings have been produced, removal of your data may not be possible.
- Do you agree to take part in this research?
- Do you wish to receive a summary of the research findings? (please tick one): Yes  No
- Do you want me to send you a copy of the audio recording for this consent:      No
- Please confirm your name and contact details

Participant's name: .....

Participant's Contact Details:

.....

.....


.....

I will now turn off the recording of the Consent and then will start a separate recording for the interview.

Approved by the Auckland University of Technology Ethics Committee on 15<sup>th</sup> November 2021 AUTEK Reference number 21/286

Note: The Participant should retain a copy of this form

## Appendix 3 – Information Sheet and Social Media Post



### Participant Information Sheet

Supporting the Mental Wellbeing of Tertiary Students // Nov 2021

---

#### What is the purpose of this research?

University students are experiencing unfamiliar circumstances that fundamentally impact their perspective and behaviour. This research aims to understand what support tertiary students require to help them attain positive well-being. With your participation, we can improve the experiences of students around Tamaki Makaurau (Auckland)

---

#### Why am I being invited to participate in this research?

You have been invited to participate in this project as you can offer valuable insights into the needs of students and have expressed an interest in this study through a social media advertisement. This project requires participants to be over 18, have adequate English comprehension, and provide written or verbal consent. If you are a friend or relative of mine or are a student of my supervisor Amabel Hunting, you will not be able to participate.

Your participation in this research is voluntary (it is your choice), and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

I will share the consent form that outlines your rights prior to the interview and obtain verbal or written consent from you.

---

#### What will happen during this research?

This research will consist of a one-on-one interview which will take approximately 60 minutes. All sessions will be audio recorded so I can focus on your experiences. These recordings will be transcribed for data analysis. During these interviews, you will be asked to reflect on positive experiences which have made you feel supported. I will ask you follow-up questions to help review, reflect and describe your experience in more detail. These insights will be used to create support services for you and other students. I will provide you with a summary of the findings once the analysis is completed.

You will not be asked about your mental health state or conditions.

---

#### What are the benefits?

I benefit from this research by using the results to complete my qualification. Additionally, I get to practice my research, communication, and creativity skills. In return, I hope to empower students with a unique opportunity to utilise their experience and foster positive change for themselves and other students.

---

#### What are the discomforts and risks?

I do not expect there to be much discomfort or risk in this research. If you are uncomfortable with answering any questions, you are free to skip any that may cause you discomfort. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

This research is not a therapeutic engagement. If you require support for your needs, please contact

---

#### How will my privacy be protected?

Your identity will be kept confidential. Identifiable information will not be disclosed as I will create a pseudonym to protect your identity. Everything that we collect will be kept for a maximum of six years and will then be destroyed.

---

#### What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor.


Amabel Hunting:  
amabel.hunting@aut.ac.nz  
09 021 9999 extn. 8762

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEAC:  
ethics@aut.ac.nz  
(+649) 921 9999 ext 6038.

---

#### Whom do I contact for further information about this

Researcher Contact Details: Shalom Pinto hsq1749@autuni.ac.nz	Project Supervisor Contact Details: Amabel Hunting amabel.hunting@aut.ac.nz 09 021 9999 extn. 6719
---	---



Hello, my name is Shalom Pinto. I am currently a Master's of Design student studying Design Thinking at Auckland University of Technology (AUT).

I want to create meaningful change through positive interactions and collaboration with people.



## Do you want to improve your experience at university?

---

#### What is this study about?

University students are experiencing unfamiliar circumstances that fundamentally impact their perspective and behaviour. This study seeks to understand the support that students require to attain positive mental wellbeing. These insights will be used to create a service that supports students mental wellbeing.

Participants must be aged 18+ and currently enrolled into a tertiary education provider. You will be asked to participate in a single 1 hour online interview.

#### Why Participate?

You will have a unique opportunity to utilise your experience and foster positive change for yourself and other students.  
You will receive a \$30 gift voucher of your choice for participating.

Email Shalom Pinto at [hsq1749@autuni.ac.nz](mailto:hsq1749@autuni.ac.nz) to find out more!



## Appendix 4 - Indicative Questions

### **Indicative Questions**

1. How do you feel about your university experience?
2. What did you like best about your experience?
3. What can we do to enhance your experience?
4. What are your main concerns about your university experience? - How do you navigate these concerns?
5. What are your priorities when it comes to your own well-being? - What support services are you aware of?
6. Where would you go to receive support?
7. What factors would support your well-being?
8. If you could have any support, what would this look like?