

Being alone, together: How does design shape social interactions and relationships of young adults in Singapore

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ABSTRACT

Studying the social interactions and relationships of young adults in Singapore, this paper seeks to understand the issue of social disconnection and how design shapes them. Young adults face the challenge of navigating the complex lifestyle of a smart city while balancing their ever expanding and fluctuating social network. As such, it causes them to feel disconnected in their social interactions and relationships. By considering these questions: What does it mean to be connected? What is the role of product design in people's relationships? Why do young adults feel disconnected in a technologically connected society? How can design establish a truly connected society? it will evaluate how products could be designed and created for genuine interactions and fulfilling relationships. From the surveys, interviews, observations, case studies and literature readings in this study, it reveals the social disconnection young adults face in a connected city, how they navigate in a technological environment, and how experiences are designed for connection. It also shows that design plays a vital role in tackling the social disconnection young adults face. Designing with a human-centric approach not only creates an opportunity for people to create meaningful relationships using technology, but also maintains the spontaneous and fluid elements of social connections through prompting interactions. Additionally, it has been found that design is only a platform where they can initiate these interactions and relationships, the decision to disconnect remain with the human user as much as devices have been designed to lead to certain decisions being made.

Introduction

Cities have always been about connections; they exist to connect the people who live collectively. (Gumpert and Drucker, 31) In a digital era, urban cities start to evolve into smart cities, incorporating technology, changing our lifestyles, industries, and relationships. (SNDGO, 5) When it comes to smart cities, Singapore is considered one of the top cities where the city meets citizens' fluctuating needs through digital innovation and technology. (Thales Group) The social connections of the city that were once supported by the physical environment are being redirected into the digital infrastructure of the city. (Gumpert and Drucker, 27) As such the social infrastructure of these cities and how people interact with one another would also evolve.

In 2014, Prime Minister Lee Hsien Loong launched the Smart Nation initiative, a vision of Singapore as a smart city, to transform the country into one that will enable people to live "meaningful and fulfilled lives" by utilizing technology and digitalisation. (SNDGO, 4) A hyperconnected environment (Hwang) has been created in Singapore's development through an increased connectivity of information in its urban infrastructure, both physically and digitally. However, such an environment does not reflect the depth or quality of the interpersonal relationships formed in the city's social fabric.

There have been many studies done abroad about the connections and connectivity that digitalisation and smart cities bring to society; from the advantages of connecting everything and everyone, to the disadvantages such as how certain groups such as the elderly and disabled are left out (). However, there is a gap in

literature study about the depth and quality of interpersonal relationships and social disconnection young adults face especially in the context of Singapore.

In 2021, McCann Worldgroup Truth Central, an international marketing agency, released “Truth About Gen Z”, a research conducted across various countries, and it was found that there is a rising trend of being “connected-but-lonely” (MW Truth Central, 3) amongst Generation Z (Gen Z), individuals who are born into an era of technology and hyperconnectivity (Twenge, 2). It is possible that the young adults in Singapore who fall into a similar age group may face this issue. At this age, people in Singapore go through the greatest number of life milestones, transiting through studies, work, national service, marriage, and family. Young adults face the challenge of navigating the complex lifestyle of a smart city while balancing their ever expanding and fluctuating social network. As such, it may cause them to feel a sense of disconnection in their social interactions and relationships.

By studying the social interactions and relationships of young adults in Singapore, this dissertation seeks to understand the issue of social disconnection and how design shapes them. Through the consideration of these questions: What does it mean to be connected? What is the role of product design in people’s relationships? Why do young adults feel disconnected in a technologically connected society? How can design establish a truly connected society? it will allow us to evaluate how products could be designed and created for genuine interactions and fulfilling relationships.

Literature Review

Connectivity and social relationships in a “smartified” environment

When people talk about connections in a smart city, the first thing that comes to peoples’ minds is how everything and everyone in society is connected, and how technology can solve many of our problems; a “smartified” environment. On the other hand, they rarely think about the social connections and interactions within the society.

The development into a smart city has changed the culture of communication. Citizens’ interactions and social relationships have been shaped in a way where technology is easily accessible as a medium for communication. In the development towards a Smart Nation, Singapore is pushing its social infrastructure towards a more digital one.

Under the Digital society pillar of the Smart Nation initiative, it aims for people in the city to adopt the use of technology. This is done by making it more accessible, improving their digital literacy, helping local communities and businesses adopt technology, and designing inclusive digital services as highlighted in the Digital Readiness Blueprint (MCI, 14) seen in Fig. 1. For example, Singapore has provided its citizens with accessibility to mobile phones with network access, and accessibility to the internet. In doing so, it has changed Singapore’s social dynamics in communities, encouraging connections and interactions in society through technology and digital formats.

Allowing technology to be more accessible in Singapore and improving Singaporean’s digital literacy aims to meet the social need for inclusion as a society. It is part of the three interpersonal needs which involves community engagement and the ability to connect, often fulfilled by sharing a social environment. (Gumpert and Drucker, 33) By giving everyone the opportunity to make use of the digital applications and services today and enabling everyone to safely navigate the complex digital environment, it ensures that no one is left out in the progress of a smart city. (MCI 10 - 11)

In a smart city like Singapore, the use of technology has become an integral part of social interactions and relationships. Everyone living in Singapore is included in the adoption of technology into society. It has provided and improved many outlets of communication in both physical and digital interactions, shaping an environment where connections are ever present. However, these outlets of connection only reflect the quantity of social connections and not its quality; it shows connectivity of the social environment, but not how socially connected people feel.

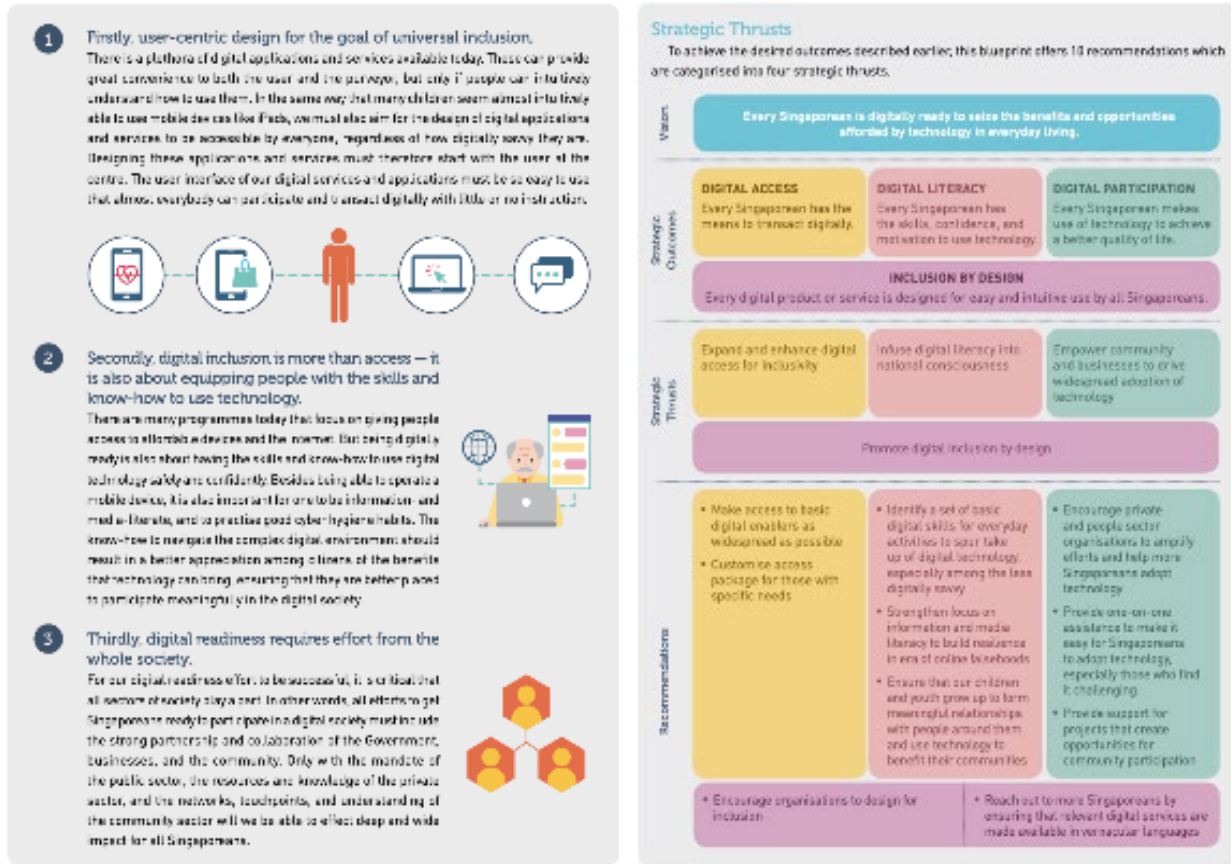


Fig. 1. Ministry of Communications and Information (MCI). Guiding principles and strategic thrusts found in Digital Readiness Blueprint. 2020.

Control and unpredictability of interactions in a designed environment

With technology being integrated into social interactions and relationships in Singapore, it gives people the ability to control where and when they want to connect with others, whether physically or digitally. Having the ability to control something gives people a sense of safety. According to A.H Maslow’s hierarchy of needs, safety is second after meeting physiological needs. Having control over social interactions gives people a sense of safety, no matter how misconceived it may be, and with technology people are given the ability to do so. (Gumpert and Drucker, 34) Often this leads people to supplement their physical interactions with digital ones to satisfy their social needs by relying on technology. (Gumpert and Drucker, 37)

The more we extend our connection, the more insular we become. The more we control our communication environment, the less is surprise or chance a daily expectation. The more we connect, the more we seek to control the connection. The more we detach from our immediate surroundings, the more we rely upon surveillance of the environment. The more communication choice offered, the less we trust the information we receive. The more information and data available, the more we need. The more individuality we achieve, the more communities we seek. The more we extend our senses, the less we depend upon our sensorium. (Gumpert and Drucker, 33-34)

The quote above shows how too much control can lead to social disconnection. The more people rely on technology as a means of connection, the more isolated they may feel. The control people have over their social environment has decreased the chances for unplanned interactions in society. People need a certain level of excitement and unpredictability, along with a sense of predictability in social interactions. Often in the use of technology and

digital interfaces, it gives a sense of control over these chances, but it is through the physical environment where the unexpected and unintended truly happen. (Gumpert and Drucker, 35 - 36)

When it comes to smart cities, Singapore is considered one of the top cities where the city meets citizens' fluctuating needs through digital innovation and technology. (Thales Group) However, if their needs are constantly fulfilled by digital innovation and technology, are people still in control when it comes to their interpersonal interactions and relationship with others?

The relationship people in Singapore have between technology and our interpersonal relationships can be seen through the theoretical approaches of technological determinism (TD), social construction of technology (SCOT), actor-network theory (ANT), and social shaping of technology (SST) presented in a study by Daniel Okamura. TD, assumes that technology shapes society, and SCOT, states that reality is socially constructed (Okamura, 46). ANT suggests that people are not in full control of their agency (Okamura, 48), and SST argues social conditions and technological advances shape each other.

The relationship people in Singapore have between their social relationships and technology is most suited to be explored through SST which looks at the changes on a macro scale across a period of time, leading to different interpretations. (Okamura, 49) With the introduction of technology, the way people interact with one another has changed. These social changes then inform and define the development of technology. It results in a repetitive cycle where social and technological changes shape each other. (Okamura, 50)

Experience of the city to an individual

A smart city is a concept and system of a macroscale. From the perspective of a citizen, what they are able to experience is limited; they are not able to encompass the experience of a smart city in its totality, but merely understand the complexity and relationships that it is made of. (Buchanan, 100) The experiences one has in their interactions and relationships with others in society is very personal and individualistic.

It contrasts from the perspective of government bodies, city planners, civil engineers, and designers, where designing for Singapore as a smart city is a large-scale task that takes into consideration of almost every aspect of the city, where it can be seen as a system. For them to realise its vision of a smart city, the initiative is broken down into smaller components that make up the city, focusing on areas such as health, transport, urban solutions, finance, and education. (SNDGO, 1)

Their perspective mirrors systems thinking where it is a top-down method focusing the complexity and relationship of the things in our surroundings, in this case the physical and digital infrastructure of Singapore. It is good to consider the various agencies within the system, from businesses, communities, government bodies, etc. that make up a large part of the system, giving a cohesive understanding of the situation and relationships in the city.

However, a system thinking approach is often reductionistic in nature and does not take into consideration of the elaborate social aspects of the system. (Buchanan, 97 - 98) In its journey to become a smart city, Singapore has been said to be technocratic where it tries to solve every other problem in society through technology. This places more importance on creating solutions with the appearance of urban problems than truly addressing the needs of the citizens in society. (Kong and Woods, 680) As such, the relationship that an individual has with the city is often overlooked in the process of creating the structural, design and technological aspects of the system. (Gumpert and Drucker, 28) Aspects such as their social interactions and relationships are often not taken into account.

In the design of the city, the volatile relationship of the citizen to the city should always be considered. The changes in the social and cultural aspects of the city can only be clearly seen from the perspective of the citizen. This can be emphasized in the design thinking method where it is a bottom-up approach, focusing on shaping the surroundings for human experience. (Buchanan, 100)

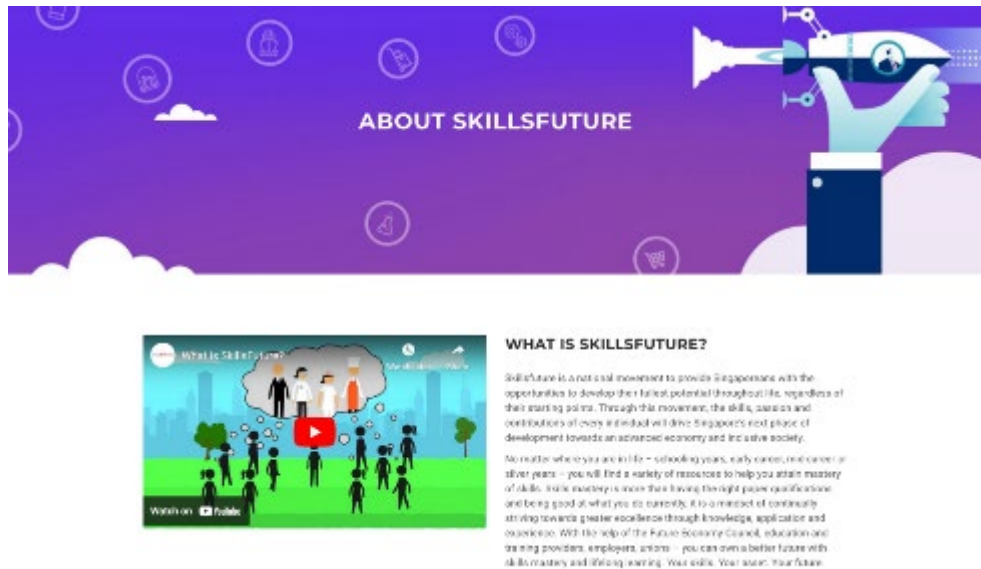


Fig. 2. SkillsFuture Singapore. About SkillsFuture. 2022.

The Smart Nation initiative is proposed to be a “citizen-centric” approach towards the development of a smart city which reveals a semblance of the human-centric design thinking approach. We can see that there are some considerations about the social aspect of the system in Singapore’s development towards a smart city. It places an importance on inclusivity, ensuring that citizens are included together in the progress towards a smart city. Programs and campaigns such as the SkillsFuture program provides courses for citizens where they can and keep themselves relevant in society (Fig. 2). While these are catered to the individuals in the city, the outcomes of these citizen-centric solutions and services eventually benefit the country as a whole. By considering both design approaches, it is possible to reveal the crucial conflicts and issues of a situation, resulting in something that would truly benefit the citizens and nation.

Case Studies

Pokémon GO



Fig. 3. Singapore Tourism Board (STB). STB teams up with Niantic to use Pokémon GO in collaboration with SingaporeRediscover campaign. 2020.

In August 2016, Pokémon GO was released in Singapore. It is an Augmented Reality (AR) mobile game by Niantic, in collaboration with Nintendo. Using geo-location and AR technology, it encourages players to go around different physical locations across the country to catch Pokémon, collect items at Pokestops, and battle at Pokegyms. By utilizing such technology into a game format, it encourages social interaction between players of all ages to interact with each other in attaining different goals together.



Fig. 4. Today Online. People gathered to play Pokémon GO at Blk 401, Hougang Ave 10 on Aug 10, 2016. 2016.

The design of the game made use of physical locations, AR technology, and leveraged on social media platforms, which resulted in a new avenue for social activity and connections in Singapore. With Pokémon sightings being shared online through social media platforms, such as Facebook, Twitter, Reddit, etc. it quickly became a new form of social activity. Groups of friends and family would go out together to various locations across the country in search of Pokémon. During the craze of its initial release, there were various hotspots around Singapore, such as Chinese Garden, Hougang, Yishun, etc. where large crowds would gather to catch rare Pokémon that were spotted in the area as seen in Fig. 4. Such a social activity increases the chances of unplanned interactions in physical spaces, allowing for people in society to meet, spend quality time together, and deepen the interpersonal relationships that they have.

Pokémon GO is an example of how digitalization and technology with consideration for physical spaces can bring about social connections and deepen bonds within society. While being limited to a mobile interface, it was able to tap into the physical and digital infrastructure of Singapore, breaking the stigma that interactions from mobile games and online social connections can only occur on a digital platform, bringing the social connections to physical spaces. Through a digital format, it was able to bring people together in the physical space, driving social interactions and connections between people in society.

Even though Pokémon GO is successful in bringing people together, it brings to question whether the means in which we create connections and interact with one another today has changed. Connections and interactions previously created through physical interactions have been interchanged with digital means by technology and digitalisation. In some ways, the use of apps and social media has redefined what it means for us to connect with someone;

these connections are no longer defined through face-to-face interactions, but by the act of “following” or “adding” someone through their devices.

HDB void deck seating



Fig. 5. Seng, Sabrina. HDB void deck tables and seating taken during the Covid-19 pandemic as part of a series “Lepak Downstairs”. 2021.

Benches and seats are located around various HDB estates as part of the HDB void decks. They are designed for community usage as part of the community space where residents can use them to gather and interact with one another. They come in many forms and arrangements, some providing tables, benches, chairs, stools, etc. as seen in Fig. 5. They create an opportunity for people in the community to have social interactions and connect with one another at the void deck. However, these public seating in HDB void decks are only found in older estates as newer estates are being designed to be taller and more compact to optimise land usage.

The design and deployment of seating in HDB void decks allows for various groups of people within the vicinity to make use of the space, be it residents or passers-by in the area. They are very neutral in design, considering how Singaporeans come from various ages, ethnicities, religions, and cultures, it encourages everyone to use them. On some level, it is almost like a landmark within the HDB estate as different estates and communities would have different designs. This creates a communal sense of belonging and familiarity for people in the space when they see it. For citizens, being more present within a public space also allows for more opportunities to meet and bond with their community, creating closer and warmer relationships with the people around them.



Fig. 6. Fattah, Farzana, The Smart Local (TSL). Sheltered table and seating located at Blk 967 Pioneer Road North multi-story carpark. 2022.

However, as the country heads towards a more fast-paced urban and digital lifestyle, societies' habits and needs changed, leading to the HDB void deck seating slowly becoming under-utilized and eventually obsolete. The community gathering areas in newer estates were relocated to HDB pavilions or roof terraces which are not as prominent in the day-to-day life of a citizen when they go about their urban lifestyle.

The HDB void deck seating is a good example of a physical product within a space that allows for community bonding. It is an easily accessible piece of furniture within a public space that everyone in the community would encounter as they head out or go home. Even though the idea of a community seating area is still present in newer estates, it plays a less conspicuous role in the design of the present urban space. It brings us to consider how the physical infrastructure should be enlivened to compete with the digital infrastructure of such a technological city like Singapore. Online interactions are able to fill the gaps and improve people's social life, but it does not mean that the physical space should be any less important. By diminishing the presence of community seating areas in shared public spaces, it may further drive people's behaviour of using technology as a means of connection to interaction online.

Stop, Smile, Stroll



Fig. 7. Playable City. Pedestrian walking by the Stop, Smile, Stroll installation in Bristol. 2016.

Stop, Smile, Stroll is a public installation by Hirsch & Mann. It won the Playable City Award in 2016 which aims to prompt a unique form of interaction, creating a social connection and getting citizens involved in various cities. The installation transforms the waiting time for a traffic light into an experience where pedestrians can share an unexpected moment of connection.

It was designed to disrupt the boring routine of people's commute by converting a traffic light into a space where it invites people to playfully connect with one another. Pictures are taken upon pressing a button on the installation, which are then analysed according to the mood or emotion shown, and displayed with messages, a tune, and unique animations that are overlaid onto the images. By sharing their mood, pedestrians are able to co-create a musical response together through an unplanned moment of connection, all within the short time span of waiting for the traffic light.

Stop, Smile, Stroll is a good example of how technology can be used to create engaging and spontaneous connections between people within a physical space. There is a balance between the physical and digital aspects of its design which invites people to take part with it. It breaks the social barrier between strangers on their commute around the city, creating a simple yet meaningful interaction between them. It shows that interactions and connections created through design need not be very deep and complex for them to be meaningful.

Though it should be considered that people's behaviour in a city is constantly influenced by their environment, culture, and history. Thus, the same product would produce different responses with people in different cities as people within each city are influenced by different cultures. If this project were to be installed and tested within the context of Singapore's urban lifestyle culture, it may not necessarily receive the same response from the residents living in the area.

Primary Research

Methods

Observation

Ethnographic research was conducted to understand how young adults interact with others in comparison to the elderly. Two locations were observed for this study: Macpherson and Sengkang. Both locations are similar in a way that they are dense neighbourhood spaces where people pass through in their daily life. However, as found from the Singstat website by the Singapore Department of Statistics (DOS), the age demographics within those neighbourhoods are different; Macpherson is a mature estate that has a larger percentage of elderly and older families, while Sengkang is a younger estate with a larger percentage of the younger generation and families.

Two contrasting age groups were chosen for the observation: young adults who are more digitally inclined and the elderly who are less digitally savvy. By observing young adults and the elderly in these locations, it may give some insight to the differences in how they interact with others in a public space and show how technology might have influenced them. The observation will be focused on a few locations along the target audiences' commute in both areas; bus stops, lift lobbies, and public seating areas. These places have a higher chance of interaction between individuals as they are areas of rest or pause in one's daily commute in the public space.

Participant Observation



Fig. 8. FriendZone. Event post on FriendZone Instagram page. 2023.

Participant observation was conducted during a FriendZone event, “Form new friendships, Forge our future”, for the East region of Singapore at Bedok in January 2023. It is a community-building event, supported by REACH, that promotes new connections between young adults through conversation. All of the participants for the event fall within the age range of 18 to 35 which is suitable for this research. Participating in the event was to gain first-hand experience of how their community-building events were facilitated and understand how young adults interact with one another as strangers. By personally interacting with fellow participants, it allows for deeper involvement in the conversation and an opportunity to better understand the participant's background, motivations, and purpose in joining

such an event. Furthermore, through the conversations with other participants, the personal opinions about the topic of this research can be sought out from young adults of various backgrounds.

Survey

Two online surveys were conducted using Google Forms with most of the respondents being young adults aged between 18 to 30. The first survey focuses on the issue of social disconnection. The second survey focuses on the way young adults navigate their social circles. The age range chosen is when people living in Singapore face the most changes in life, such as studies, career, family, and relationships. By splitting the research into two short online surveys sent at different times, it helps to frame the respondent's mindset while responding as they are looking at different points of a relationship and different types of interactions. Additionally, conducting it online as a short survey allows it to reach out to a broader range of young adults due to the accessibility and short response time needed.

1. Social Disconnection

The first online survey was conducted to find out and understand more about the issue of social disconnection young adults in Singapore face. The survey is split into two sections about their relationships and interactions.

The collage shows four sections of a survey form:

- Section 1:** A question titled "What best describes a 'close' relationship to you? (with friends and family) *". Below it is a "Select all that apply" instruction and a list of 10 checkboxes:
 - when balance and time spent does not affect your relationship
 - being able to trust them with deeper thoughts and feelings
 - being able to easily communicate with them
 - understanding each others thoughts, feelings, and habits without saying
 - enjoying spending quality time together
 - accepting each others flaws
 - being there for each other when needed
 - being able to be forthcoming with opinions and feedback
 - being comfortable with yourself around them
 - Other:
- Section 2:** A question titled "How would you rate your relationship with friends? *". It features a 10-point Likert scale from "Not so close" to "Very close".
- Section 3:** A question titled "How would you rate your relationship with family? *". It features a 10-point Likert scale from "Not so close" to "Very close".
- Section 4:** A question titled "In one word, describe what you feel when interacting with someone close to you". It has a text input field labeled "Your answer".
- Section 5:** A question titled "Have you ever felt alone even when you are with friends and family? *". It has two radio button options: "Yes" and "No".

Fig. 9. Hoon, Wei Jin. Collage showing section 1 of the survey about the interpersonal relationship young adults have with their friends and family. 2023.

The first section looks into relationships, seeking to understand what young adults think is important in a relationship with friends and family, how close they perceive their friends and family to be, and how they feel with someone close. Finally, it seeks to find out if they have ever felt disconnected with friends or family and depending on their answers, it would redirect them to different questions in the next section about the interactions they have in their relationships with friends and family.

Interactions	Interactions
I have felt alone even when with friends and family	I have never felt alone with friends and family
What happened that makes you feel that way? *	What kind of activities made you feel close to your friends and family? Why? *
Your answer	Your answer
What kind of activities or environment do you think can improve relationships with friends and family? (please specify) *	What kind of activities or environment do you think can improve relationships with friends and family? (please specify) *
Your answer	Your answer
Having someone significant that you care the most about in mind, describe what makes your relationship with this person special? Can be either friends or family (please specify which) *	Having someone significant that you care the most about in mind, describe what makes your relationship with this person special? Can be either friends or family (please specify which) *
Your answer	Your answer

Fig. 10. Hoon, Wei Jin. Collage of section 2 in the survey about the interpersonal interactions young adults have with their friends and family. 2023.

The second section focuses more on the interaction that young adults have in their relationships to understand the connection or disconnection that they feel. The first question of this section varies based on the respondent's answer for the last question in section 1. It seeks to understand why they feel a sense of connection or disconnection, and what kind of interactions in their opinion would help to foster stronger bonds.

2. Navigating social circles

A second online survey was conducted to find out how young adults in Singapore create and maintain relationships. As compared to the first survey, it looks at a broader spectrum of relationships than friends and family, including simple relationships and interactions with others such as second degree connections, neighbours, and members of the public. The survey is made up of 2 sections about creating relationships and maintaining them.

Making new connections

How comfortable are you in making new connections? *

1 2 3 4 5 6 7 8 9 10

Not comfortable Comfortable

How likely are you to approach someone through events? *

*events: school classes, community events, etc.

1 2 3 4 5 6 7 8 9 10

Not likely Very likely

How likely are you to approach someone in person? *

1 2 3 4 5 6 7 8 9 10

Not likely Very likely

How likely are you to approach a neighbour in your community? *

1 2 3 4 5 6 7 8 9 10

Not likely Very likely

How likely are you to approach someone through social media? *

1 2 3 4 5 6 7 8 9 10

Not likely Very likely

How likely are you to approach a secondary connection? *

*secondary connection: friend's friend, family friend, etc.

1 2 3 4 5 6 7 8 9 10

Not likely Very likely

Fig. 11. Hoon, Wei Jin. Collage showing section 1 of the survey about how young adults approach new connections. 2023.

The first section examines how young adults create relationships. It seeks to find out if they would initiate new connections, the common methods of interaction that they use to form a relationship, and who they would form those relationships with.

Maintaining connections

How do you usually maintain your relationships with friends? *

- Short meetups (less than 3 hours)
- Hangout (half a day)
- Text messages
- Voice calls
- Voice messages
- Video calls
- Video messages
- Memes, videos, online content, etc.
- Other: _____

How often do you feel like you need to meet with friends? *

give a time frame

Your answer: _____

How often do you interact with friends on social media? *

- Daily
- 3-3 days
- Weekly
- Monthly
- Other: _____

What content do you exchange the most with friends on social media? *

- Memes, videos, online content, etc.
- Photographs
- Text messages
- Voice/video messages
- Other: _____

What is the most memorable part of your relationship? *

- Activities / events
- Places
- Conversations
- Text messages
- Pictures
- Videos
- Other: _____

Fig. 12. Hoon, Wei Jin. Collage showing section 2 of the survey about young adults maintaining existing relationships. 2023.

The second section places an emphasis on current relationships and how young adults maintain them. It seeks to understand how young adults interact in their relationships with others by studying the means they use to interact, and the frequency of such interaction.

Interview

An online interview with Grace Ann Chua, Co-Founder and CEO of FriendZone, was conducted to understand more about the connections young adults make with one another. FriendZone was started by Grace and her fellow co-founders in 2018 to provide opportunities for young adults to connect meaningfully. Her organisation focuses on a similar target audience as this research, hosting community-building events in neighbourhoods between young adults, aged 18 to 35, and encouraging meaningful conversations between them. Being one of the co-founders of FriendZone, she has experience in facilitating community-building events and interacting with young adults through conversations which would be insightful for this research. The questions will explore her thoughts regarding: the background of her role and her organization, her experience of running FriendZone events, and gain her professional insights on the social connections between young adults.

Findings

Observation



Fig. 13. Hoon, Wei Jin. Residents waiting for the lift in Sengkang. 2022.

Observations at various locations in both Macpherson and Sengkang both saw that the elderly were receptive towards interaction from others in their community. From small conversations about their day-to-day life to their general wellbeing, it reflected a sense of belonging and warmth within the community. During the observation, especially at lift lobbies and public seating, it could be inferred from their conversations that the people whom the elderly interact with may not necessarily be direct neighbours of the same level or even the same block. It is possible that the familiarity of seeing one another in these common spaces and their frequent proximity within the neighbourhood might have allowed them to create a certain level of friendship.



Fig. 14. Hoon, Wei Jin. Young adults on their devices at a bus stop in Sengkang. 2022.

The observation of young adults in both locations found that they were often on their devices. It is observed that on their commute, they are listening to music on their earphones or headphones, engaged on their social media platforms, or on calls within these spaces as shown in Fig. 14. They mainly go about the neighbourhood area as a transient space on their commute and are often not found using the public seating at HDB void decks. Other than the friends and family they are with, it is observed that the young adults in these spaces do not interact with others in their surroundings.



Fig. 15. Hoon, Wei Jin. Pavilion with public seating and resident's furniture in Macpherson. 2022.



Fig. 16. Hoon, Wei Jin. Resident's setup of seats in Sengkang. 2022.

Additionally, it was observed that people may interact more with one another within a public space when they feel a sense of belonging to the place. An observation at Macpherson found that there were a few pavilions with public seating where the elderly within the area have set up their own furniture (Fig. 15). Whilst in Sengkang, it was found that a resident set up their own personal seating area in the public space behind their residence (Fig. 16). These public spaces became a place for them to gather and interact with one another.

Participant Observation

During the FriendZone event, it was split into 4 sessions which engaged participants to connect with others in different ways. It started with a free and easy session an hour before the official event time, giving participants time to arrive, settle down, freely mingle and have dinner which was provided. The official event started when Grace, the event host and co-founder of FriendZone, gave the event introduction address.



Fig. 17. FriendZone. Participants talking during the mass activity session. 2023.

The first session was a mass activity that brought participants together through common topics and interests that they have in different parts of Singapore as shown in Fig. 17. It was conducted by using a mini version of Singapore marked on the ground, inviting participants to gather at certain parts based prompts such as favourite hangout places, food places, etc. Gathered in pairs to small groups of four on the mini-map, participants shared their experiences of the topic given. Through the short conversations, it was found that some people shared similar experiences or knowledge of that area, forming a basis of how they can better connect with one another.



Fig. 18. FriendZone. Group photo during breakout session. 2023.

The breakout session was in smaller groups of 4 to 5 participants with a facilitator in each group. In the smaller groups, each participant started off introducing themselves, talking about what they do, and something they like. Next, there were prompt cards provided by FriendZone with topics which participants would go around the table and discuss.

The prompt cards showed that the event had a secondary purpose which was to collect feedback from participants about certain conversation topics. For example, some of the prompts were about describing Singapore to others, what are some issues we think Singapore faces, etc. While participants discuss certain topics given, the facilitator in the group would be taking note of some responses given by individuals.

Such events require a certain amount of funds to operate, thus supporting organizations would have some influence over the event. As FriendZone events are supported by REACH, the Singapore Government's feedback unit, it was evident that some of the prompt questions were targeted questions to collect feedback about some aspects of Singapore. It brings to question how effective these events can be, as the main goal for participants is to meet new people and create connections, but the organization hosting and supporting the event is using it as a platform for a larger purpose.

During the discussion, the topic of social disconnection was brought up. Cherylene works as a caretaker for elderly. She brought up how her interactions and relationships with elderly people and young adults around her are vastly different. The disconnection both groups feel would be different. The elderly usually prefer having physical

connection to maintain their relationships and social circles, which is why they may feel disconnected with the use of technology in their relationships. With young adults, their physical and digital interactions are balanced to maintain their relationships. However, she mentions that the disconnection that young adults may feel might be due to digital interactions. How people communicate and respond on digital platforms are limited. For example, facial expressions, body language, etc, are not conveyed in a digital space; text, stickers, and emojis are used to convey them, but they may not fully express and communicate it across. Additionally, she mentions that the habit of interacting online may have changed how they physically interact with others.



Fig. 19. Hoon, Wei Jin. Mass sharing session during FriendZone event. 2023.

Lastly, during the mass sharing session, each group shared a summary of their discussions, which was rounded up by the guest speaker, Mr Tan Chuan Jin, who gave his thoughts about what the groups have shared. As a public figure and government official, his comments on certain issues about Singapore were more neutral, and on the topics about the event and community, he was more light-hearted. Finally, Grace gave the event's closing address to end the event. At the end of the event, some participants stayed longer to continue their conversations.

Survey

1. Social Disconnection

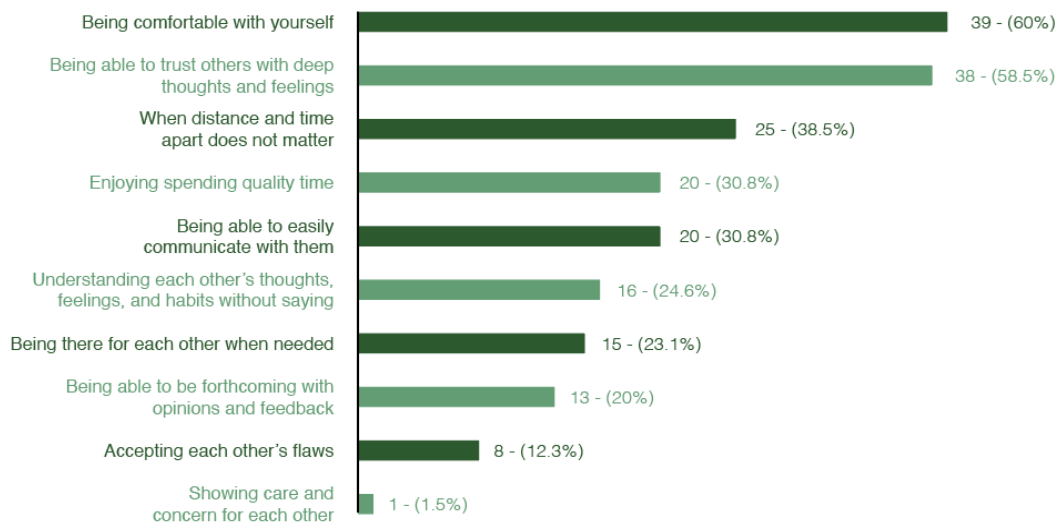


Fig. 20. Hoon, Wei Jin. Graph of factors defining a close relationship. 2023.

A total of 65 responses from young adults in Singapore was received for the survey. Respondents were young adults in Singapore aged between 18 to 28. Firstly they were given various factors to define what a close relationship means to them. Based on the responses, the top 3 factors that define a close relationship for young adults is being comfortable with themselves in the relationship (60%), being able to trust others with deeper thoughts and feelings (58.5%), and a relationship where distance and time apart does not matter (38.5%) as shown in Fig. 20. These responses were further supported by the last question in the survey where respondents were asked to describe what makes their relationship with someone close special to them.

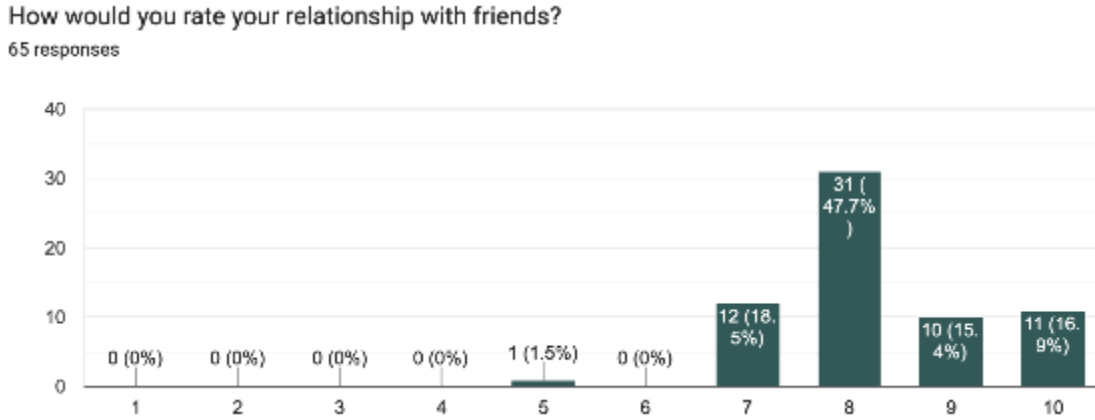


Fig. 21. Hoon, Wei Jin. Graph of relationship with friends. 2023.

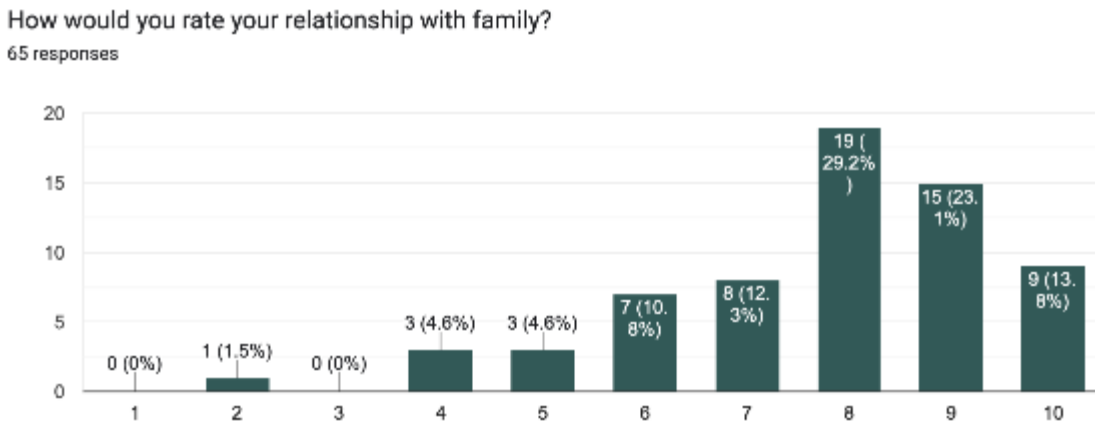


Fig. 22. Hoon, Wei Jin. Graph of relationship with family. 2023.

Have you ever felt alone even when you are with friends and family?
65 responses

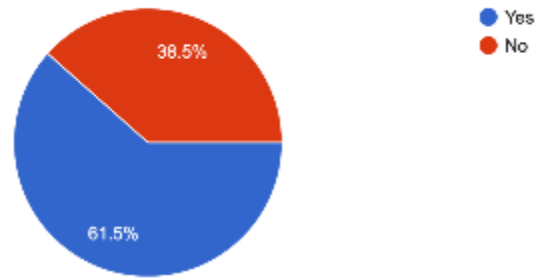


Fig. 23. Hoon, Wei Jin. Pie chart of social disconnection. 2023.

The findings show that most of them have good relationships with their friends and family, with a majority of responses receiving a 6 to 10 rating. However, despite the good rating of their relationships 61.5% (40) of respondents have felt a sense of loneliness while with friends and family.

Out of the 25 respondents who felt connected to friends and family, the survey shows that by being present, having conversations, and being heard made them feel connected in their relationships. On the other hand, the 40 respondents who have felt disconnected from friends and family commonly described that being unengaged, excluded, unheard, and the lack of affirmation or acknowledgement made them feel disconnected in their relationships.

Lastly, the survey collected feedback of activities or environments which they felt could improve their relationships. Some of the common suggestions included activities, games, meals, and conversations which shows that most of them were based on physical interactions. These suggestions give insight into what design could do to improve the relationships that they have with friends and family.

2. Navigating Social Circles

How comfortable are you in making new connections?
60 responses

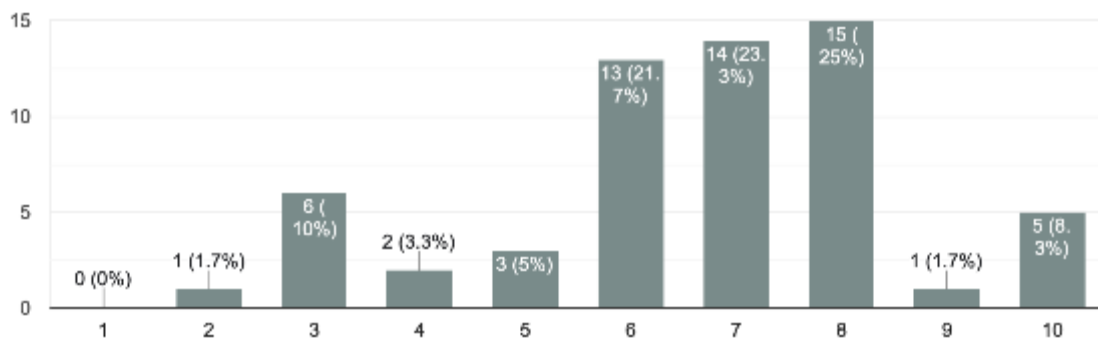


Fig. 24. Hoon, Wei Jin. Graph of young adult’s level of comfort in making new connections. 2023.

A total of 60 responses were received for the survey. Respondents were young adults in Singapore aged between 19 to 29. In the first section about making new connections, ratings of 1 to 5 will be interpreted as “no”, and

ratings of 6 to 10 will be interpreted as “yes”. The response shows that 80% (48) of young adults felt comfortable in making new connections with others as seen in Fig. 24.

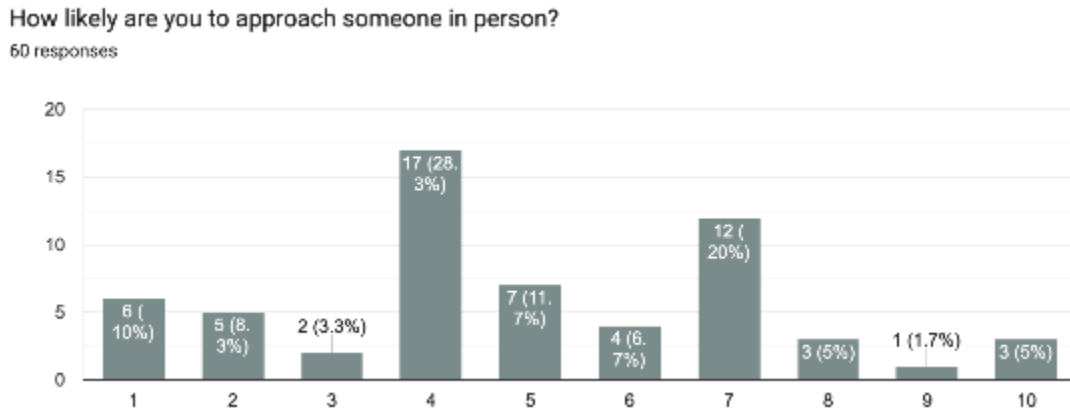


Fig. 25. Hoon, Wei Jin. Graph of comfort in approaching someone in person. 2023.

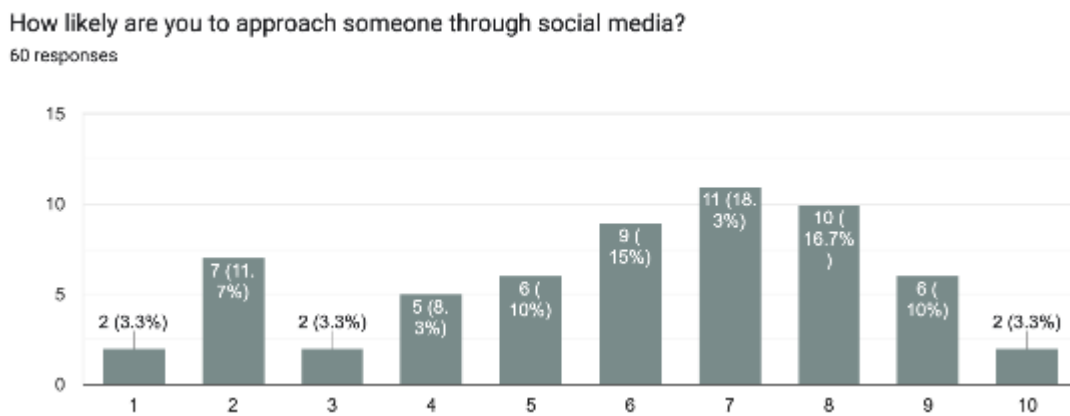


Fig. 26. Hoon, Wei Jin. Graph of comfort in approaching someone through social media. 2023.

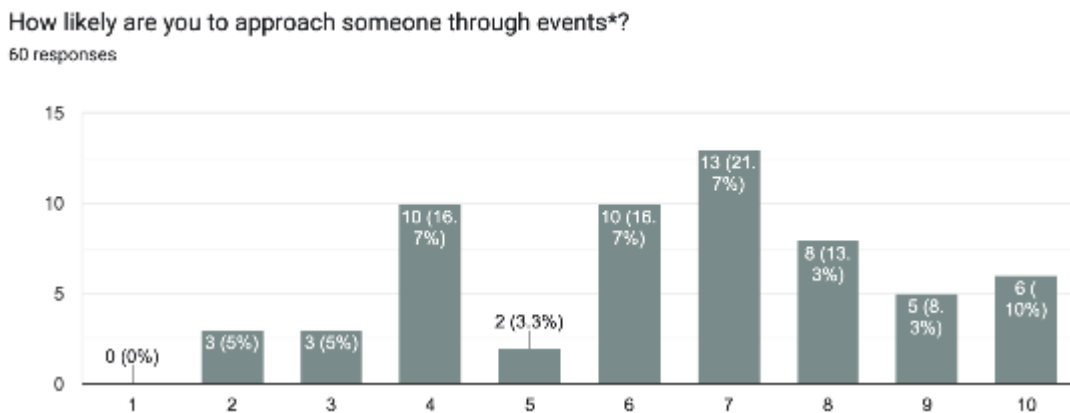


Fig. 27. Hoon, Wei Jin. Graph of comfort in approaching someone through facilitated events. 2023.

When questioned about how they would approach someone to make new connections, 61.6% (37) would not approach someone in person, 63.3% (38) would approach someone through social media, and 70% (42) would approach someone through facilitated events such as school, classes, community events and activities. This shows that young adults would choose to approach someone through digital platforms over physical interactions unless it is a facilitated interaction.

How likely are you to approach a neighbour in your community?

60 responses

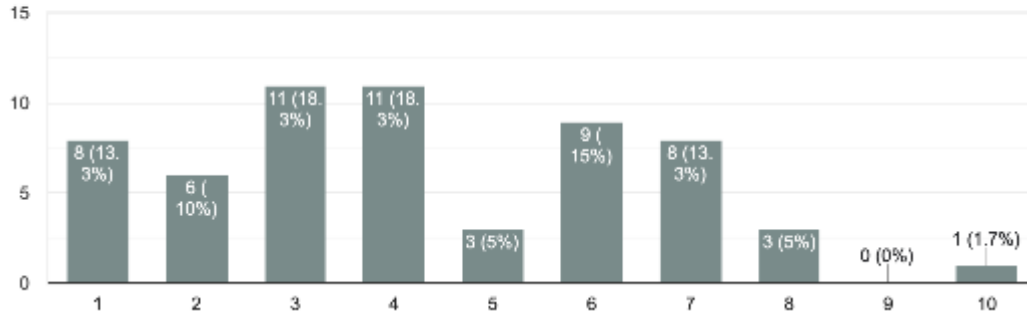


Fig. 28. Hoon, Wei Jin. Graph of comfort in approaching neighbours in their community. 2023.

How likely are you to approach a secondary connection*?

60 responses

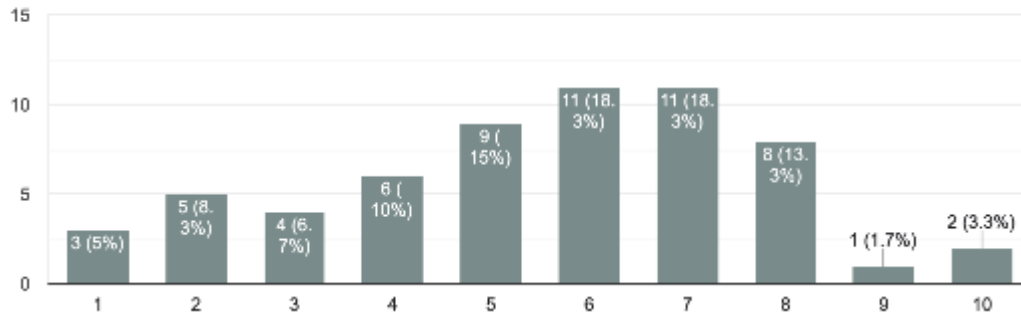


Fig. 29. Hoon, Wei Jin. Graph of comfort in approaching a secondary connection. 2023.

While identifying who they would approach, 65% (39) would not approach a neighbour in their community, 55% (33) would approach a secondary connection such as a friend’s friend or a family friend. This shows they are more likely to approach someone who they have some connections with as compared to those within their proximity. In the second section, it seeks to find out how young adults maintain their social connections. More than 50% of respondents maintain their relationships through text messages (96.7%), short meetups of up to 3 hours (78.3%), half or full day hangouts (78.3%), and sharing memes, videos, and online content (63.3%). (Fig. 30)

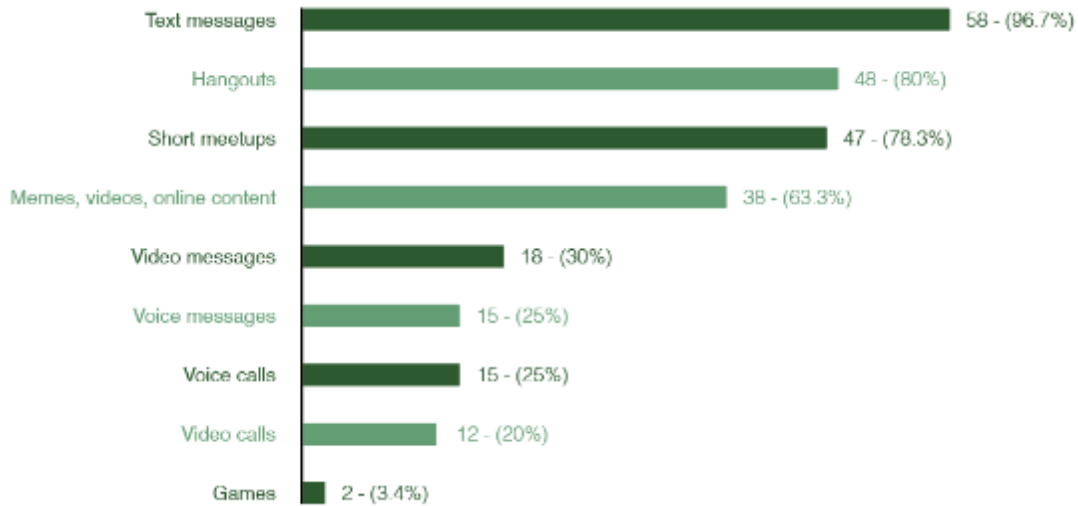


Fig. 30. Hoon, Wei Jin. Graph of factors defining a close relationship. 2023.

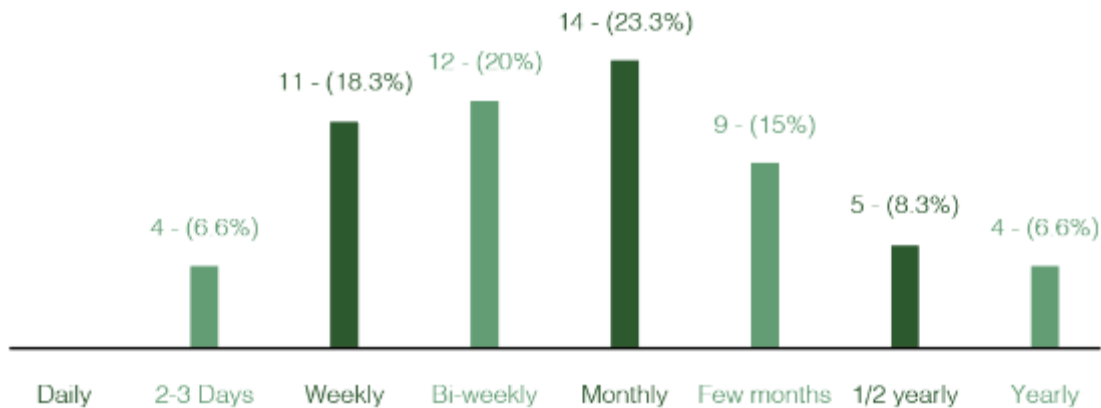


Fig. 31. Hoon, Wei Jin. Graph of physical meet-up frequency. 2023.

How often do you interact with friends on social media?
60 responses

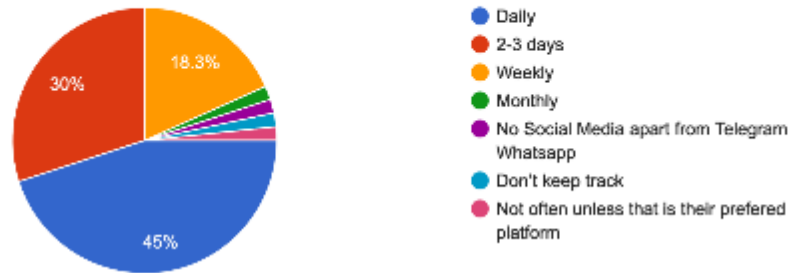


Fig. 32. Hoon, Wei Jin. Graph of digital interaction frequency. 2023.

In terms of frequency of their interactions, in physical meet-ups, 6.6% (4) would meet up every 2 to 3 days, 18.3% (11) would meet up weekly, 20% (12) would meet up twice a month, 23.3% (14) would meet up monthly, and the rest would meet up less frequently. On the other hand with digital interactions through social media, 45% (27) would interact daily, 30% (18) would interact every 2 to 3 days, and 18.3% (11) would interact weekly. The comparison between the two forms of interactions shows that young adults maintain their social connections through digital platforms more frequently than physical meet-ups.

What content do you exchange the most with friends on social media?
60 responses

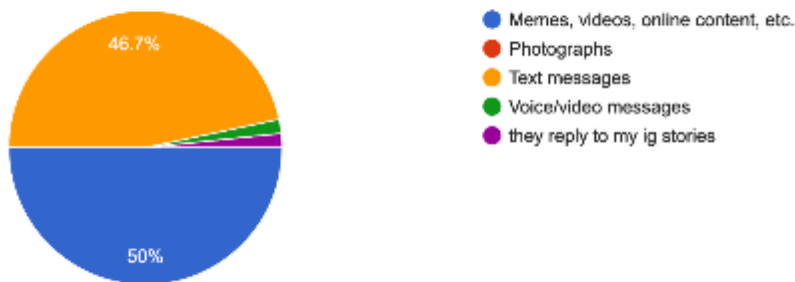


Fig. 33. Hoon, Wei Jin. Pie chart of the type of content most often shared. 2023.

Digging deeper into digital interactions, the type of content that was most often exchanged by young adults was memes, videos, and online content (50%), followed by text messages (46.7%).

What is the most memorable part of your relationships?

59 responses



Fig. 34. Hoon, Wei Jin. Pie chart of the most memorable part of relationships. 2023.

Finally, when asked about the most memorable part of their relationships, 48.3% (29) chose activities and events, 41.6% (25) chose the conversations they had, and 8.3% (5) chose photos they took. From this, it can be inferred that physical interactions that young adults have plays a significant role in defining their relationships with others.

Interview

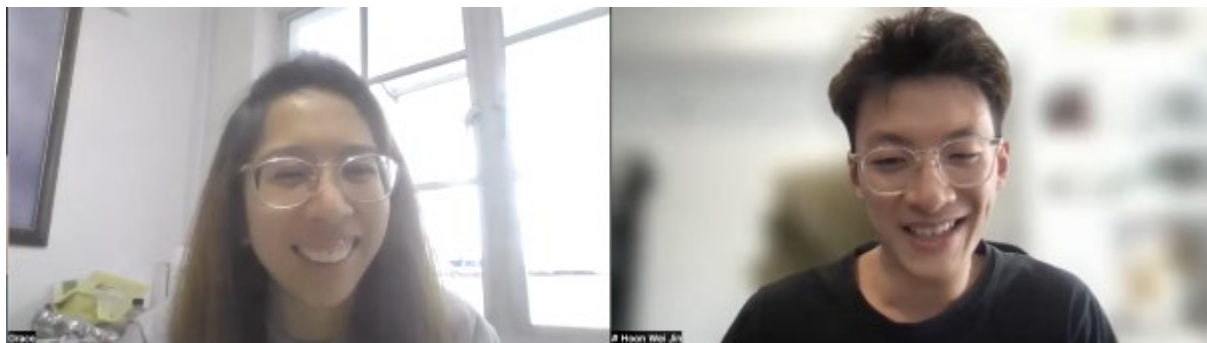


Fig. 35. Hoon, Wei Jin. Online interview with Grace, Co-Founder of FriendZone. 2023.

In the interview with Grace, she shares about starting up FriendZone and her experiences organizing FriendZone events. She mentions that these events serve as a platform for young adults to meet and make new connections. Even though participants may have various reasons for joining the events, they usually have the intention to meet more people even if they are more introverted. When talking about the impact of their events, Grace shares that they are just a starting point where possible connections are made, but it is up to individuals to keep the connection going after the events.

Talking about other opportunities or outlets to create connections, Grace mentions various activities that people would do where they can meet like-minded individuals. Generally as people go through various stages of life, there would be situations or experiences that allow them to meet new people like school camps, classes, work, etc. Depending on the context or environment where they happen, it creates a difference in the type of connections between people. However, in terms of meeting new people in neighbourhoods it may not be the case as each individual is at different stages of life. When individuals meet for the first time, the more commonalities they have, such as interests, hobbies, or their stage in life, would help in building stronger connections.

Her opinion on the social disconnection that young adults face is that it could either be due to the lack of personal security within a relationship or a mismatch of expectations between individuals within a relationship. The personal security within a relationship she refers to is the “sense of wanting to be known fully and to be liked and loved regardless”. Thus, someone who feels more secure may not feel as disconnected to others in a relationship. There are also examples she brought up where expectations in a relationship may be mismatched. As a relationship is between two individuals, communication and connection should work both ways to understand the value of that relationship.

As a comparison to acquaintances, Grace also brings up the idea of para-social relationships, where individuals may feel connected to influencers, celebrities, or popular figures but it is only a one way relationship. It is similar to acquaintances that people stay connected with on social media, you may know about their life from what they post online but it is a shallow level of connection.

Additionally, Grace also mentions how Singapore’s culture influences the way we connect with one another. People in Singapore do not take the initiative to talk to others and they are wary when people do so. They are only more receptive to talk to others when there is a change in culture, or an experience facilitated by someone that gives them an opportunity to meet people. A certain level of psychological safety within the community has to be present before such behaviour arises, if not individuals would just be focused on their own devices.

Analysis and Interpretation

Social disconnection in a connected society

From the literature reviews, implies that interpersonal needs of inclusion, affection and control is important in social interactions and relationships. Even though Singapore is structured in a way where it tries to include everyone in its progress towards a Smart Nation, providing many outlets of communication for the people in the city, young adults in Singapore still feel a sense of disconnection. The findings from the survey when young adults, unengaged, excluded, unheard, and the lack of acknowledgement, resulting in a sense of disconnection. Through these responses it can be seen that there are times when they do not feel included in their social interactions and relationships.

From the primary research, it shows that young adults have an awareness of their social disconnection and know how they can improve their relationships. Most of them proposed that through physical interactions such as conversations, meals, and participating in activities together would enhance their relationships with others. However, the surveys show that they are not receptive in approaching others in person to make new connections, they would rather approach others through social media or through facilitated interactions by others.

As mentioned in the interview with Grace, the socio-cultural aspects of Singapore may play a part in how young adults in Singapore deal with social disconnection. They seek these interactions and relationships to fulfil their social needs. However, the security that digital interactions provide and social norms in Singapore render them apprehensive of approaching others in person. Thus, that is where design can come in to bridge the connection through a facilitated interaction.

Navigating in a technological environment

Technology is an undeniable part of people’s interaction and relationships with one another. From the primary research conducted, it is clear that technology became part of their daily life, influencing their interactions and relationships they have with others. The surveys show that even though physical interactions are still present, digital interactions play a more dominant role in their interactions and relationships as it gives them a stronger sense of security in their social lifestyle.

The literature reviews show that Singapore has fostered an environment surrounded by technology. The convenience and accessibility of it, makes it a common means of connection in a relationship. Technology provides young adults with many outlets of interaction and gives them the ability of when, where, and how they interact with others. Even though it may seem to meet the interpersonal need of control mentioned in the literature review, by choosing to interact either physically or digitally, they give up the opportunity to for the other form of interaction. This is exemplified in the case study of HDB void deck seating, it provides an opportunity for people in the community to interact with one another but as everyone is so caught up with their digital lifestyle, the opportunity to interact within the physical space is neglected.

Thus, even with the ability to control their interactions and relationships, young adults have to be aware of how they balance them and navigate in the complex social structure that Singapore provides. On some level, they would have to accept some level of uncertainty in their social interactions and relationships to truly fulfil their interpersonal needs. Eventually, it is on young adults as individuals in the city to create and deepen the connections that they have with others.

Designing experiences for connection

From the case studies shown, design can create opportunities for unplanned interactions to happen between people in the city. Since technology and social media play such a big role in our social life, it could be used to revitalise the physical infrastructure of the city and change how young adults connect with others. Just like Pokémon GO and Stop, Smile, Stroll, designs can be created with the use of technology and digital platforms to encourage physical interactions to happen.

From the participant observation and interview, it gives insights to where design could possibly start from. For example, common interests and similar stages in life between two parties would often encourage better relationships to be fostered. With these commonalities, they are able to empathise and relate to one another, creating a stronger connection. By tapping on such individualistic experiences, design can construct a human-centric experience where it gives young adults the platform to develop genuine interactions and relationships. The insights gained through this method also shows how a bottom-up perspective in facing the issue of social disconnection is an important one. Everyone's background and thoughts are different, and by getting various feedback, it can give insights to how something can be designed.

As mentioned in the literature review, design is part of a larger system and often takes a systems thinking approach in projects like Singapore's Smart Nation. The problem of social disconnection that young adults face is on a very personal level, and everyone experiences it to a different degree. Thus, it is often overlooked in the broader spectrum of issues in society. Design has to consider these issues from a design thinking perspective where they look at the true core of the issue and try to solve it from the perspective of the end user. The theoretical approach, SST, demonstrates that people and design have a cyclical influence over one another; a change in design affects people, and a change in people's behaviours affects design. Thus, the process of design, especially in relation to social interactions and relationships, is a reiterative one that will progress over time.

Conclusion

In conclusion, this dissertation has discussed various aspects of interpersonal relationships young adults in Singapore have in relation to design. Living in a smart city like Singapore, surrounded by technology and an array of outlets for connection, one would expect that everyone feels connected, but that is not the case. With social disconnection being an unspoken issue amongst young adults in Singapore, this dissertation employed various research methods to understand this issue and how product design plays a part in it.

Literature concerning the relationship people have between technology and their social interactions and relationships were examined to understand how the interpersonal needs of people living in Singapore are met. Additionally, literature with regards to how social connections are seen from contrasting perspectives was discussed to understand how they can be designed.

Distinct case studies presented showcase various designs that allow for means of interaction that people could use to connect with one another. Pokémon GO shows how design has brought people together through digital means and HDB void deck seating exhibits the potential for physical interactions to occur. Additionally, Stop, Smile, Stroll is an international installation which distinctly shows how authentic interactions between people in the city can be designed.

Lastly, primary research was carried out to gain a deeper understanding of young adults' interpersonal interactions and relationships. Two surveys were conducted to find out about the issue of social disconnection and their interactions in creating and maintaining relationships. Ethnographic observations were done to understand how their social interactions with others in public may differ from other age groups. A participant observation was done at a community-building event to gain first-hand knowledge of how such events are held and understand the views of young adults on this research. Finally, an interview with a community-building event organizer for young adults to gain an understanding of her experience in facilitating such events and her professional perspective of social interactions and relationships young adults have.

From the various research methods used, it can be seen that young adults heavily rely on technology and social media to maintain their relationships. Though they are aware of why they feel disconnected and how their relationships can be better, they do not take an active role in solving it. That is why design plays a vital role in tackling the social disconnection young adults face. By designing from a human-centric approach, it can be used to facilitate genuine interactions and relationships. However, design is only a platform where they can initiate these interactions and relationships. It is ultimately up to young adults as individuals to foster the relationships they have with others.