



To blow up the bubble

Framing loneliness to foster social transitions

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"To Blow up the bubble: Framing loneliness to foster social transitions"

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1. Chapter 1: Introduction

1.1. Preface

The research originated from the ambition of understanding, representing and creating awareness of a prominent societal problem of contemporary society in a way that is not peculiar to classical design processes, and to merge personal interests with the design expertise that I gathered during my studies.

The main goal is to operationalise psychological and behavioural studies and to build a framework that enables and empowers civil servants to act and react towards the 'loneliness epidemic' (Kantar Public, 2016). This process has the aim of giving form to what several people feel but struggle to frame and describe and to indirectly fostering a transition that can benefit the whole society, by considering different perspectives in both analysing and coping with loneliness.

I will explore and experience how design research and practice can be an active part of social innovation. In this way, I would like to demonstrate how the focus on people's experience should be a large part of policy transitions and how holistic approaches are fundamental while studying evolving issues.

My personal goal for this project is to explore how design research can be framed and applied within the political and societal landscape and create an impact in complex systems. Moreover, I would like to exploit the psychological and sociological components of the Master's course I am following (namely Design for Interaction), by bridging contemporary societal issues and policy-making, to support and facilitate the development of new capabilities needed to address loneliness.

1.2. Executive summary

The HPM project was articulated in three main phases:

- Research phase
- Feedback and iteration phase
- Design of the knowledge product

During the first phase, I had the opportunity to diverge and broaden the problem area by researching loneliness from the psychological and sociological perspective. Moreover, I had the chance to discuss with a professional counsellor and get some insights on how to make the knowledge I gathered operationalisable from a design perspective. I experimented new methodologies and mixed sociological and psychological research approaches with typical design ones, like for instance problem framing and journey mapping. In this phase, I alternated desk research with practical exercises, to prepare a fertile field for the next stages.

The second phase was about discussing the interim results with peers and getting feedback to inform the design phase. The focal point of this stage was the HPM seminar, in

which I had the chance to share my insights with the designers' community and to operatively discuss them before starting the final design.

The last phase was about designing a model and a framework for public institutions to cope with loneliness. All the relevant notions from previous stages have been analysed and materialised to make the research available for the intended audience and the insights usable for further studies.

This phase, and therefore the project ended with a seminar with policymakers and public managers from the municipality of Delft. During this meeting, I shared the results of the research and the final design.

1.3. Towards a new vision on sustainability

The sustainability discourse takes a central role in contemporary societal discussions and it can be considered as a driver when designing for transitions (see Paragraph 1.4).

The sustainability domain is often represented by spotting on three distinct perspectives: People, Planet and Profit (see Figure 1). The three components carry specific challenges and are interconnected, having the final goal of affecting society and environment in a global way.

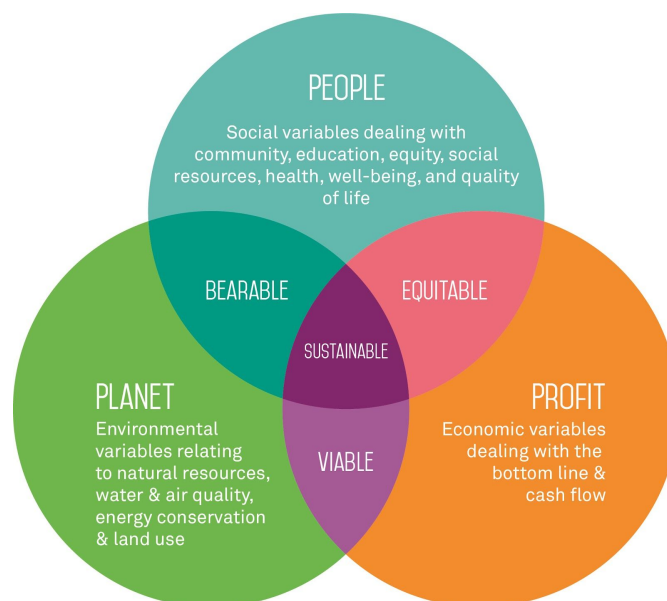


Figure 1: The three spheres of sustainability: People, Profit & Planet (adapted from Yates, 2012)

The current project specifically focuses on the People component, by stressing the notion of 'social sustainability' (Dempsey et al., 2011). In this case, indeed, loneliness is seen as a barrier that can preclude people to socially interact, jeopardising societal wellbeing.

Since reframing Loneliness and envisioning direct or indirect coping entails a paradigmatic societal shift, a Transition design approach has been chosen.

1.4. Transition design approach

The Transition design model (see Figure 2) is aimed at researching, informing and fostering societal change in a radical way. Transitions are intended as “long-term, complex, and non-linear processes of systemic change” (Mulder & Loorbach, 2018).

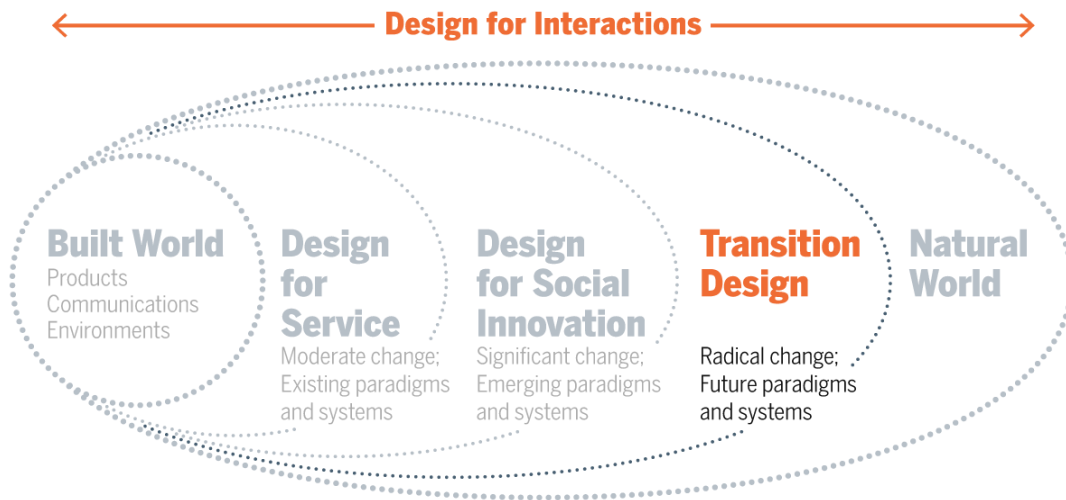


Figure 2: The Transition design model

Hence, this approach has been individuated as particularly in line with the intent of the project, because it represents a structured way of actively researching and iterating on envisioned opportunities in order to drive societal change.

The Transition design process consists of three distinct phases: ‘Design research’, ‘Designing interventions’ and ‘Design Practice for transition’ (Van Selm & Mulder, 2019). The first phase’s aim is to investigate and understand the problem to be addressed in its entirety. That means thoroughly deconstructing the past and the present of the challenge and extracting relevant insights that will serve as a starting point to reframing the problem and envisioning future approaches and solutions. The ‘Design interventions’ phase entails taking the right actions in a suitable context(s) with the right timing. In other words, taking the relevant insights and models from the previous phase and translating them into design intervention aimed at testing and iteratively finetuning the solution opportunities. Last, the ‘Design practice for transition’ phase is an active synthesis of the previous one. Here the design interventions are analysed and the relevant ones gathered to drive and inform societal transitions.

The focus of design for transition is to address persistent problems. Therefore, It is important to adopt a deconstructivist mindset, and to break down the issue into smaller and more digestible opportunities (Rittel & Webber, 1973; Rotmans & Loorbach, 2008). This deconstruction allows iterating on the problem by creating smaller interventions.

This project focuses on the first phase of the Transition design process, namely ‘Design research’. Therefore, the goal is to get relevant insights on how loneliness is framed,

conceived and experienced, and to envision possible lines of action to address the issue from an institutional perspective.

2. Chapter 2: Framing loneliness

2.1. Problem Statement

The project started by wanting to explore and frame loneliness in contemporary society and to make the findings operationalizable for civil servants. In other words, to hybridise psychological and sociological research and bridging it to the public domain by using design methodologies. Every individual defines him/herself within society through very intimate values, beliefs and interests. Society, in its turn, represents the stage in which social relationships occur and where different identities form social groups which interacting generate social value. The complex essence of society and of human nature itself make this process of identification and aggregation multifaceted and irregular. For individuals to aggregate, it is needed to share relevant experiences, values and interests.

A healthy society is made of healthy individuals, and unfortunately, this is not always the case. People are precluded to socially interact on a daily basis and loneliness is one of the most prominent the causes, and it is growing in number and severity throughout the years.

A governmental effort is needed to do so, but society should support. A functioning solution should be the result of a choral effort. To enable this transition, society should recognise the issue and have the tools to analyse it, whereas civil servants should approach the design of policies and initiatives to cope with loneliness by keeping in mind the end goal and the underlying factors, in order to materialise and facilitate this shift.

To conclude, it is needed to put the individual at the centre, enabling everyone - despite his/her role within society - to nurture and exploit personal perspectives and values. Current solutions are limited to impersonal forms of engagement and quite narrow in reachability, often targeting social group, and not individuals.

2.2. The loneliness epidemic

Contemporary scientific and technological development introduced a wide range of new tools, and societies changed at an unprecedented pace. These facts present unfamiliar problems and new opportunities, but the key is to acknowledge these societal shifts. One of the biggest changes occurs right in front of our eyes, in the cities. As Tonkiss (2005) asserts: "Modern social theory has frequently represented city life as isolating, as degrading of social ties and as inimical to the community." But the postmodern age brought new elements in the cities, such as the possibility of being connected anytime, anywhere, but to some extent, just in a figurative sense.

According to Holt-Lunstad (2017), nowadays we are facing a complex 'loneliness epidemic', sprung by prominent features of the postmodern age (ageing, low marriage rates, more people living alone, etc.). More and more people are experiencing loneliness, closing the

channels of sharing and interaction with each other, which have always been the basis of functioning societies.

2.3. What is loneliness?

Loneliness has been defined by Weiss (1973) as “Quality of social contact and engagement and a subjective biological construct - like hunger/thirst”. Since then, several studies have been conducted, pointing more towards an individualistic sphere and picturing loneliness as largely influenced by the major scientific and social changes we faced in the last decade.

Loneliness has been presented in numerous studies as a negative emotional state that is triggered by the need for belonging and social connections (Ayalon, Shiovitz-Ezra & Roziner, 2016). Two main components have been identified by Weiss (1973) as contributors, triggers and evaluative parameters of loneliness: ‘Emotional isolation’ and ‘Social isolation’ (see Figure 3). The first one refers to the lack of intimate emotional connections, whereas the second one is a deficiency in social integration (Social isolation is also presented in the literature as Social loneliness).

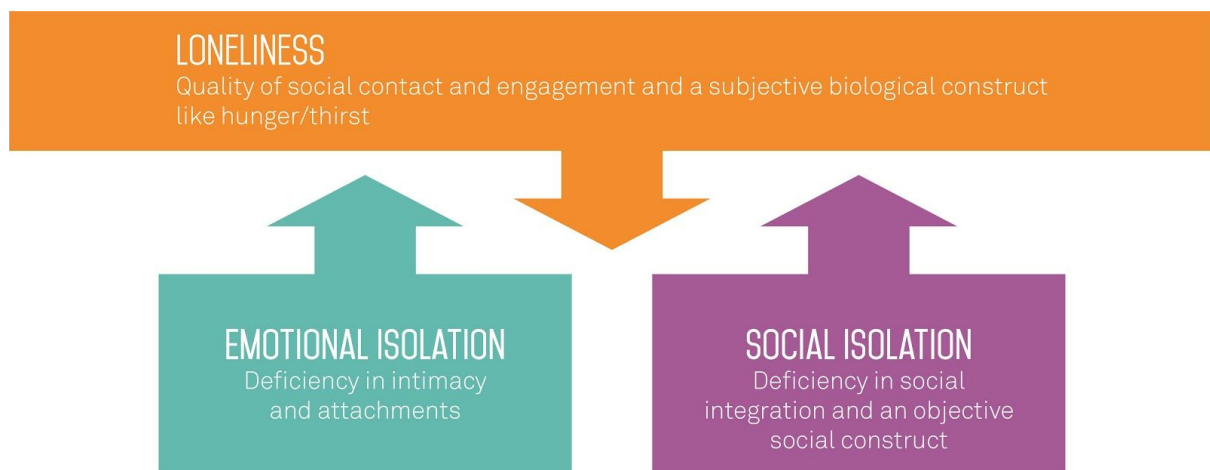


Figure 3: The components of loneliness: Emotional isolation and Social isolation

The two components have an interesting common aspect: they are both the result of a process of self-appraisal. In other words, they can only be assessed by a given person in relation to a precise situation.

Adding to the two-fold nature of loneliness theorised by Weiss, it is possible to say that Emotional loneliness can be addressed by first coping with the Social one. In fact, a rich emotional connection is a consequence of strong social identity and sense of belonging built through social inclusion. Cacioppo, Christakis & Fowler (2009) mainly focused on Social loneliness and stated that when personal needs related to social inclusion are not met, individual confidence and capabilities needed to create relevant social connections are jeopardised. As a consequence, this state can lead to the experience of chronic loneliness (Cacioppo & Hawkley, 2009) (see Figure 4).



Figure 4: Chronic loneliness (adapted from Cacioppo & Hawkley, 2009)

The main difference between Emotional and Social isolation is that the two components can be (and are often) experienced separately. For instance, individuals may still experience Emotional loneliness despite having many social connections (Grageset et al., 2012).

Loneliness does not only harm the psychological sphere, but it can also have severe consequences on the physical one, causing illness and morbidity. The observed effects of loneliness are anti-social behaviours, like isolation and lack of trust (Cacioppo, Hawkley & Thisted, 2010; Lodder et al., 2015; Epley et al., 2008) and unhealthy behaviours (Chen & Feeley, 2015). However, loneliness is mostly considered having motivational effects rather than self-defeating ones (Peterson, 2018). In fact, the two types of isolation are to be considered outcomes of a self-evaluative process in which an individual assess whether his/her social needs are met or not. If the social needs are perceived as low or lacking and emotional loneliness does not occur, coping behaviours are adopted to reconnect or socialise.

2.4. A biopsychosocial disease

In the previous paragraph, we have seen that 'loneliness epidemic' is a complex and multifaceted condition caused by a severe and extended lack of social connections. Technically speaking, the prominent factors underlying this status are linked to three different fields: Biology, Psychology and Society. For this reason, it is usually called a 'Biopsychosocial disease' (Kantar Public, 2016). Figure 5 shows how these various aspects act and interact, leading to an identity crisis. First, loneliness physically impacts individuals experiencing it. This aspect has a negative effect on the daily routine and it precludes different social interactions. A high sense of tiredness and a lowering of the perception of well-being are the most known aspects, but it is also important to consider other

psychosomatic aspects, such as stress, anxiety, lack of energy and manifestation or worsening of mental problems.

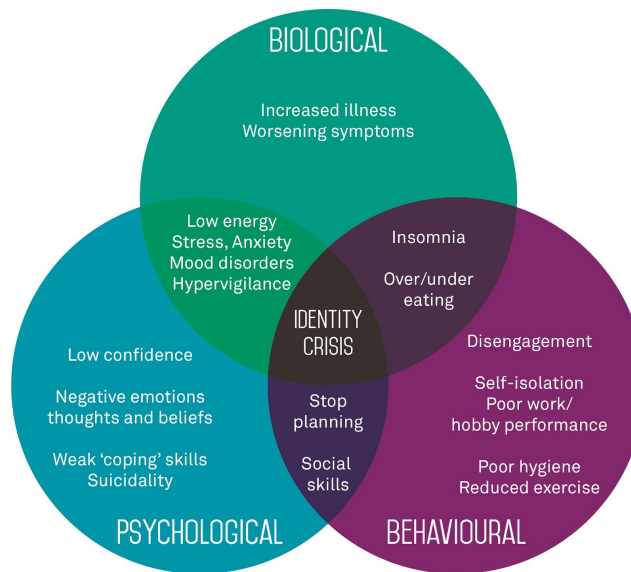


Figure 5: Summary of biological, psychological and behavioural impacts on loneliness

Next to this, talking about the psychological impact, it is not difficult to see how individuals experiencing loneliness are often prone to lower confidence and negative beliefs and emotions. Moreover, they describe themselves as 'angry', 'frustrated', 'alone', 'without purposes', and again 'trapped in a bubble'.

Finally, it is important to have a glance at the social impact. This is, according to Kantar Public (2016), the one that contributes the most to people's perception and self-perception and determines social relationships. Aspects like talking less, taking less care of their hygiene and appearance and changing their eating and sleeping habits are typical of this kind of impact.

2.5. Drivers of loneliness and barriers to connections

The drivers of loneliness and their relative barriers to connection can be articulated in four concentric spheres: 'Individual', 'Connections', 'Community' and 'Society' (see Figure 6).



Figure 6: Drivers of loneliness and barriers to connections (Adapted from Kantar Public, 2016)

The first one refers to the individual's social identity and how a person perceives him/herself in a given context. The 'Connection' layer is related to a perceived inability to connect with his/her close network. Finally, 'Community' and 'Society' describe the feeling of disconnection on a progressively wider scale.

2.5.1. Social Isolation triggers

Social isolation can be triggered by a wide array of factors, that goes from the Individual sphere up to the Societal one.

The analysed factors have been clustered into five main groups: 'Geography', 'Health & Disability', 'Personal circumstances', 'Personal characteristics' and 'Transitions' (see Figure 7).

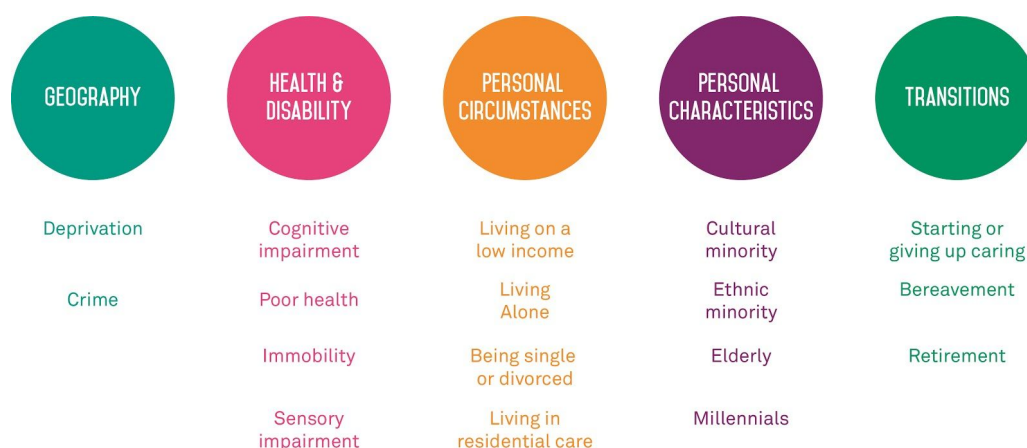


Figure 7: Social isolation triggers

2.5.2. Social spheres and contributing factors

We have already seen how loneliness can be triggered by disparate factors. This characteristic dramatically broadens the array of coping actions and consequently widens the solution space. On the other hand, it can lead to confusion and misunderstandings, due to the openness of the problem. Hence, it is needed to map the relevant themes and keep an open frame on the problem, in order to make the study of it able to evolve in parallel with the solution (Dorst, 2015).

The contributing factors can be linked to three different social spheres and divided into the following groups: 'Individual-level', 'Community-level' and 'Societal-level' (see Figure 8).

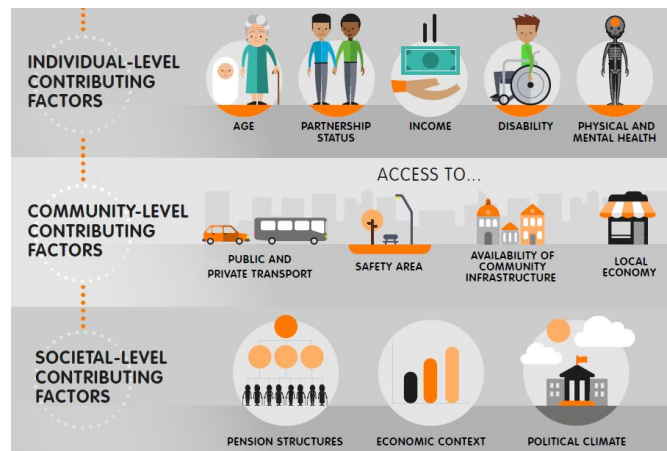


Figure 8: Social spheres and related contributing factors

2.5.3. Life-course triggers

Like contributing factors for loneliness can be associated with social spheres, triggers can be related to different life stages, as they entail different challenges and big transitions (see Figure 9).

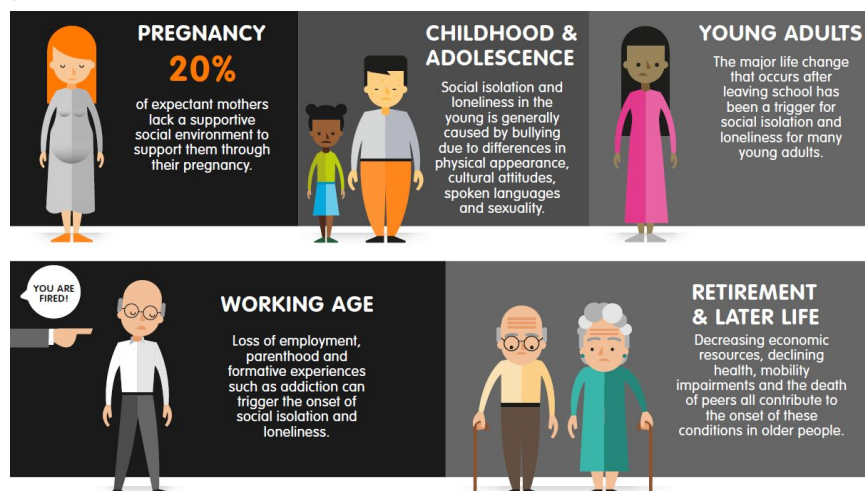


Figure 9: Life-course triggers

This aspect demonstrates how the common belief that spots on the elderly as the 'loneliest' social group is an only partially true assumption.

2.6. Who is affected?

Loneliness is a largely diffused issue, regardless of age groups, personal status and social interactions (see Figure 10).



Figure 10: Who is affected?

Yet, the public perception of individuals experiencing loneliness is not completely realistic, because many people unfairly think that this condition is mostly experienced by the elderly (Holt-Lunstad, 2017). It is possible to find a myriad of papers and proposals for intervention dedicated to this target group. However, as recent systematic studies demonstrate (Werber, 2017), the problem is prominent amongst young adults. The main discrepancy is that loneliness is not often considered as it deserves because it is usual to perceive it as a taboo or a condition strictly linked to people's personal background and psychological status. Almost the totality of people involved in this disturbing process is thinking of being excluded from society, but the fact is that they are still part of it, even if they feel they are not. This leads to a deeper problem: being an inactive individual in a dynamic environment, that works properly when single citizens can cooperate and interact with each other.

It is now clear how creating understanding and awareness is as important as addressing the problem directly. Moreover, it is fundamental to build and nurture efficient and effective infrastructures to reach the wide public, by starting from the sensitive groups.

Pivot

At this point, it was decided not to focus on a specific target group but to approach the problem from a more holistic point of view. It can be very counterproductive to narrow down to a social or age group at this stage because it can leave out important insights to inform the transition design process.

2.7. Current solutions

In this section, current solutions and initiatives to address the loneliness issue will be presented, in order to have an overview of the state of the art and to draw limitations to

The most interesting solutions have been analysed and divided into two groups: the ones happening worldwide (see paragraph 2.7.1), and the ones happening in the Netherlands (see paragraph 2.7.2).

It is important to mention that overall, the UK, the United States and Australia are the countries with already developed and networked policy interventions and initiatives to cope with loneliness. Plus, in the UK - which has gained the unhappy title of 'loneliest country in Europe' - a ministry of loneliness has been set in January 2018, but there are very few cases worldwide of loneliness being systematically approached by the policy and public domain.

2.7.1. Current solutions worldwide

BuddyHub

It is an online platform which matches senior citizens with other people who share similar interests. Their core aim is to alleviate loneliness and isolation so people can feel more connected to society.

AV1 | No Isolation

AV1 is a telepresence robot which allows children and young adults suffering from a long-term illness to be present in school even when they are not physically there.

EllieQ | Intuition Robotics

EllieQ is the proactive Artificial Intelligence driven social robot designed to encourage an active and engaged lifestyle by suggesting activities and making it simple to connect with loved ones.

WeWork

Coliving-spaces encourage people to work together and share experiences making it easy for people to forge strong ties in a short amount of time.

One Shared House 2030 | IKEA

With an increasing population, it is believed that people would share many things and this would result in co-living. IKEA has started an initiative which promotes it.

Jam Card

A JAM Card is a credit card-sized card that can be shown to staff to let them know they may need to be a little more patient (on one side it says 'Just a Minute' and on the other, it says 'Please be patient I have a learning difficulty/disability').

2.7.2. Current solutions in the Netherlands

PostNL

In 2017 PostNL started a project aimed to cope with loneliness by asking the postmen to interact more with the citizens.

IAMEXPAT FAIR

The organisation IamExpat organises every year a fair dedicated to international citizens. The fair offer the possibility to talk about different initiatives and share thoughts and insights.

Week van de Eenzaamheid

Status: eenzaam

It is an event organised every year in Amsterdam. The event entails different initiatives, like workshops, conferences and co-design sessions.

BankjesCollectief

Together with social organizations, residents and local partners, BankjesCollectief organizes an open-air café with 10 benches on the sidewalk in the Nieuw-West district.

Providing residents of New West with an instrument to play a role in tackling loneliness by opening a bench for their neighbours.

Animals & Friends

Nerissa ten Velthuis investigates how lonely people in Amsterdam can be a keeper or shelter family for pets. She will do this from the Rainbow Group and, among others, in collaboration with OPOEH and IFAW. Possibly resulting in a project plan that will be implemented in 2018.

Creative Life Course

The Creative Life course helps participants in a small group (6 to 8) to give life control with self-knowledge and to engage in desired activities and contacts.

2.7.3. Limitations to current solutions

Although there are many solutions been implemented, there are few limitations:

1. Right now the government seems to be focused on the older generation but research has found that younger people are also susceptible to this problem.
2. The government usually targets Dutch citizens by offering the services in dutch language leaving behind expats and people from other countries.
3. Artificial Intelligence, telepresence robot does not help to make a meaningful connection, therefore, are not a proper solution for the problem.
4. Current solutions are not personalised.
5. Many solutions are one time activities but to make a deeper connection more time is needed.

3. Chapter 3: Loneliness, an experience map

3.1. Loneliness, an experience map

The first step made in order to operationalise the gathered insights and bridging the research phase to the framework building one - and therefore to designing the knowledge product - was to create an experience map of loneliness (see Figure 11).

Nine different phases have been detected in this study. The nine phases are: 'Change', 'Trigger', 'Detachment', 'Incubation', 'Early awareness', 'Short circuit', 'Enough is enough!', 'Learning and coping', 'Long term behaviour'. Each phase represents a stage of Loneliness perception, starting from before such kind of perception occurs and finishing with the moment in which the traumatic event has passed and the (formerly) lonely person has interiorised all the tools to prevent low emotional peaks in the future.

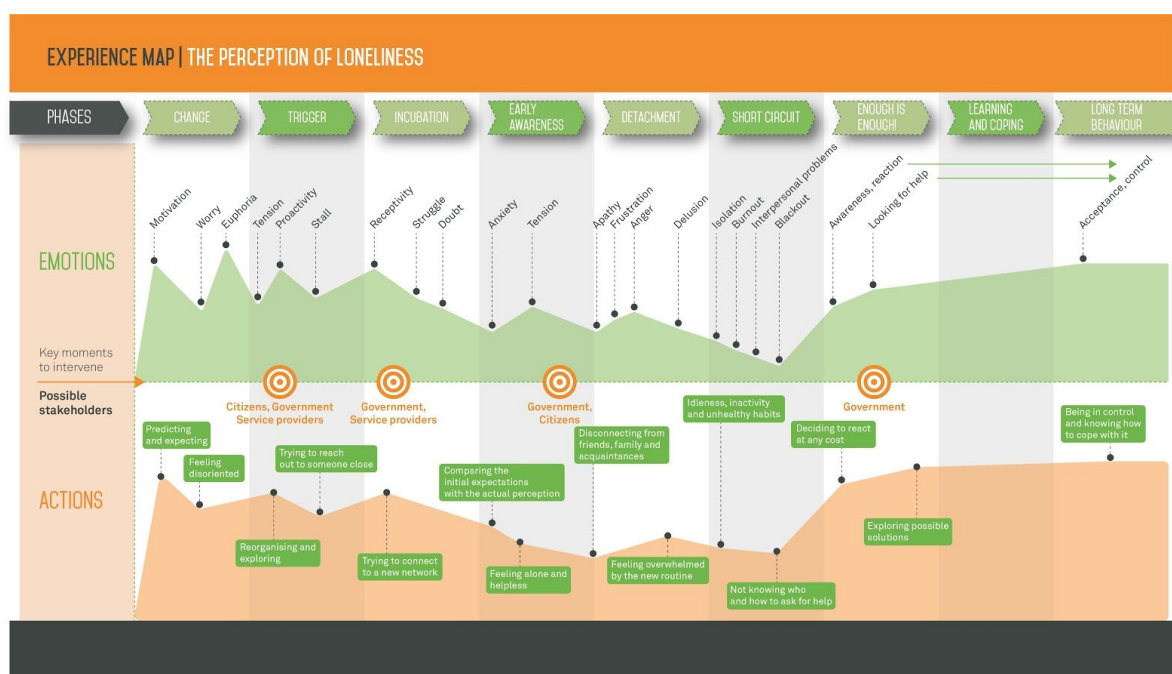


Figure 11: Experience map: The perception of loneliness

For each step of the journey map, the emotion and actions have been mapped and described, in order to allow for an empathetic understanding of the individual and consequently spot on key moments in which would be ideal for institutions to act.

3.2. How to use the experience map in practice

The Loneliness experience map represents a tool to empathise with people who feel or might feel lonely and to recognise their mental status by focusing on relevant emotions and actions that are taken in precise moments.

Throughout the nine phases, that represent the journey of Loneliness, the model is divided into two main parts: emotions and actions. Between the two cited areas, four key

moments to intervene are highlighted and the main (ideal) stakeholders responsible for these kinds of interventions are listed. In the 'Trigger' and 'Incubation' phases citizens, government and service providers can play a primary role in preventing loneliness, by helping individuals to recognise the symptoms and taking actions to overcome them. In the 'Early awareness' phase, it is possible for government and citizens to prevent the detachments of individuals from society by giving support and guidance, and lastly, in the 'Enough is enough!' the government can exploit individual's proactivity and motivation by giving them the tools to escape from their current state.

To conclude, the actions individuated in this experience map and related to the government will be used to build a framework to help public institutions to cope with loneliness (see Chapter 5).

3.3. Validation of the experience map of Loneliness

In order to discuss the interim insights and to validate the experience map of Loneliness, a meeting with a professional counsellor has been organised. I had the opportunity to discuss with Vassia Sarantopoulou, a psychologist who is currently running a research project, called [AntiLoneliness](#). The aim of her research is to create awareness about the loneliness epidemic that is now occurring worldwide and to find suitable solutions to this issue.

We had an interview in December 2018, to have an overview of her major findings and to have some advice on how to operationalise my insights. Here are the major findings:

- She pointed out at the experience map as a good tool to assess loneliness and coordinate actions at the right time.
- Vassia recognised the map as a valid conversation tool.
- She stated that building connections on personal values can be a key element to help people recovering from or mitigating loneliness.
- Loneliness, Vassia said, can be a "discovery of a new part of yourself. The point is to always be able to recover your real self". It is all in the transition.

4. Chapter 4: HPM seminar

During the HPM seminar, I had the unique opportunity of discussing my interim findings with fellow Honours students, teachers and students from the faculty (see Figure 12).



Figure 12: Presentation of the interim results during the HPM seminar

Our cohort decided to organise the seminars by pairing students with a project in similar domains and to carry out lunch workshop with presentations and a plenary activity or discussion after it.

My project was in the “Design for Society” group and the setup for my seminar was presenting my progress and findings and having a final discussion guided by a small template which I distributed to the audience at the end of my presentation (see Figure 13).

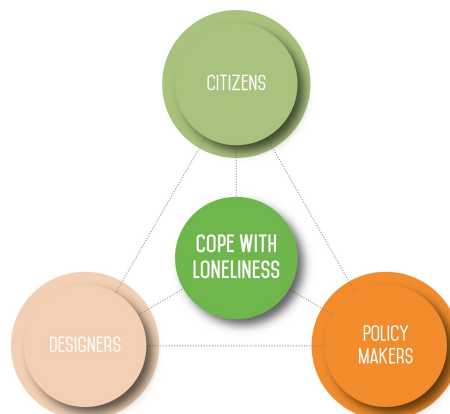


Figure 13: Discussion template used for the final activity of the Seminar

The seminar in my case happened before the last stage of the process, namely, ahead of the creation of the knowledge product.

Therefore, the main goal was to discuss with the designers' community the importance of creating awareness about loneliness and how to break the taboo around it. Plus, to gather insights on how designers, citizens and policy-makers can help in this transition.

To this extent, the focal point of the seminar was the final guided discussion (see Figure 14) about social roles and underlying responsibilities to cope with loneliness.



Figure 14: Plenary discussion

The questions leading the final discussion were:

- Who has the main responsibilities?
- What are the main responsibilities?
- How can we help each other?

The discussion was accompanied by a discussion template (see Figure 13). The template showed the three societal stakeholders involved: Citizens, Policy Makers and Designers. The three groups are connected with the end goal of cope with loneliness.

The results of the discussion showed how Institutions should take the responsibility of coping with loneliness, because of their attractive and reaching power. Moreover, it was stressed that such kind of transition should be the result of a choral effort.

The insights gathered during the previous research phase and the discussion at the end of the seminar informed the creation of the knowledge product, which will be extensively presented in the next chapter.

5. Chapter 5: Knowledge product: Social bonding model and framework

5.1. Introduction

The insights gathered during the previous phases of the project demonstrate that values take a central role in connecting citizens with institutions, they represent basic elements that can be used to build social value. By exploiting themes related to the individual values and connecting the findings with each other, it is possible for institutions to have an overview of the societal values landscape and therefore individuate viable direction to engage with citizens in a natural way. Values are the scaffold of the perception of a given experience, and they can stimulate or restore social engagement, which in its turn is able to reduce psychological stress and elicit resilience.

The designed knowledge product is divided into two main parts: the Social bonding model and framework.

- The Social bonding model shows how institutions should engage with lonely citizens by exploiting the social relevance of values and provides three elements to foster this reaction, in order to transform citizens into value shareholders (see paragraph 5.2).
- The Social bonding framework shows relevant Mindsets, Actions and Capability to enable public institutions to address loneliness (see paragraph 5.3).

Before presenting the Social bonding model and framework it is important to introduce and define the social engagement framework proposed by Peterson (2018), which explains why values take a central role in coping with loneliness.

5.1.1. Contextualising and validating the social engagement framework

According to the Social Identity Theory (SIT), individuals tend to connect with groups having analogous attributes and values (Tajfel & Turner, 1982), and subsequently develop their social identities building on the values and qualities shared in the group in which they decide to affiliate (Turner, 1982). Social belonging and motivation triggered by loneliness self-appraisal stimulate the creation of emotional bonds characterised by similar values, attitudes and beliefs (Carter, 2013). Subsequently, this new or recovered relationship activate a shift in individuals' perception of social and emotional detachment and provide alleviation from loneliness.

Peterson hypothesised that saliency of social identity may be the fundamental factor to reduce subjective experiences of loneliness (Peterson, 2018). The model (see Figure 15) shows the interdependency between social identification and perception of loneliness.

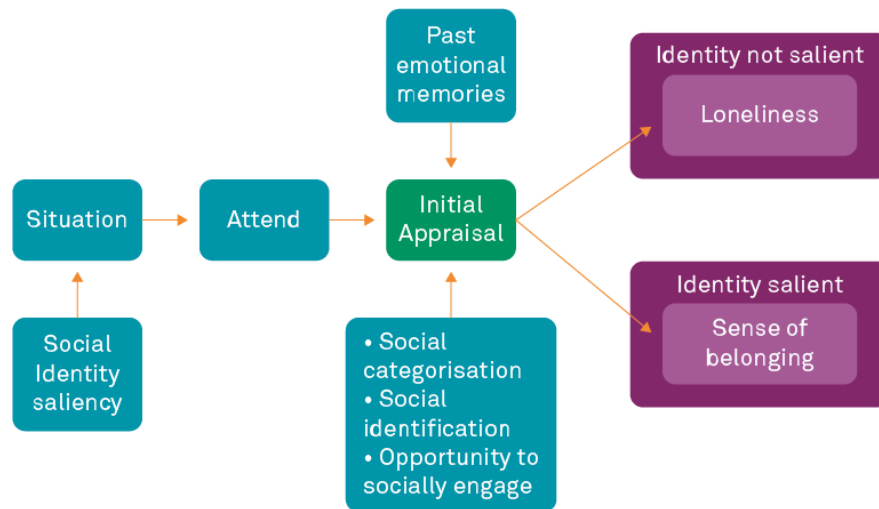


Figure 15: Model of loneliness reduction through social identification. (Adapted from Peterson, 2018)

The model proposed by Peterson (2018) explores how saliency of social identity can mitigate and eventually reduce the subjective experiences of loneliness. The principal hypothesis is that social identification is a means of overcoming loneliness.

Since emotions are results of a cognitive appraisal of individuals' present situation, and social identity saliency regulate the evaluation of that given circumstance, this assessment is at the basis of personal recognition of loneliness. Important factors influencing this process are past emotional memories, social categorisation and the opportunity to engage. Altogether, these elements work as a cognitive checklist, enabling the person to assess whether the situation could be linked to potentially harmful consequences (past emotional memories) and to categorise the saliency of his/her social identity (social categorisation, social identification). This evaluation leads to either belonging or feeling lonely in the present situation.

Building on this process, it is possible to draw a scenario of what might happen in society if personal values are shared and become social values. As an evaluative situation, we can take a person being unable to share personal values. The given individual might appraise this situation as poor in social connections and identity, and consequently, feel lonely and strive to reconnect. Once the reconnection has happened, the new situation makes his/her (societal) identity salient again, because of shared relationships (categorisation) and similarity in the way of connecting with other people (emotional belonging). Hence, the person perceives a dramatic increase in belonging and mitigate or annul the feeling of loneliness. The need to belong plays here a crucial role, since it tips the scale between loneliness and social landscape (Cacioppo & Patrick, 2008; Fiske, 2013; Lieberman, 2013).

5.2. Social bonding model

The Social bonding model takes inspiration from the covalent bonding, a chemical bond that involves the sharing of electron pairs between atoms. In this way, they balance attractive and repulsive forces between them. Likewise, the atoms are associated with people and institutions and the shared electrons with the values. This metaphor reflects the ultimate scope of the model, namely creating strong bonds that are able to transform the elements and at the same time the entire ecosystem, generating social transition.

Therefore, the model's ultimate aim is to envision a strategy to facilitate the sharing of values between citizens and institutions, in order to nurture reciprocal reliability and empathy between them.

The 'Reaction' that activates this process should be fueled by three main elements: 'Enablement', 'Mutual reliability' and 'Empathy'. These three components transform individual values into shared social values and citizens into value shareholders (see Figure 16).

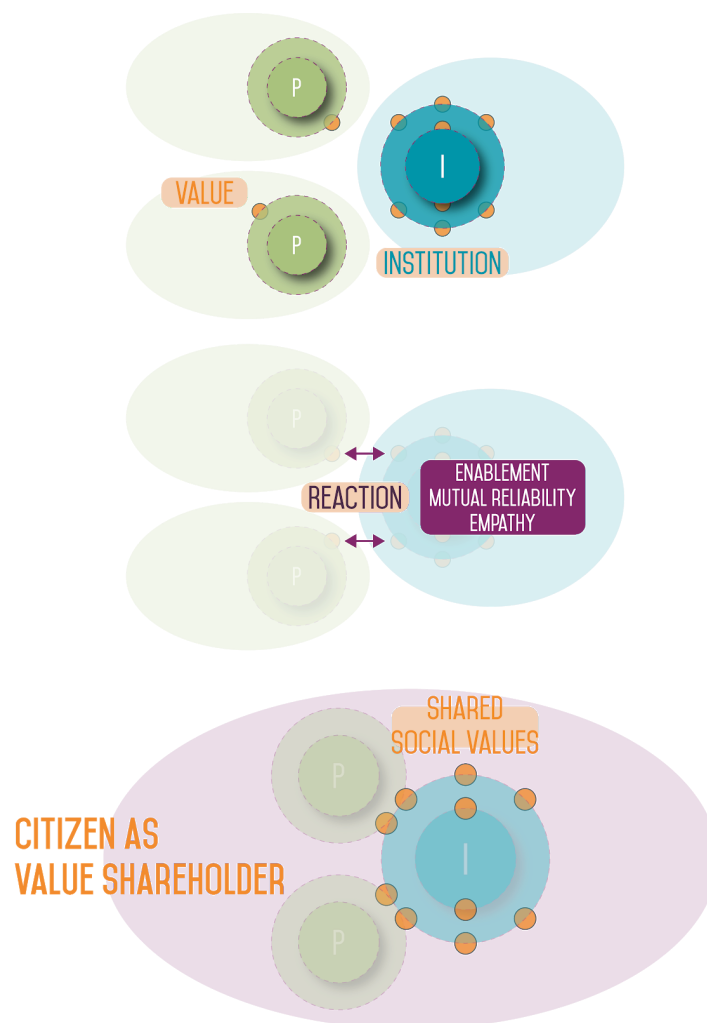


Figure 16: Social bonding model

5.3. Social bonding framework

The Social bonding framework is mainly addressed to policymakers and public managers and its main function is to map and assess the Mindsets needed to design for loneliness, the Actions to be included in such a design, and the Capabilities to be finetuned or developed by enablers while facilitating this transition (see Figure 17).

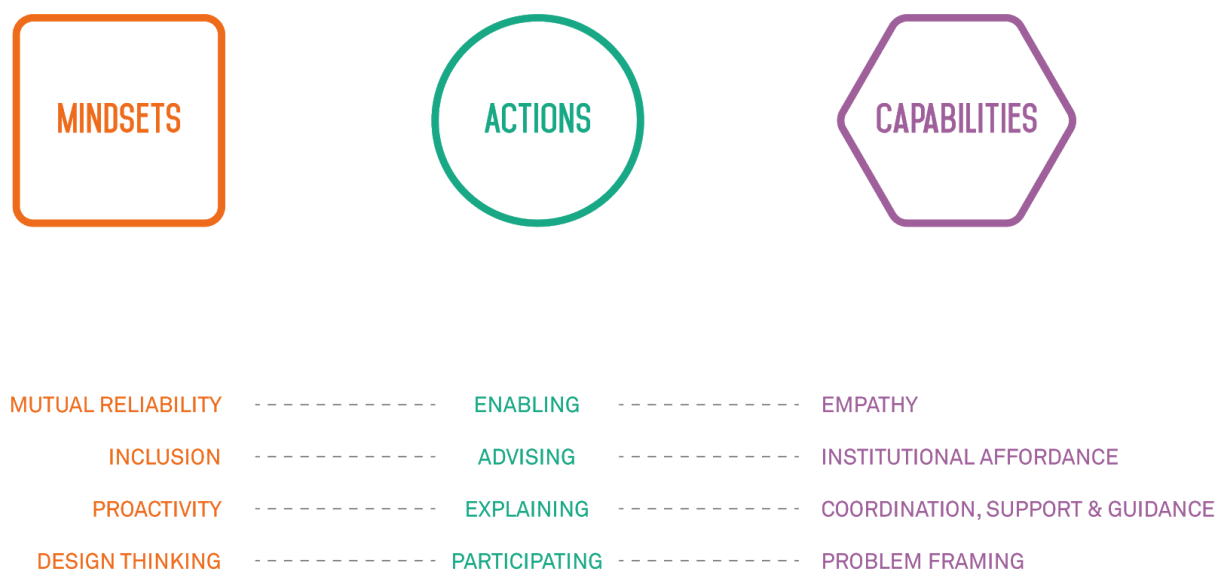


Figure 17: The social bonding framework

It is important here to consider the three main aspects: 'Mindsets', 'Actions' and 'Capabilities'. A coherent and thorough interaction and coexistence of these aspects can lead to iteratively challenge the problem while implementing the solutions. This aspect has been considered particularly important, because it allows practitioners to reflect on every aspect of the problem but also to renew the model and the framework themselves, by adding relevant changes extracted by successive research and implementation.

Mindsets, Actions and Capabilities can also be linked to each other in parallel. For instance, the 'Mutual reliability' mindset entails the capability of being empathetic and concerns actions of enablement towards people who feel (or might potentially feel) lonely.

6. Chapter 6: Conclusion

6.1. Institutional affordance

The objective of the research was to understand and create awareness of loneliness, and consequently operationalise the findings in order to make them accessible and affordable for society and institution in the medium-short term. An ambitious, yet reachable goal for the long term is to make the findings and the tools to solve the issue available and open for the public, in order to allow self-analysis and direct solutions. To this extent, it is important to better explain the “Institutional affordance” capability (see Figure 17).

Institutional affordance

The concept of affordance in design (Norman, 2004) refers to an intrinsic quality of suggesting its way of use. This quality of being intrinsic is designed on purpose in order to encourage users to operate in the correct way without big cognitive efforts. In other words, it is a way of making something self-explanatory. This quality can be adapted to the institutional field. Institutions, especially if public or social ones, need to be available for citizens. This is well-known and most of them are already performing transformation processes to obtain an almost total reach. However, this is not enough if people need support and guidance but do not know how to find the right channel to communicate at the right time. Being affordable, in this case, represents for institutions a quality to strive for when interacting with a complex system like today's society.

6.2. Relevance & further development

Social connections represent the primary factor to cope with loneliness and broadly a key element of personal and societal well-being. They are able to generate equilibrium and stability through sharing and discussing, and not only to decrease the loneliness spread but also to improve psychological and physical wellbeing. Relationships help in providing fresh points of view, and in making sense of the multifacetedness of nowadays' world by creating settings to better understand it. Therefore, it is fundamental to frame policies aimed at addressing loneliness as a choral effort, not merely an individual or institutional one.

As the main goal of this knowledge product was to transfer the knowledge gathered during the research to public institutions, the selected format was a seminar. During the seminar, the main insights of the research have been shared with policymakers and public managers from the Delft Municipality.

After the presentation, the main themes have been discussed with policymakers and public managers from Delft Municipality, and a graduation assignment has been formulated to carry on the research generated from this HPM project. Hence, the next step will be the second phase of the Transition design process, namely, 'Design

Interventions'. In this phase, actions will be taken to address loneliness in an urban context (Delft), and the research will be taken forward by designing and implementing solutions.

6.2.1. Recommendations

- The act of understanding and sharing values is context-dependent. Therefore, it is always needed to take individuals as a central focus of this process, in order not to lose meaning and to design the right intervention at the right moment.
- The loneliness experience map can be used as a tool to assess loneliness and coordinate actions. Plus, it can be a valid conversation tool to understand individuals' perception of loneliness.
- The Social bonding model can be used to map relevant values and to inform the implementation of a design intervention.
- The Social bonding framework can (and should) be modified if relevant additional themes are found or required by citizens.

6.3. Reflection on the HPM project

Participating in the Honours Programme represented for me a unique opportunity not only to explore a topic that I felt actual and urgent in contemporary society, and to propose solutions for it, but also to challenge my beliefs as a designer and to put my expertise at work in an open-ended domain.

Specifically, I had the chance to dive deep into research and to understand how it is possible to create an impact with the tools and methodologies I learned so far. This is one of the most valuable takeaways I had. Moreover, I got to understand where my passions lie and how it is possible to make a research personal and in its turn how to bring personal interests into the research field.

During the project development, I had the chance to reframe the project multiple times within the scope. I consider this aspect very precious, and it taught me a lot about my profession and helped me finetuning my research skills and approach. The research started indeed with the aim of designing co-design interventions to cope with loneliness, but after the exploratory phase in the first part of the process, I discovered that loneliness was mainly studied and approached from a medical and psychological point of view. There was a lack of guidelines on how to approach it from a societal perspective because it is often considered a taboo.

Therefore, I decided to set a common ground and create a fertile field for developing solutions from the designers' point of view. This evolution in thought allowed me to learn how to frame and reframe problems more than every other course I attended so far in a natural and spontaneous way.

However, this process has not been flawless. There are several points for improvement, both from a personal and from the HPM community perspective. It was hard to keep the motivation high the process running, especially in busy periods with the Masters' courses.

This is an aspect I knew upfront but experiencing it challenged my perspectives and pushed me to improve several skills I lacked in. Moreover, it was difficult to keep the HPM community tied and to keep each other informed on our different signs of progress. For the first half of the project, we mostly worked separately, but eventually, we came together in the period preceding the seminars. From then on, a pleasant collaborative climate has been restored, and it was precious to work together and challenge each other.

To conclude, I can say that although the difficulties, it was one of the best and most relevant experiences I had in my career because it helped me understand myself in relation to a community of peers and to fuel my passion for always learning something new.

6.3.1. Achieved learning goals

L01: Improved communication and presenting skills.

L02: Improved pitching skills.

L03: Improved academic skills, namely how to interact with and act within the academic environment.

L04: Learning how to organise, set-up and carry out academic seminars.

L05: Interacting with stakeholders from different domains (in my case psychology and policymaking).

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