

Politecnico di Milano
School of Design
Master Degree in Product-Service System Design

**Service design for elderlies'
resilience to loneliness:
practical interventions in tackling
opportunities post-pandemic**

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a.a: 2021/2022



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Politong Double Degree program

Politecnico di Milano

School of Design

Master Degree in Product-Service System Design

Tongji University

College of Design and Innovation

Master of Fine Arts in Product-Service System Design

**“Now I see the
mystery of your
loneliness”**

William Shakespeare, All's Well That Ends Well

Abstract

English

Loneliness is a worldwide public health problem that significantly impacts the world's oldest citizens. Even though it is a well-known phenomenon, the percentage of seniors feeling lonely worldwide is still substantial, stressing how loneliness is still an up-to-date issue. Difficulties in properly targeting loneliness are often caused by the misconception of loneliness itself, highlighting the mismatch between the academic insights, the offerings and the actual needs of seniors.

As the pandemic hit, the incidence of various risk factors augmented, including ageism and depression. Therefore, the epidemic opened opportunities for intervention in the public sector, tackled in this study with the following research question: How can the public administrations be supported in developing programs targeting loneliness in seniors for the post-pandemic society?

Through a comprehensive literature review, case studies analysis and qualitative fieldwork, the thesis aims to understand how a relational service design approach can be used to develop loneliness interventions targeting seniors who usually fall from the target audience addressed in current services.

The project, called SegnorCinema, is a service that promotes the connection of seniors with their surrounding community while empowering the individual in taking an active role in the community of Pordenone. A befriending service focused on discussing movies promotes inclusive socialization for people with different social needs. At the same time, a committee oversees the organization of exhibitions during relevant cultural events of Pordenone, aiming to showcase seniors' contributions to a broader audience. Group activities and educational laboratories exploring cinema are offered to foster a network of movie enthusiasts and encourage seniors to engage in activities outside home.

The collaboration with an association of Pordenone allowed to bridge the needs of local seniors with cultural relevance for the municipality. Furthermore, the relational service design method applied ensured to give ownership of the service to its users while fostering interpersonal relationships, guaranteeing its sustainability.

Keywords

Service design, relational design, loneliness, seniors, COVID-19, participatory approach

Italian

A livello mondiale, la solitudine è un problema di salute pubblica che colpisce in modo significativo i cittadini più anziani. Nonostante sia un fenomeno ben conosciuto, la percentuale di anziani soli nel mondo è ancora consistente, sottolineando come la solitudine sia ancora considerata un tema di attualità. Le difficoltà nell'identificare interventi efficaci sono causate dalla mancata comprensione del fenomeno stesso, evidenziando la discrepanza tra i risultati della ricerca accademica, l'offerta proposta al pubblico e le effettive esigenze degli anziani. Con la pandemia, l'incidenza di fattori di rischio è aumentata: spiccano l'ageismo e la depressione. Di conseguenza, sono state definite nuove opportunità di intervento, elaborate con la seguente domanda di ricerca: "Come possono le pubbliche amministrazioni essere supportate nello sviluppo di programmi mirati alla solitudine degli anziani nella società post-pandemia?".

Attraverso una revisione della letteratura, l'analisi di casi studio e il fieldwork, la tesi mira a comprendere come il relational service design possa essere utilizzato per sviluppare interventi rivolti agli anziani più soli. Il progetto, denominato SegnorCinema, promuove la connessione degli anziani con la comunità pordenonese, responsabilizzando l'individuo e sostenendolo nell'assumere un ruolo attivo nel territorio. Un servizio telefonico incentrato sui film promuove una socializzazione inclusiva per persone con diverse esigenze sociali. Allo stesso tempo un comitato organizza esposizioni durante importanti eventi culturali di Pordenone, con l'obiettivo di mostrare il contributo degli anziani ad un pubblico più ampio. Vengono proposte attività di gruppo e laboratori didattici dedicati al cinema, durante i quali si incoraggiano gli anziani a svolgere attività fuori casa.

La partnership con un'associazione di Pordenone ha consentito lo sviluppo di un servizio che collega i bisogni degli anziani con un'offerta che abbia rilevanza culturale per il comune. Inoltre, la metodologia di service design relazionale ha garantito di far percepire un senso di appartenenza agli utenti, favorendo le relazioni interpersonali.

Keywords

Service design, design relazionale, solitudine, anziani, COVID-19, approccio partecipativo

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1. Introduction

1.1. A thesis about the services targeting socialization in high-risk seniors

Since the dawn of time, humans had to depend on cooperation and socialization to survive. This legacy is still essential to human nature, making us inherently social animals.

Socialization has therefore been an integral part of the focus of different sectors of academia, from psychology to medicine, up until service design. Specifically, as the emblem of unsatisfactory social connection, loneliness has been the target of various studies to understand this phenomenon and how to alleviate it. Although the topic has been widely examined, its complexity makes it challenging to design proper interventions, especially ones that can effectively address the target group. Research has helped investigate the effectiveness of solutions targeting loneliness, but it is evident that there is still a gap between the theoretical studies and the delivered interventions (Fakoya, McCorry, and Donnelly 2020). A service design approach could help bridge this gap, as its methodology combines a solid theoretical groundwork and anthropology-inspired research to bring targeted solutions to life.

1.1.1 Loneliness interventions

Although socialization and social networks are essential for daily life, a person might find themselves unsatisfied with the amount or quality of their social life compared to their expectations. This subjective phenomenon is the definition of how loneliness appears in people (Russell, Peplau, and Cutrona 1980). Its subjectivity is what makes addressing this phenomenon particularly complex. Not only are there copious risk factors for loneliness, but there has to be a triggering event that causes such frustration, as seen in the loneliness model theorized by Perlman and Peplau (Perlman and Peplau 1984) explained in detail in chapters 2.1.3 and 2.1.4.3

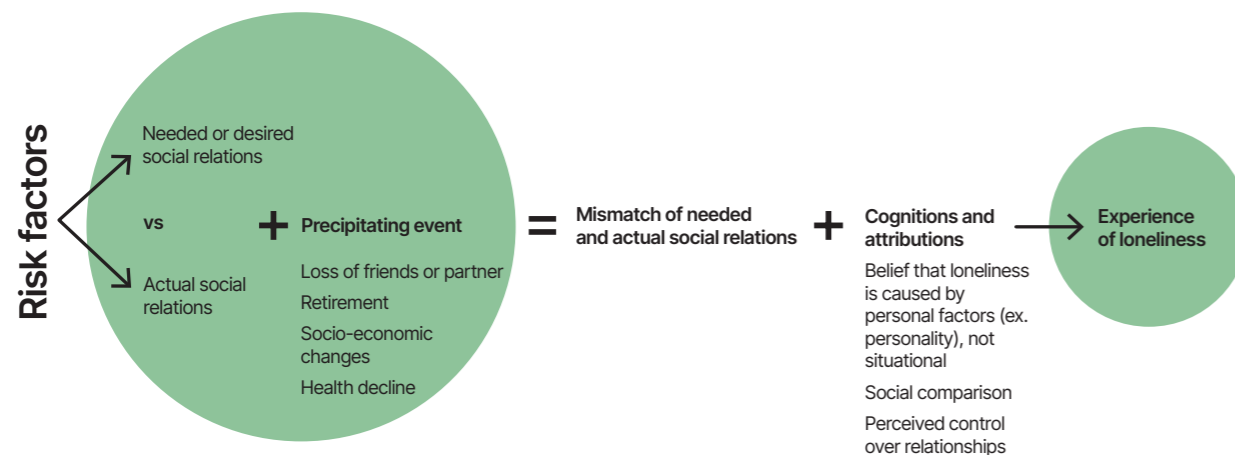


Figure 1.1 Loneliness activation model. Re-elaborated model from Daniel Perlman and Letitia Anne Peplau, *Loneliness research: a survey of empirical findings* (1984), pg. 22

Personal circumstances, social group, psychological status, life events, and environmental factors (Goodman, Adams, and Swift 2015) are macro-cluster of risk factors that can lead to loneliness. Therefore, services tendentially focus on one or more of these parameters when targeting such phenomenon.

There are different types of interventions according to their intended goal (Akhter-Khan and Au 2020):

- **Macro-level interventions:** focus on environmental and personal factors involved with the senior’s general welfare – such as physical health, living conditions or socioeconomic status.
- **Meso-level interventions:** prioritize socialization opportunities and teaching social skills.
- **Micro-level interventions:** focus on the quality of social encounters by concentrating on maladaptive cognition and emotional loneliness.

These goals can be delivered to the citizens by using different means. According to the budget available, public services can offer personal support (ex. counselling or access to therapy), social events, educational activities, physical exercise, phone call services, companionship robots, and AI devices (Dickens et al. 2011). When analyzing the services offered in Western Europe and Eastern Asia, it was found that the majority of interventions existing fall in the macro and meso categories, primarily delivered through phone calls, the employment of volunteers and dedicated devices.

It is evident that services cannot expect to target all risk factors and ease the precipitating events causing loneliness; however, both desk research and fieldwork have highlighted that some intervention opportunities are still untackled. Current offerings of public services for lonely seniors mainly target general welfare and offer socialization opportunities. Essentially, although targeting certain risk factors, this type of offering often fails to address the loneliest, the minorities and the frailer strands of society. (Fakoya, McCorry, and Donnelly 2020; Saito, Kai, and Takizawa 2012).

1.1.2. Seniors’ social life

In the last decade, the ageing population has increased worldwide, even in countries traditionally known to have averagely younger citizens. This phenomenon especially concerns countries like Italy, where almost one-quarter of the population is composed of over-65-year-olds, and China, as 12% of its population is in this age group regardless of being the most populous country in the world (The World Bank n.d.). As predictions for 2050 expect that more than 30% of Europeans and Chinese will be over 60 (World Health Organization 2015b), academic and political disciplines have to dedicate significant attention to the wellbeing of older adults now and in the future. For the sake of the thesis, we will focus on the social life of senior citizens and aspects that can cause loneliness.

Socialization in seniors is strictly connected to their health status and daily habits. The presence of a spouse and a solid connection to family members are closely related to a low level of loneliness (Savikko et al. 2005; Goodman, Adams, and Swift 2015). Significant differences can be seen in the household dimension between China and Italy (ISTAT - Italian National Institute of Statistics 2021)

(Lei et al. 2015), but it is evident that a high percentage of seniors live alone, which reduces the opportunities for daily socialization. Thanks to community participation, however, older people who live alone can have a greater quality of life and maintain appropriate levels of social connection (Burnette et al. 2020). Regardless, the seniors' capability to keep meaningful relationships is dependent on the presence of mobility impairments and their capability to form new relationships (World Health Organization 2015b). Both parameters are highly dependent on ageing; in fact, it is visible a steady increase of seniors declaring they do not have friends or do not meet them (ISTAT - Italian National Institute of Statistics 2019).

This phenomenon is noticeable worldwide, in Italy and China the incidence of social isolation in seniors is notably high in the old elderly, a group composed of over 75-year-old individuals (F. Wu and Sheng 2020). With the pandemic, the aforementioned group was most impacted, especially as most community services were suspended. Furthermore, it was visible an increase in the risk factors' severity (B. Wu 2020) for the frailer seniors.

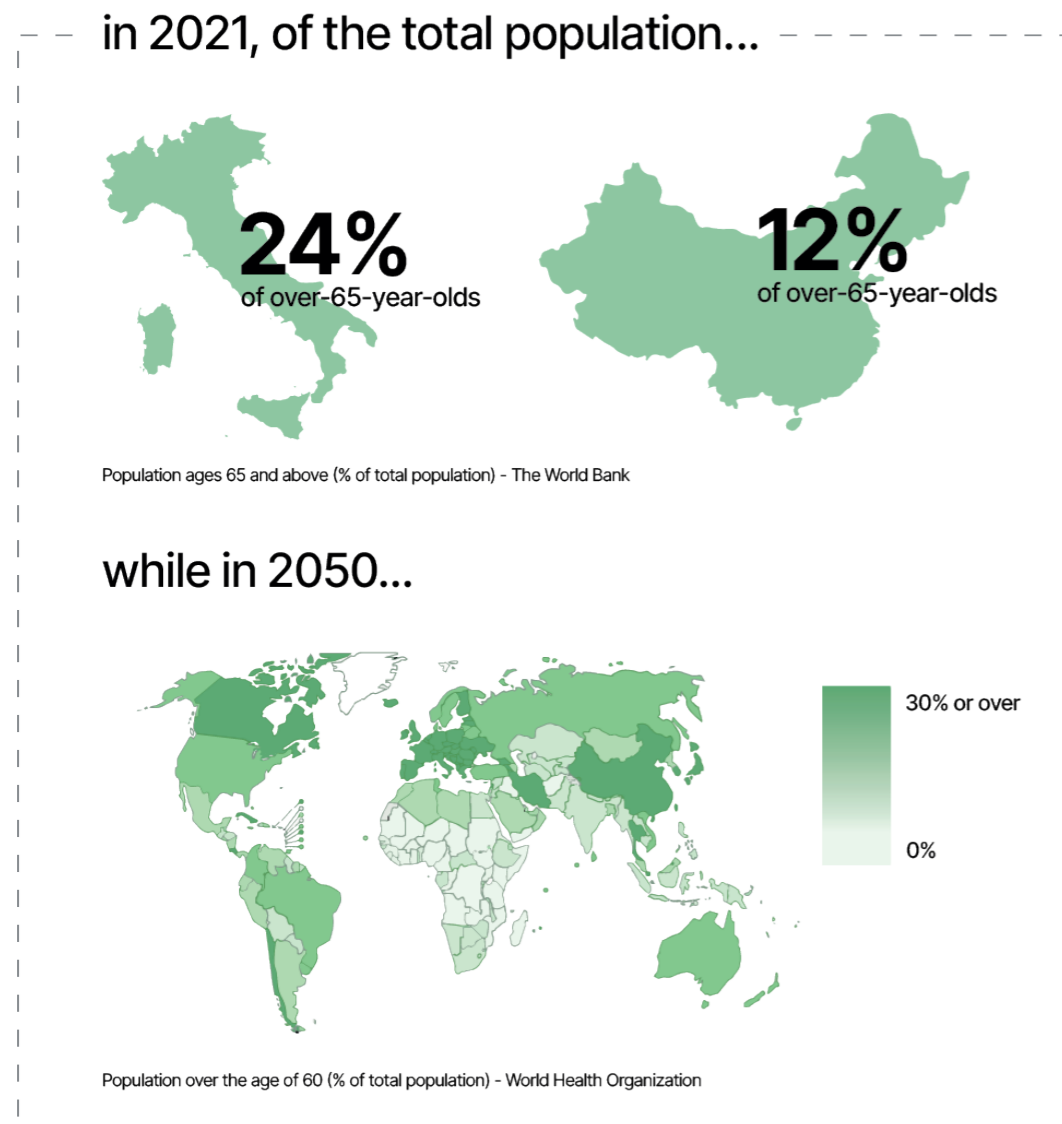


Figure 1.2 Infographic regarding the total percentage of seniors per country. Source: the author.

1.1.3. Service design for socialization

As a core part of the human being, socialization is both a need and a characteristic that must be considered when designing services. Since service design started being used in healthcare in the 1990s (van der Bijl-Brouwer 2022), a relational-centred approach to design has gained traction, particularly in welfare, where such a method is needed to ensure the targetization of the interventions. Supported by influential experts such as H. Cottam, relational welfare services have become more and more relevant as they highlight the impact of interpersonal relationships in the service offering (Cottam 2018).

While the terminology used to describe such approach changes according to the scholar, relational service design generally fuses the service offering to the underlying social network (Carla Cipolla 2008; Cipolla and Manzini 2009), showcasing the ability of a service to embed both. The collaboration among users allows the service to give ownership of the offering to its users, making the social network generated essential to the service delivery. Relationships by nature cannot be designed, so designers become pure facilitators of these connections by fostering socialization through the design solution (Cipolla and Manzini 2009).

1.1.4. The post-pandemic society

The COVID-19 pandemic has disrupted the worldwide social, economic and political realm, shifting how society is perceived. Different issues were exposed during this period of crisis, including the role of the workforce, existing inequalities, and the digital divide among citizens (Laranja and Pinto 2022).

The pandemic was the motor that forced many sectors to switch to digital platforms; however, people with low availability to internet access and lacking digital literacy found themselves unable to access information and services properly (Roese 2021). Even after two years of the pandemic, almost 30% of citizens worldwide still have no internet access (International Telecommunication Union (ITU) 2022).

The epidemic impacted both physical and mental health. Firstly, the more the pandemic continues, the more researchers discover the impact of "long COVID". The latter indicates many symptoms evident after becoming negative to the virus and impairs the possibility of performing basic daily tasks. (World Health Organization 2021). Moreover, the diagnosis of psychological conditions such as anxiety and depression has increased worldwide (World Health Organization 2022), boosting the sensibility of this topic.

Inequalities, digital divide and COVID itself severely impacted seniors. The lack of access to digital platforms and the widespread ageism led to new causes of social exclusion (Seifert, Hofer, and Rössel 2018). In addition, ageism emphasized the stigma of being in the oldest strands of society, making them more prone to avoid taking preventive measures for COVID as they perceived themselves as frail and vulnerable (Morrow-Howell, Galucia, and Swinford 2020).

Previously, it was explained how community engagement influenced seniors' socialization. With the shutdown of all services for sociality, it was even more evident the importance of community services and the strengthening of relationships between the various local actors (The British Academy 2021). These new insights lead to identifying new opportunities for novel forms of intervention, especially for the most vulnerable seniors.

1.2. Research question

The previous summary of the research phases has led to the definition of a working paradox and the following research question. As learned by the analysis of existing interventions, services adopt a comprehensive approach in their offerings which tackles only certain aspects of loneliness. While ensuring to address a bigger target audience, the downside of such an approach is that it does not help particularly high-risk categories, including severely lonely people, seniors with mobility and hearing issues, or people suffering from embarrassment and social stigma.

Nonetheless, high-risk seniors would be the ones with higher benefits in engaging in social networks, as loneliness is related to worsening health conditions and higher mortality incidence (see chapter 2.1 "The social life of seniors"). Moreover, the current pandemic has also exacerbated the risk factors for loneliness for both seniors previously at risk of loneliness and seniors that did not feel lonely before, making the development of new targeted services even more impactful.

This paradox has led to the following research question and sub-question:

How can public administrations be supported in developing programs targeting loneliness in seniors for the post-pandemic society?

How could interventions be designed to target tailored offerings for high-risk lonely seniors?

1.3. Purpose and significance of the study

The present thesis aims to understand how to engage and design loneliness interventions for seniors who usually fall from the target audience addressed in current services by employing a service design approach focused on relationality.

To achieve such goals, the research has been divided into the following objectives:

1. *Examine the loneliness phenomenon among seniors, understanding the inter-correlation between social isolation, loneliness, and interventions to target them.*
2. *Evaluate case studies aimed at tackling loneliness among over 65 y.o. seniors across Asian and European urban areas and analyze the different approaches used.*
3. *Understand the Italian elderlies' general support system and identify each actor's necessities, ambitions, and opportunities.*
4. *Identify effective mechanisms to cope with social isolation and loneliness, reflecting on the influence social stigma and low self-esteem have in this matter.*

The relevance of the thesis topic is posed in the different approach to designing services for loneliness. The methodology to develop the thesis project promoted a holistic yet targeted intervention to loneliness. The opportunities of the post-pandemic society were combined with an extensive understanding of the phenomenon and the limitations perceived by the most vulnerable seniors. SegnorCinema, the service here presented, purposely took into consideration often overlooked target groups to propose a solution that could be inclusive and sustainable for a complex reality as public welfare service.

Furthermore, the project presented is an example of applying a service design approach based on relationality in interventions targeting loneliness. In the design phases, the author worked as a facilitator among stakeholders to develop an intervention where the participant gained active control of the offering, blurring the line between users and service providers. The method ensured giving ownership of the service to its users (the seniors) while fostering interpersonal relationships, additionally making the project sustainable in scenarios where low budgets and resources are available, as in the case of public interventions for loneliness in Italy.

1.4. Research approach and methodology

The research on loneliness in seniors for the post-pandemic society tackles a series of elements that pose a great complexity, considering both their influencing factors and their related consequences. Although, while writing this thesis, it is impossible to predict the long-term effect of the pandemic, different statements correlated to such a topic have been assumed using empirical data already published. Nonetheless, much research on loneliness allows tackling opportunities arised during such time. Therefore, the thesis will use a constructivist approach to structurize its process.

The constructivist approach (Thompson 2019) aims to understand the subjective nature of reality through collaboration and the understanding of the study's subject. This methodology uses proven theories to validate the interpretation of data gathered during the research. The data used are collected using qualitative

methods, including interviews and observations. Constructivism aims to highlight the participants' contribution and use their experience to explain the phenomenon analyzed in a defined context, avoiding generalization. This approach is necessary to identify the specific risk factors influencing loneliness that could be overlooked by current interventions, especially in Pordenone, Italy. Furthermore, the different stakeholders involved in the service delivery bring a different lens of interpretation of the data and distinct needs and aspirations.

1.4.1. Research approach

Preliminary research on the loneliness phenomenon and its implications in the seniors' lifestyle has been investigated through a literature review. Desk research was used to identify the general definitions provided by scholars and the perception of the post-pandemic society among experts. Mind maps and different levels of synthesis walls were used to track the insights gathered and the questions generated by said information. The questions were used to develop secondary objectives for the case study and fieldwork phase.

Due to the complexity of loneliness, it was essential to investigate how interventions are delivered both from a theoretical and practical standpoint. A series of European and Asian-based case studies were collected through desk research to analyze how the offerings were structured and the most common intervention typologies. In addition, a detailed study of a selection of Italian case studies was carried out to comprehend the interaction among stakeholders, the targetization of seniors and the sustainability of the services throughout time. This last step was accomplished through interviews with the service coordinators. The case studies analysis allowed to understand the general needs of the stakeholders in the Italian context.

A proper qualitative study of the research was used to understand the needs and aspirations of associations, the municipality and the seniors of Pordenone. An association was interviewed to have a systemic view of the services offered locally to seniors. In contrast, an interview with a municipality representative was conducted to comprehend the municipal administration's objectives regarding investments in new services. Understanding seniors' socialization habits and daily life was essential to identify intervention opportunities. Due to the limitations caused by the pandemic, a series of cultural probes were designed to have individual discussions between the author and each senior involved.

All the insights gathered in the previous phases were re-elaborated using a synthesis wall and clustering them on a board. Personas and user stories were used to summarize the needs of the seniors and volunteers. A design scenario and a metaphor for the future intervention were used to identify the direction to take for the subsequent phases. Afterwards, a new research question was identified to start the concept generation. With the association involved in the fieldwork phase, a collaboration was established to validate the project in different phases of the concept development. A first iteration with the said association was carried out in the first steps of the development, with the presentation of 3 possible concepts. The insights obtained allowed the selection of one concept, which was then developed using service design tools, including a customer journey map, ecosystem map and stakeholders map. Once the project was fully developed, the association validated its feasibility and main touchpoints in a meeting held in November 2022.

Using a desktop walkthrough and touchpoint prototypes allowed an overview of the whole journey from both the senior and the volunteer perspective.

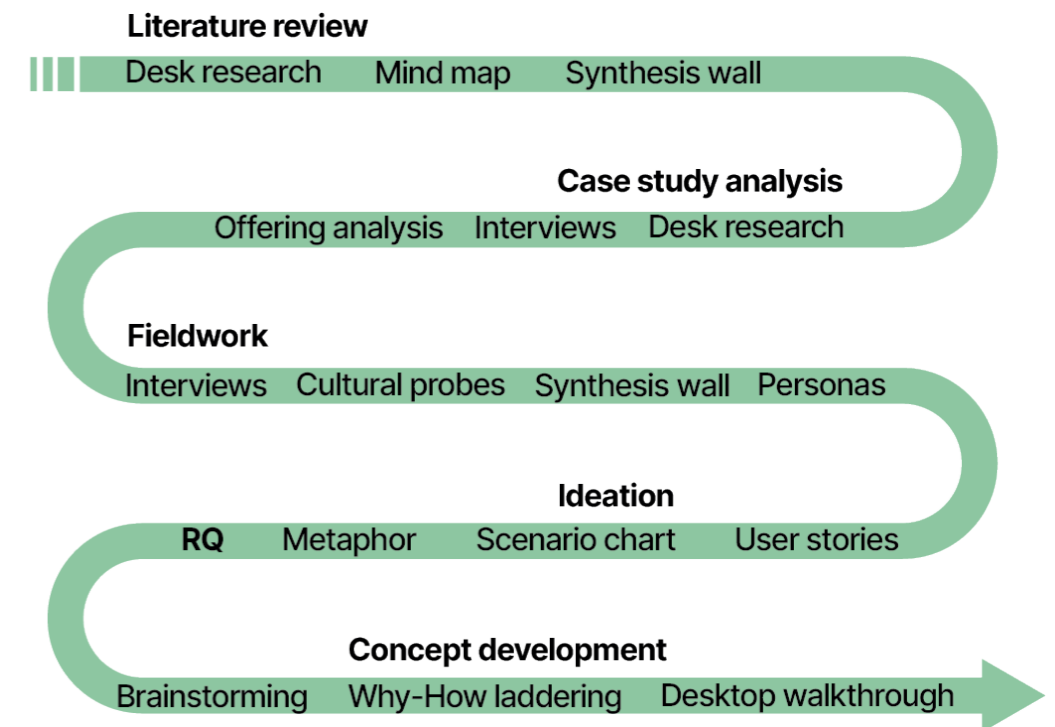


Figure 1.3 Research methods. Source: the author.

1.4.2. Main methods

Desk research

Desk research will be conducted for the preliminary and explorative phases of the research to analyze the current literature regarding loneliness, the phenomenon in over-65-year-old seniors and the impact of COVID. At first, a general literature review was conducted to investigate and set the current information available through papers, magazines, and online databases, selecting them by using keywords such as "loneliness", "elderly", "social isolation", "relationships", and "interventions".

To explore the insights coming from the post-COVID scenario, a similar analysis has been conducted using mainly magazines and papers as source material. Furthermore, research regarding the characteristics of seniors in Italy and China has been conducted to have a deeper understanding of the target. As for the first case, papers, magazines, and reports have been consulted. In addition, primary sources such as national statistic archives have been used as quantitative data about the senior population in both territories.

The same methodology has been used to select the case studies and deepen the knowledge about details of the concept developed, for example, designing empowerment in seniors or understanding different psychological factors involved in the loneliness stigma.

Synthesis Wall

The synthesis wall was used as a method to track and structure the research finding. The method consists in organizing relevant research notes on single post-it notes on a board to detect clusters, significant themes, and crucial discoveries that might influence and inspire the design process. (Service Design Tools n.d.). A macro board was prepared to track the insights from each step of the research (literature review, case studies, fieldwork) and the questions that triggered specific research directions between each phase. Then, starting the concept generation, all the insights in the board were reorganised into themed clusters to identify specific opportunities to include in the project.

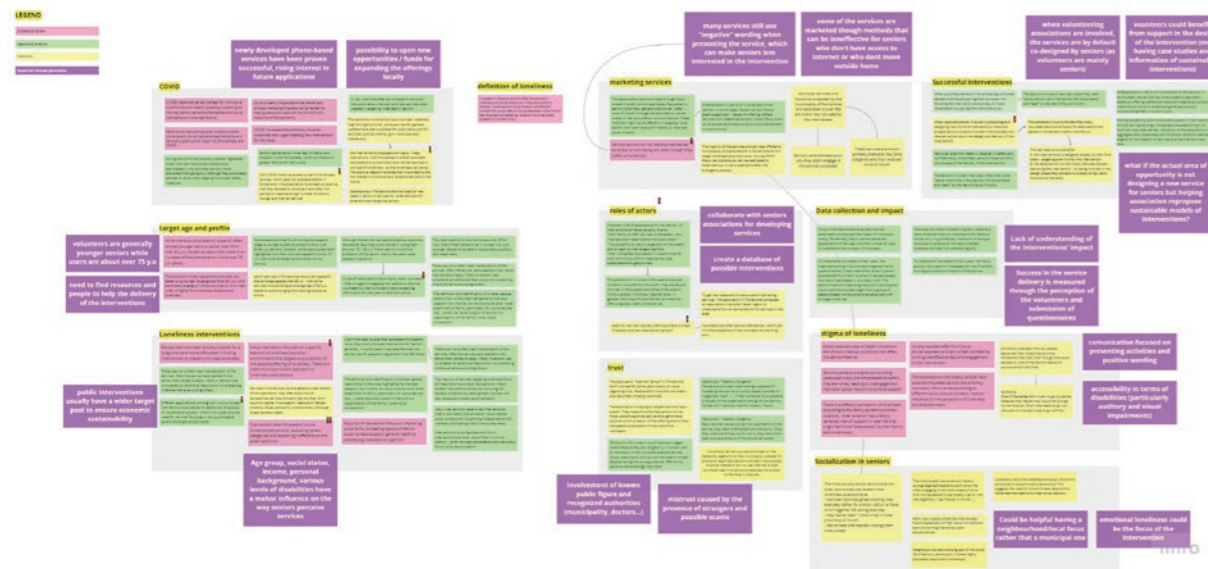


Figure 1.4 Example of a synthesis map used during the data analysis. Source: the author.

Case study interviews

Coordinators of five case studies located in Italy have been selected to conduct a series of interviews to collect additional insights into Italy's current scenario for loneliness interventions. The interviews were held online using video-calling platforms, such as Zoom. Each session lasted approximately an hour, according to the number of questions prepared. When the coordinators were contacted, they received a list of the questions to ensure transparency.

The interviews were organized in Spring 2021, focusing on the role of stakeholders, segmentation of the offering, funding, engagement of the seniors, and advertisement.

Interviews

Interviews were also carried out with a representative of the association Tempo Scambio and the municipality of Pordenone. Both were held in person in the public office of each interviewee for approximately an hour. This step aimed to understand the objectives of the two stakeholders and the local system of services dedicated to seniors.

Cultural probes

Cultural probes (Gaver, Dunne, and Pacenti 1999) were designed to collect qualitative data about the social circle of seniors and their daily habits. Seniors over the age of 75 who lived in the municipality of Pordenone were selected, reaching a total of 5 participants. As the measures for the containment of the pandemic were frequently changing in November 2021, the cultural probes were designed as a kit to hand to the elder so that they could do it individually from home. However, the measurements allowed us to make in-person meetings and use probes in real life.

The cultural probes handed were divided into four modules.

- The first module was to document general information about the research and let participants give informed consent. The document aimed at ensuring transparency and receiving full consent. The second probe included two activities to comprehend the average day of the participant and their interests in local activities: a collage of images and a short questionnaire.
- A convoy model (Antonucci, Akiyama, and Takahashi 2004) was used to discuss and track the social network of seniors, both in terms of confidentiality and frequency of contacts. Lastly, a questionnaire based on the De Jong Gierveld
- Loneliness Scale was used to investigate the severity of loneliness among the participants (Campaign to End Loneliness UK and Age UK 2015).

Why-How Laddering

Although not explicitly cited in the previous sections, a variation of the Why-How Laddering (Munzert n.d.) was used to focus on the stakeholders' needs and delve into the concept development. Instead of gathering new data with the stakeholders, the tool was used by reviewing the insights gathered and roleplaying the various stakeholders.

Through the "Why's" and "How's", the offering and user journey were explored, clarifying doubts and vulnerabilities of the service as well as connecting them with any relevant data supporting specific design directions.

Desktop Walkthrough

A desktop walkthrough enables to promptly prototype the service journey on a small scale and test it. The most important part of the method is not the map itself but rather the experience of going through the service to receive feedback (Stickdorn et al. n.d.). A desktop walkthrough has been prototyped to validate the project with the stakeholders, focusing on the intervention's feasibility and the structurization of the touchpoints. The tool was developed using a series of post-its on a board, highlighting the steps that needed to be discussed.



2. Literature review

2.1. The social life of seniors: social isolation and loneliness

2.1.1. A rising phenomenon still to discuss

The steady increase in the ageing population worldwide has fostered great attention to loneliness in over 65 years old citizens in both the academic and political fields. The United Nations have forecasted that one in six people worldwide will belong to this age group (16%) by 2050, and the people over 80 will triplicate, becoming globally 426 million (United Nations, Department of Economic and Social Affairs, and Population Division 2019). This perspective sets a great challenge for today's society and governments.

Loneliness and social isolation are worldwide public health problems that significantly impact the world's ageing population. Plenty of academic research has connected loneliness with worsening health conditions and a higher death incidence (Nicholson 2012), equivalent to smoking, inactivity, high blood pressure or obesity. (Holt-Lunstad, Smith, and Layton 2010; Holt-Lunstad 2017; Yanguas, Pinazo-Henandis, and Tarazona-Santabalbina 2018) According to the World Report on Ageing and Health by the WHO the *"estimates of the prevalence of social isolation among community-dwelling older people range from 7 to 17%, depending on the definitions and outcome measures used; approximately 40% of older people report feeling lonely"*. (World Health Organization 2015b)

Looking closer at Asia and Europe, this trend is stable throughout the geographical area. In Europe, on average, 7% of adults feel lonely, which equals 30 million people; this percentage can reach up to 10% of the total adults in countries like Italy, Hungary, France, or Greece. (Lange 2019) However, the percentage of European adults feeling socially isolated is even higher, reaching a total of 18% of the population (around 75 million people).

Meanwhile, in Asia, specifically China, the level of loneliness is averagely higher, reaching 36.6% of seniors, according to a report issued by the China Research Center on Aging in 2020. Collected between 2015 and 2017, the data showcase how half of the interviewees aged 80 or older feel lonely, while only 30.2 percent of those aged 60 to 69 can agree to the same statement (Xinhua 2020). In a recent paper comparing the loneliness levels in China, Latin America and India, Chinese over-65-years-olds reported a drastically lower percentage, equal to 3.8% (Gao et al. 2021).

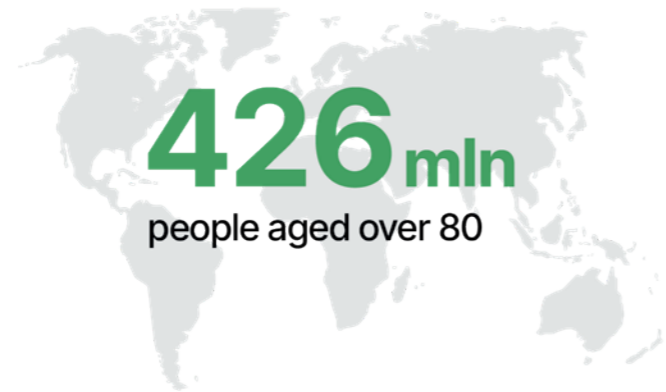
This incongruence between data could be related to the different methodologies used to collect them and the wording used in the questions. As explained later, loneliness can be correlated to feelings of shame and a general perception of a *"stigma"* according to the culture referred to, so the way the topic is presented to the interviewee can change their perception.

Figure 2.1 Infographic of loneliness data in seniors. Source: the author.

by 2050...



of citizens worldwide are over-65-year-olds

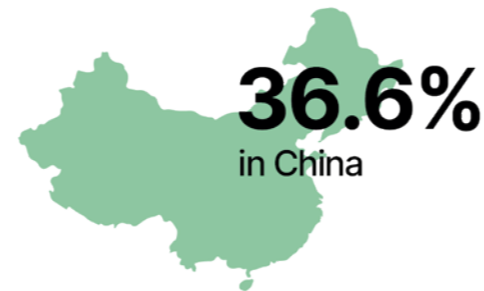


Seniors feeling lonely, per total population

in 2015

40%

of older people report feeling lonely worldwide



in Europe

18%

of the adult population is socially isolated

Loneliness has the same effects on health as...

smoking
inactivity
high blood pressure
obesity

United Nations, Department of Economic and Social Affairs, and Population Division. World Population Prospects 2019: Highlights (2019)

World Health Organization. World Report on Ageing and Health (2015)

Timo Lange, European Union Commission. How Lonely Are Europeans? (2019)

Xinhua. China Focus: Timebanks Help China Tackle Population Aging - China.Org.Cn (2019)

Although the increasingly ageing societies around the world and the issues related to loneliness are well-known phenomena among governments and scholars, the high percentage of people feeling lonely in this age group nowadays shows how loneliness can be considered an up-to-date issue.

As a matter of fact, current studies and interventions often face loneliness and social isolation as similar phenomena, even though the two are separate concepts that do not always require the same type of solutions.

This first issue leads to the design of intervention where loneliness is conceived as a broad problem without addressing the complexity of its risk factors – including the specific needs of different age groups, different health conditions, and socio-economic statuses. This leads to ineffective interventions and could cause a mismatch between the academic insights regarding the effectiveness of solutions and the actual needs of seniors, particularly the less researched groups (Akhter-Khan and Au 2020; Smith and Lim 2020).

2.1.2. Social isolation vs Loneliness

Although scholars agree that social isolation and loneliness are different and co-dependent phenomena, academic papers and the general public often use these terms as synonyms (Masi et al. 2011). The misuse of the terminology, however, does not help appropriately target the concepts and could lead to confusion in terms of intervention design and the objectives of the intervention itself (Fakoya, McCorry, and Donnelly 2020).

Loneliness is a subjective condition when an individual finds an emotional discrepancy between the quantity and quality of social connections needed and the ones experienced (Russell, Peplau, and Cutrona 1980). On the other hand, **social isolation** is considered an objective status where a person “lacks a sense of belonging socially, lacks engagement with others, and has a minimal number of social contacts which are deficient in fulfilling quality relationships” (Nicholson Jr. 2009).

The two definitions pose a significant difference the two concepts have. Loneliness is used to describe an emotional and subjective status, making it the most suitable phenomenon to describe and evaluate the quality of an individual’s relationships. Oppositely, social isolation is used to verify the quantity of a person’s network (Masi et al. 2011). This division precludes that a person could be socially isolated but not suffer from loneliness and vice versa, with people reporting feeling lonely although having an extended social network.

A further classification of loneliness was first presented in the book “*The experience of emotional and social isolation*” by R.C. Weiss in 1973, where he theorized the division between emotional and social loneliness (Weiss 1973). According to Weiss, **social loneliness** happens when there is a lack of social connections among friends, relatives, and acquaintances. Oppositely, **emotional loneliness** is present when a person has a social network but lacks a considerable emotional connection with at least one person (Weiss 1973). Further differentiation comes from the potential length of the condition since the former may be resolved by making new friends. However, the latter can only be relieved by forming an intimate relationship that takes longer to form (Dickens et al. 2011).

Scholars have different views on the influence of this latter classification when discussing the matter, as academic research is conflicted in the efficacy and usefulness of such categorization. Although still widely used in academia, relevant and influential scholars in the field have criticized the division of emotional and social loneliness because "these features have also been found to be highly correlated, and their antecedents and consequences have been found to be sufficiently overlapping that loneliness is generally conceptualized and measured as a unidimensional construct". (Masi et al. 2011)

For this thesis, the author has decided to maintain the distinction between emotional and social loneliness to simplify the differentiation of the insights and design a related solution.

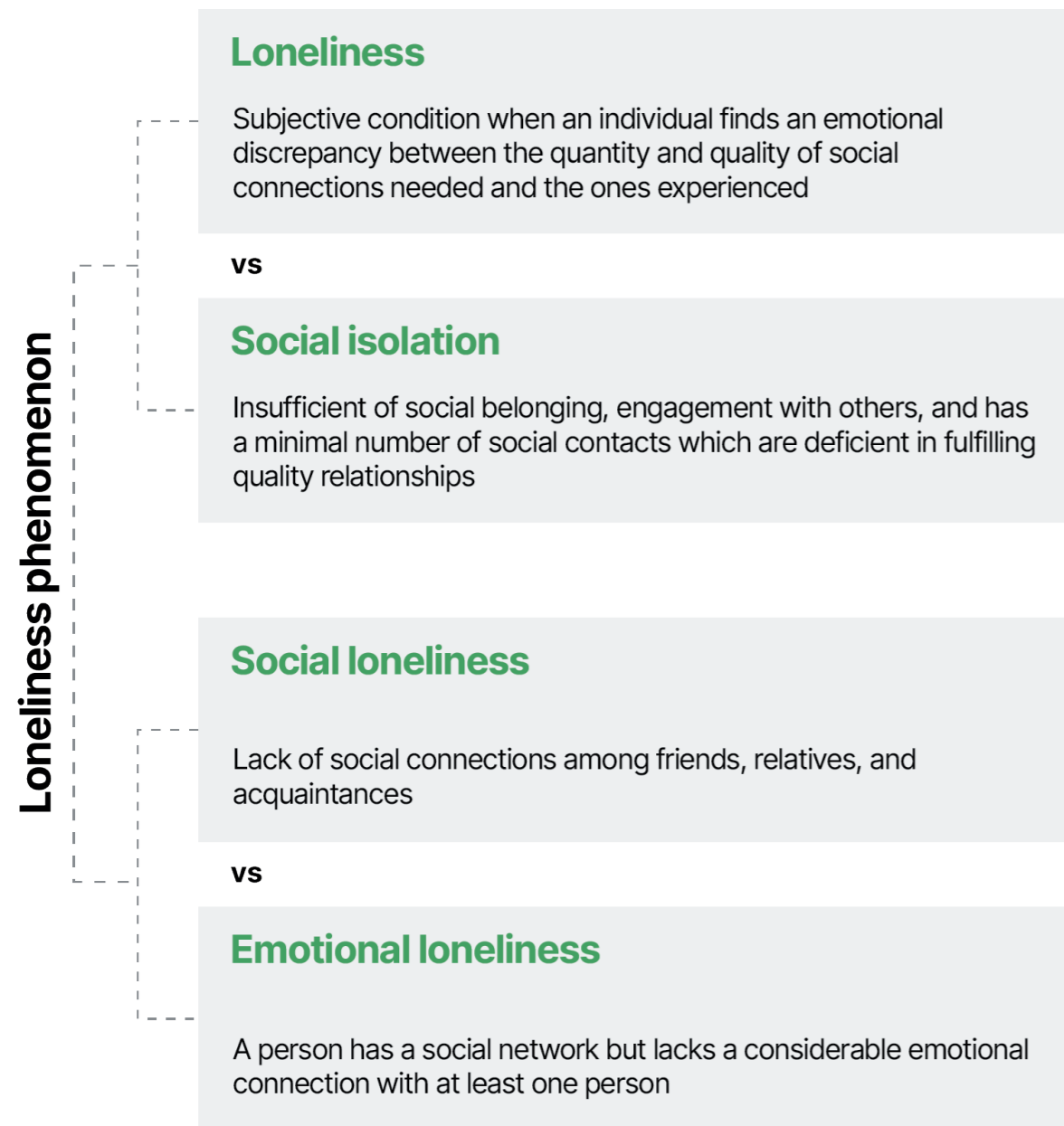


Figure 2.2 Loneliness definitions. Source: the author.

2.1.3. The loneliness model

Loneliness is a complex phenomenon to study and design for. This complexity comes from the heterogeneous variety of risk factors and the concatenate agents that exacerbate loneliness. To conceptualize it, in this chapter, the general framework ideated by D. Perlman and L.A. Peplau will be used (Perlman and Peplau 1984).

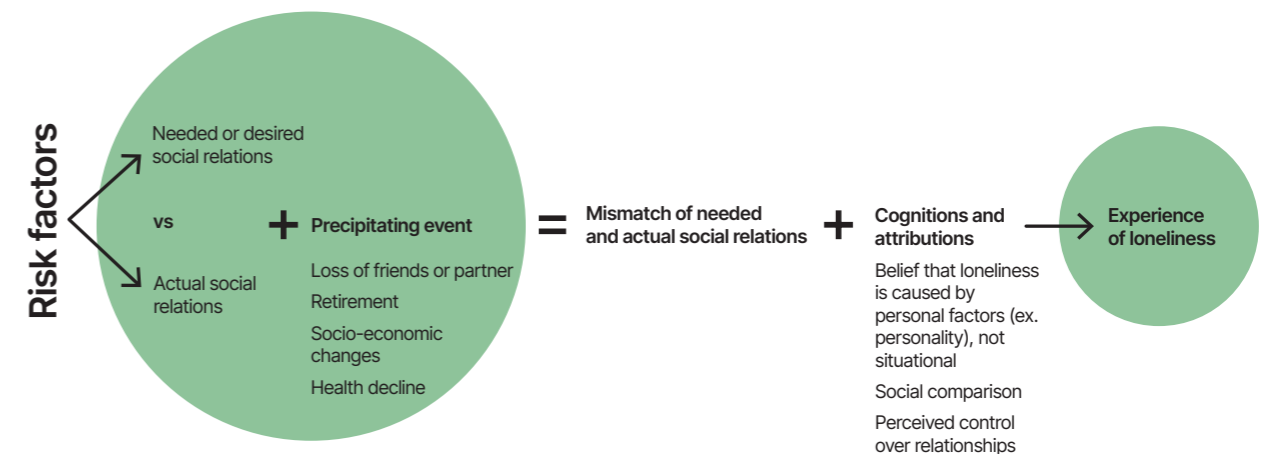


Figure 2.3 Loneliness activation model. Re-elaborated model from Daniel Perlman and Letitia Anne Peplau, *Loneliness research: a survey of empirical findings* (1984), pg. 22

Loneliness is a phenomenon that starts from the presence of a series of risk and predisposing factors. These factors have a diverse nature and are used to describe the vulnerability to loneliness. They are clustered into five main groups:

- personal circumstances,
- social group,
- psychological response and personality,
- environmental factors,
- traumatic events, traumas, and transitions. (Goodman, Adams, and Swift 2015)

Under each category, there are varying influencing factors which will be furtherly discussed in paragraph 2.1.4 "The risk factors of loneliness in seniors".

While the risk factors set the vulnerability level, actual and desired social relations pose the dichotomy needed to start the actual loneliness. The prior measures the dimension of a person's social network and is used to evaluate the eventual presence of "social isolation", as referenced above in the paragraph concerning the definition of the phenomenon. On the contrary, the desired social relations represent the number of social connections needed to feel satisfied by them, no matter the actual quantity of them. (Perlman and Peplau 1984)

The mismatch between actual and needed connections is constructed in the long term. However, a triggering moment usually makes this distinction relevant to the perceived satisfaction of said relationships. In the model, the trigger is defined as a **precipitating event**. These events usually correspond to the loss of important

ties, the ending of relationships or additional factors that cause the loss of social contacts. Among these events, it is possible to find: the loss of a partner or a friend, retirement, changes in the socio-economic level and health decline. (Perlman and Peplau 1984) The difference between a precipitating event and the risk factor is the nature of the event; in the first case, the event is the exacerbating factor that highlights the actual social mismatch, while in the second ones, are contributing elements which cannot strictly preclude the evidence of a lonely person.

Additionally to the mismatch explained above, other factors can worsen the perception of loneliness, which D. Perlman and L.A. Peplau define as "cognitions and attributions". (Perlman and Peplau 1984) These factors are divided in social cognition and attribution.

Social cognition identifies biases lonely people might have in how they process their social experiences. Particularly, those who are lonely may be more susceptible to social threats and present negative interpretations of neutral or ambiguous social cues. (J. T. Cacioppo and Hawkley 2005) They are so concerned with the unpleasant aspects of social connections that they find the good ones less satisfying. Therefore, in social circumstances, they continuously feel exposed and endangered. (S. Cacioppo, Balogh, and Cacioppo 2015) An example of such behaviour could be having a friend or co-workers reply in a tense tone and assuming this person does not like the individual, instead of considering other options for such a response.

Social cognition, in these cases, can also lead to social anxiety, prolonged withdrawal, excessive self-focus, and aversive behaviours. Additionally, they might be more fearful of being rejected, burdened, or distrustful of others. (Elmer 2018)

These behaviours do not only influence the way the lonely person perceives their surroundings but also the way other people perceive them. Other people might feel rejected or pushed away from lonely people due to their passivity, distrustfulness, and judgmentalism. (J. T. Cacioppo and Hawkley 2005; 2009) Others might avoid engaging with the lonely person because they believe they are rude or wish to be alone; this reinforces the negative expectation of lonely people towards others and the feedback cycle for chronic loneliness. (Elmer 2018)

"I fear of being rejected, being a burden. I don't trust other people"

Attribution is a term used to describe all the causes that people consciously and unconsciously use to explain significant life events, including loneliness and depression. (Anderson, Horowitz, and French 1983) How each person perceives attribution can impact their self-esteem, future goals, emotional responses, and coping behavior to disruptive events in life. (Campaign to End Loneliness UK 2020)

When a cause is perceived to be related to internal circumstances or stable over time, it is likely to affect one's self-esteem, with feelings of inadequacy, self-blame, and even shame being common. It is also difficult for individuals to find parameters to adjust their situation. Attributional styles are essential in understanding the feeling of loneliness and how it may be handled. People are far more prone to lose

motivation to change if they believe they have little prospect of changing their condition. (Campaign to End Loneliness UK 2020)

"I'm lonely because I'm old"

To summarize, attribution and social cognition are effectively involved in the feedback cycle that can boost and aggravate loneliness (Qualter et al. 2015), as illustrated in the picture below.

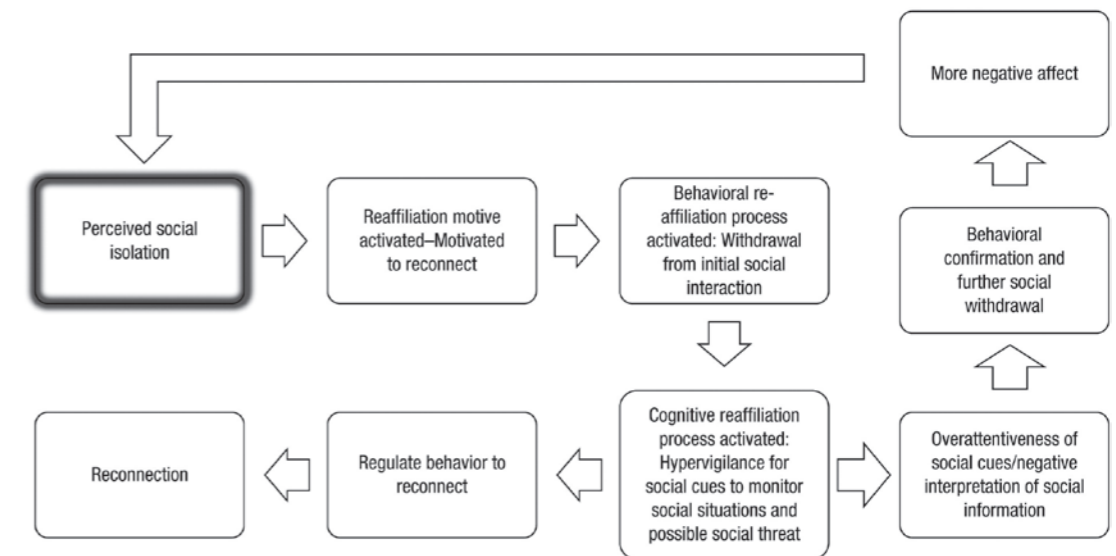


Figure 2.4 Feedback circle leading activation of the reaffiliation motive. Image by Pamela Qualter, Janne Vanhalst, Rebecca Harris, Eeske Van Roekel, Gerine Lodder, Munirah Bangee, Marlies Maes, and Maaïke Verhagen, *Loneliness Across the Life Span* (2015), n.d., fig. 1

All of the above elements constitute the general model that fosters loneliness in people, regardless of age or sex. However, different risk factors are more prominent in some specific groups, as will be explained in the next chapter.

2.1.4. Loneliness and social isolation risk factors

Various factors throughout a lifespan can represent possible risk factors for loneliness. While presenting them poses a higher risk of suffering from loneliness, the presence of these factors might not be enough to trigger it, as it is possible to see in the loneliness model. The factors have different nature but, for the sake of providing clarity and structure to this section, they will be divided into five categories:

- personal circumstances,
- social group,
- psychological status and personality,
- life events and traumas,
- environmental factors. (Goodman, Adams, and Swift 2015)

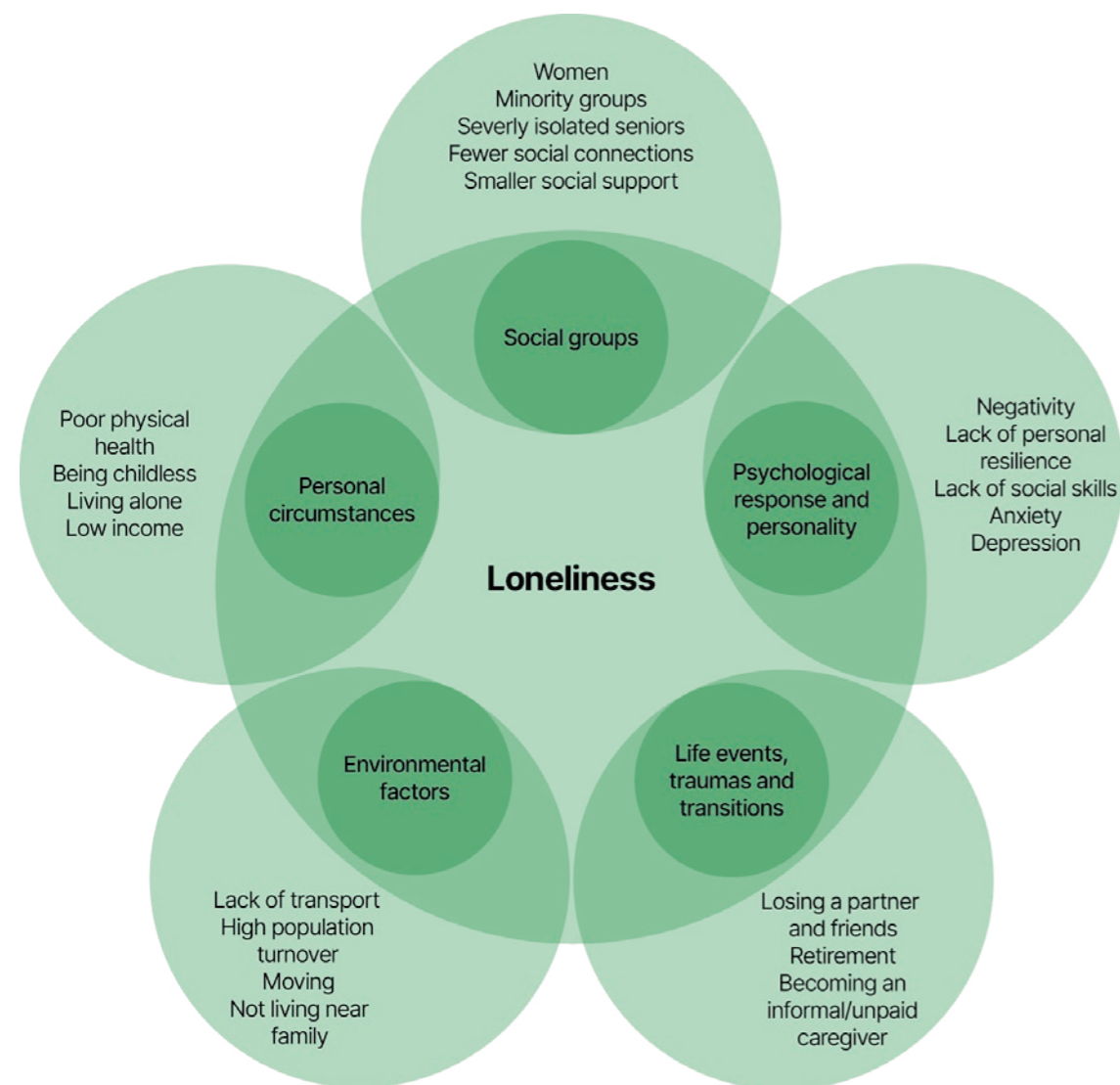


Figure 2.5. Diagram of the influencing factors for loneliness. Based on the criteria listed in Anna Goodman, Adrian Adams, and Hannah Swift, *Hidden Citizens: How Can We Identify the Most Lonely Older Adults?* (2015, Campaign to End Loneliness UK)

Personal circumstances

Personal circumstances enclose all the risk factors related to the personal sphere of an individual. These include general health, familiar status, and socio-economic status.

Physical health has been found to significantly impact loneliness, satisfaction and the number of reliable friends in several studies. (Heylen 2010; Tjihuis et al. 1999; B. V. Baarsen et al. 1999; Mullins, Elston, and Gutkowski 1996) The most prominent health issues that have been found to affect it are: mobility issues, loss of our sight and/or hearing, incontinence, chronic diseases and cognitive issues. (Heylen 2010; Burholt et al. 2017)

Mobility and loss of sign or hearing impact significantly the social life of seniors. In terms of mobility, the difficulties in walking and the higher chances of falling reduce the possibility of the senior to go out and are more self-aware of the challenges they might encounter outside their home. (Rantakokko et al. 2014)

Hearing and visual impairment also have a strong impact on socialization. (Shukla et al. 2020; Savikko et al. 2005) Many seniors consider these a source of embarrassment and limiting to perform activities outside of their home. (Cohen-Mansfield and Eisner 2020) It has been found a connection between social loneliness, visual impairment, and the perceived quality of living on the senior. (La Grow et al. 2015) Teeth issues and incontinence have been considered also an important risk factor for socialization, (Qi et al. 2022; Cohen-Mansfield and Eisner 2020) although the influence of the latter have been linked with comorbidities such as depression. (Stickley, Santini, and Koyanagi 2017)

In the case of **cognitive impairment**, it has a moderating effect on a person's perception of the sufficiency of the quality and quantity of social interactions. Such an effect can be caused by the connection of negative imagery of cognitive decline with social withdrawal and by the way the lonely person judges the adequacy of social resources. For the latter, such evaluation can be mis-aligned from the actual level of social interactions and be unrealistically compared to the reality, as the senior compares their current status with their lifestyle pre-diagnosis of cognitive impairment. (Burholt et al. 2017)

Both Heylen et al. and Savikko et al, highlighted the importance of the **personal perception of the health status** rather than the objective health condition. Even though objective health has a big influence on subjective health, it is the latter that has a significant impact on social loneliness. (Heylen 2010; Savikko et al. 2005) Subjective health status ties up also with the level of confidence and the psychological status that the senior has, both predictors of loneliness.

Familiar status and living arrangements can be predictors of loneliness. One of the most common factor is considered to be **living alone**, as it reduces the daily interactions with others - especially in the presence of other risk factors such as mobility issues. (Gierveld, Dykstra, and Schenk 2012) However according to a study by Luhmann& Hawkley, living alone may improve relationship quality since loneliness seemed to be lower among people who lived alone after adjusting for all other sociodemographic risk variables. (Luhmann and Hawkley 2016) Furthermore, not being married or not having a partner is a possible predictor, as it reduces the social connection available. (Yanguas, Pinazo-Henandis, and Tarazona-Santabalbina 2018)

Low socio-economic status is considered to be a great predictor of loneliness. Both income and education have a negative impact on the accessibility to activities and leisure available, and due to smaller social networks among people. (Dahlberg, Agahi, and Lennartsson 2018) According to Cohen-Mansfield et al. however, the latter had a lower association with loneliness rather than the income level. This effect is evident not only for the lack of access to resources but it also due to its ability to influence self-esteem and self-efficacy, which may lead to less social connections. (Cohen-Mansfield et al. 2016) Furthermore, the previous occupation can be reconnected to the risk of loneliness – as those who had a heavy physical job had a higher incidence compared to other categories. (Savikko et al. 2005) This could be correlated with a higher incidence of physical issues caused by the occupation itself.

Social groups

Social groups include all the primary characteristics that help each one of us identifying and assembling, such as age, gender, ethnic group or being part of the LGBTQ+ community.

Aging increases the risk for loneliness and social isolation, particularly in the older seniors. (Poscia et al. 2018; Tijhuis et al. 1999; F. Wu and Sheng 2020) This latter group is identified by the academic and statistic research to be averagely over 75 years old; the phenomenon is caused by the steady increase of medical issues and changes of the social status in this group (F. Wu and Sheng 2020; ISTAT - Italian National Institute of Statistics 2019).

The **gender** most at risk of suffering of loneliness is highly debated, as researchers find inconsistencies regarding the impact of loneliness among women and men. While studies have found that women have higher chances to be detected as lonely, (Aartsen and Jylhä 2011) (Dykstra, van Tilburg, and Gierveld 2005) others do not have found a significant connection with gender. (Savikko et al. 2005) However, it is important to note that association between loneliness and women is heavily connected on the higher exposure to risk factors, especially concerning the marital status, widowhood, and higher life expectancy (Aartsen and Jylhä 2011; Dahlberg, Agahi, and Lennartsson 2018).

Minority groups like ethnic minorities and LGBTQ+ members are generally less investigated in the academic literature, although being part of these clusters is widely considered to be a risk factor for loneliness. In fact, these groups due to cultural differences and societal pressure are more prone to discriminations, stigma, and rejection (Elmer 2018). In particular, the loneliness of ethnically minority seniors is ascribed by stressors connected with immigration itself (i.e. language barriers, cultural differences of the perception of family), as well as insufficient resources needed for an efficient coping, such as social and cultural capital. These stressors however tend to decrease according to the length of residence in the country of residence due to processes of social integration (Z. Wu and Penning 2015). Regarding LGBTQ+ seniors, they might have the tendency to be less socially connected and not have a steady partner. In addition they have more experiences of prejudice which make them more aware and reluctant to engage in events (Kuyper and Fokkema 2010).

Lastly, people who could rely on a larger **social support network** were less likely to perceive themselves as lonely. (Dahlberg, Agahi, and Lennartsson 2018) (Schnittger et al. 2012) Social support is needed to have emotional, practical and informational resources to be able to handle stress situations in life. (Cohen 2004) More generically, it is considered social support when an individual perceives positive support and confidence from friends. (Jennifer Yeh and Lo 2004) As social support impact greatly social loneliness, academics have found specifically a indirect correlations between the number of grandchildren and the level of loneliness – the fewer grandchildren a senior has the more likely he/she is to be lonely (Schnittger et al. 2012).

A smaller level of **social connections** was also considered correlated with loneliness (Czaja, Moxley, and Rogers 2021) - as it directly impacts the level of social isolation of the senior. In particular, Lim and Kua found that the friendship with their peers was an impactful factor to help the elderlies avoid feeling isolated (L. L. Lim and Kua 2011).

Psychological status and personality

Psychological status and personality would technically be enclosed in personal circumstances, as it directly affects the individual. However, these two aspects strongly impact the risk of developing loneliness, particularly as it is strictly tied to the **attributional style** and the **social cognition** an individual has (introduced in chapter 2.1.3 - "*The loneliness model*"). Included in this category, it is possible to find personal resilience, confidence, anxiety, and depression.

Resilience in the context of psychology refers to the techniques used by an individual to cope with life stressors (Fontes and Neri 2015). This concept has been found to be intertwined to loneliness and depression by different studies (Goodman, Adams, and Swift 2015; Gerino et al. 2017; Zhao et al. 2018; Jakobsen et al. 2020). In fact, for resilience to be established it is expected for an individual to have a series of interpersonal resources which are needed also to reduce the risk of loneliness (Jakobsen et al. 2020). Strategies working on increasing resilience and reducing the loneliness level have been found to have possible effectiveness in the improvement of mental health (Gerino et al. 2017). In a study revolving around resilience and loneliness among Chinese seniors, it was shown how seniors showcased higher levels of resilience to loneliness when they focused on the benefits for their family and on the collective wellbeing – suggesting the need to develop relationship oriented coping mechanisms to fight severe loneliness (Lou and Ng 2012).

As explained in previous segments, different factors such as incontinence or impairments can affect the self-confidence of seniors and their willingness to interact socially. (Goodman, Adams, and Swift 2015) The lack of self-confidence, feeling of frailty and anxiety are commonly associated with loneliness (Kitzmüller et al. 2018).

Frailty is strictly connected with the psychological and physical status of the senior, but also by the perception of the society (see the section dedicated to the environmental factors, where it will be explained the concept of ageism). Included in the concept of frailty, it is possible to find the disconnection between the senior and the surrounding community, which makes them **feel abandoned** by their own social group. (Stanley et al. 2010) This feeling of disconnection extends to their family,

as seniors don't want to bother and worry their family members. For this reason, there is a risen need of having someone to talk to without being perceived as a burden. (Lyberg et al. 2013) Overall, there is a general perception of **being invisible** to other people, to be abandoned by their surroundings and that there was no one that really cared for them. (Kitzmüller et al. 2018) Lowering expectations is one approach to deal with loneliness. (Heylen 2010) In fact, older adults with poor self-assessed health valued less social connections and tended to modify their criteria (or expectations) to their limited possibilities to meet people (M. I. B. van G. Baarsen Bernavan 2001).

Anxiety is another important factor concerning loneliness. As found by Lim et al., (M. H. Lim et al. 2016) social anxiety is an early predictor of loneliness, influencing it directly since from an earlier time rather than other pathologies - ie. depression or paranoia. Furthermore, it reduces the energy allocated to socialization and interfered with the development of coping strategies to manage loneliness (Kitzmüller et al. 2018).

One of the most studied psychological aspects of loneliness is its correlation with **depression**. (Schnittger et al. 2012) There has been found a direct correlation between the two, regardless of other psychological and risk factors. (J. T. Cacioppo et al. 2006; Czaja, Moxley, and Rogers 2021). Since depression is considered to be the most diffused pathology regarding mental health in later stages of life, there have been suggestion that by tackling either loneliness or depression it could be possible to alleviate the second (Campaign to End Loneliness UK 2020).

Life events and traumas

Particular life events can trigger additional risk factors for loneliness or constitute a precipitating event that highlights the mismatch between the desired and the needed social connections, as visible in the loneliness model.

Among these events, the **loss of a partner or a friend** is certainly the most studied and one of the most impactful. Bereavement causes a variety of disturbing emotions and can be reconnected with the psychological risk factors afore mentioned, such as depression and social isolation. (Campaign to End Loneliness UK 2020) The loss of a partner was particularly influential in feeling lonely when it happened recently (less than 6 years). (Savikko et al. 2005) Although widowhood is more predominant in women, (Masi et al. 2011) widowed men are at higher risk of suffering of loneliness as they have the tendency to adjust poorly to this condition (National Academies of Sciences et al. 2020).

Retirement is also seen as a relevant risk factor for loneliness. As a lifestyle change, the lack of employment removes an available social environment for people to interact, (Segel-Karpas, Ayalon, and Lachman 2018) leading to a disruption of social opportunities and daily routine. (Morris 2020) In the retirement process, workers who are already lonely are more likely to struggle with the transition to the new lifestyle and to see a degeneration of depressive symptoms. This exacerbation is generally caused by the lack of a structured social network not centered in the working environment (Gum, Shiovitz-Ezra, and Ayalon 2017).

Finally, becoming an **informal/unpaid caregiver** limits opportunities for social interaction. (Goodman, Adams, and Swift 2015) The responsibilities for caring of

another individual lead to difficulties in the relationship with friends and family, leading to an increased isolation. Additionally, the time and resources needed to be a caregiver limit the amount available to pursue other activities. Being a caregiver can be also a very lonely experience if there are no possibilities to talk and share about the experience (Carers UK 2015).

Environmental factors

The last risk factor category is composed of environmental factors. These factors are generally related to city planning, familiar and societal features that influence how seniors interact socially.

In terms of city planning, urban mobility can be particularly challenging and influence the social life of seniors – particularly those who already have mobility issues. Private forms of transportation such as cars become less viable as the age increases – since the percentage of seniors who drive drops with age. Public transport, on the other hand, can be challenging for seniors due to the difficulties in accessing them (i.e., getting on and off, reaching the stop, finding a seat) and to limited scheduling (Cohen-Mansfield and Eisner 2020).

Living in an area with a **high population turnover** can be an additional risk factor for loneliness. This factor reduces the familiarity of the neighbourhood and the possibility of creating long-lasting social connections, causing a feeling of isolation and reducing the opportunities to connect with neighbours. (Okkels et al. 2018) This distress is visible not only for the ones remaining in the community but also for the ones moving in a new area. On the opposite side of the spectrum, seniors **moving in established communities** - such as rural ones – may be more vulnerable in creating new social connections and be more prone to loneliness (Goodman, Adams, and Swift 2015).

Regarding the familiar sphere, **being childless and/or not living near the family** reduces family support (Goodman, Adams, and Swift 2015; Tiilikainen 2018), which can be particularly problematic in countries where culturally, elder care is seen as a duty of the family (such as Italy and China).

In fact, in Mediterranean cultures like Italy, the person is by default interconnected in pre-existing social networks since the development of the self is strictly correlated with its network. This strong connection leads to not invest particularly in emotional closeness in relationships but rather on practical support in the daily life. (Rodrigues, De Jong Gierveld, and Buz 2014) This insight has also been highlighted in the research "INclusive AGEing in place (IN-AGE)", which analyzed the loneliness level of seniors in different Italian cities. The research has shown that the more seniors expected support in their daily life from their families, the more they risked being disappointed by said expectations – increasing their risk of loneliness (Cerea 2020).

In China, the reproductive policies actuated in the last decades and the rise of migrations towards cities have led to the phenomenon called "empty nesting". (Wang 2016) This have led many seniors to live in one-person households and with a change of social support available for them – as their children often move to bigger cities to have more working prospects. (F. Wu and Sheng 2020) This reduction of support available goes in contrast to the traditional Chinese culture of familiar care, leading to a stronger discomfort, a higher social stigma and higher risk

of loneliness in seniors. (Chen and While 2019)

Lastly, ageism is an important societal factor that influences loneliness in later stages of life. The World Health Organization describes ageism as “the stereotyping, prejudice, and discrimination against people based on their age” that “marginalizes and excludes older people in their communities”. (World Health Organization n.d.) This kind of discrimination reinforces the image of seniors as frail and dependent members of society. It imposes limitations to the development of proper policies and solutions for an aging population. (Officer and de la Fuente-Núñez 2018) Additionally, ageism can contribute to the perception of loneliness in a number of possible ways:

- As this phenomenon predisposes seniors to constant social rejection, they may be more prone to social withdrawal;
- The depiction of seniors as frail individuals can lead to the self-embodiment of said stereotypes in older people, exposing them to psychological risk factors;
- The wider society’s practices and decisions can increase social exclusion and promote risk factors for this age group. (Shiovitz-Ezra, Shemesh, and McDonnell/Naughton 2018)

This sort of discrimination interconnects age to frailty and loneliness, suggesting that being lonely is a sign of weakness in seniors. Many elderlies have described their difficulties in raising their issues with loneliness, as they viewed the topic a **stigma**. Such frailty also leads seniors to not confide with their loved ones about the issue, afraid to worry their families. (Kitzmüller et al. 2018)

2.2. Interventions for loneliness: a review of the literature



2.2.1. Intervention typologies

Interventions for loneliness have been held in place since the rise of the issue on a systematic level. Public sector workers and associations have focused on a wide range of offerings, which target the main risk factors enlisted in the previous chapter. Although it's been decades since the first interventions have been taken in place, the rise of new technologies and new findings in social sciences require a constant update in the service offerings.

To subdivide the intervention currently existing, two different categorizations can be applied: target goal of the service and delivery methodology.

Regarding the target goal of the intervention, the author will use here and in the next chapters the categorization proposed by Samia C. Akhter-Khan and Au. Rhoda. The two scholars divided the services in the following categories (Akhter-Khan and Au 2020):

- **Macro-level interventions:** these interventions target risk factor that are indirectly connected with socialization itself – such as physical health, living conditions or socioeconomic status.
- **Meso-level interventions:** the interventions focus on social isolation by working on the social skills of people and implementing the opportunities of socialization.
- **Micro-level interventions:** the service delivery works on the quality of social connections by focusing on maladaptive cognition and emotional loneliness.

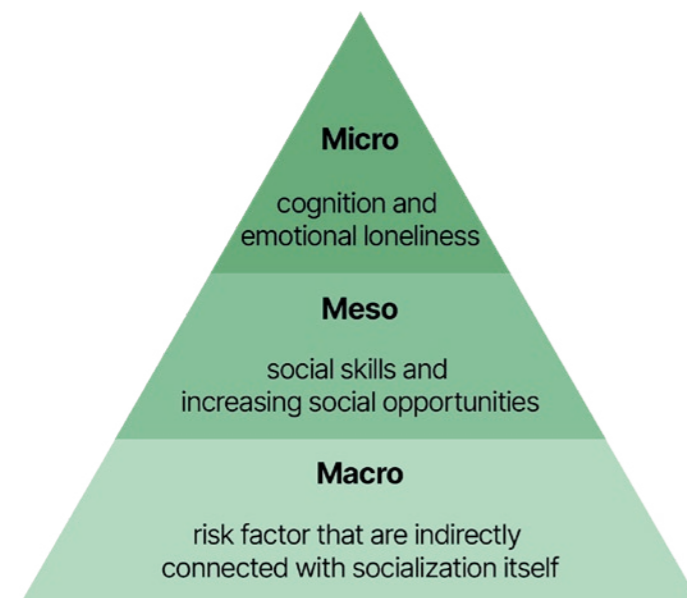


Figure 2.6. Intervention typologies, based on Samia C. Akhter-Khan and Au. Rhoda, *Why Loneliness Interventions Are Unsuccessful: A Call for Precision Health* (2020)

As seen in the graphic above, the division previously presented can also be reconnected to A. H. Maslow's hierarchy of needs. (Maslow 1943) In fact, macro-level interventions stem from the basic needs of the human being, which are visible at the bottom of the pyramid. Moving upward the hierarchy, it is visible the section dedicated to love and belonging, connected with the meso-level typology which

recalls the need to opportunities of socialization. Finally, the micro-level focusing on emotional loneliness can be visualized as a response to the self-esteem and self-actualization sections.

The delivery of the service can be divided into different subsection and depend on the general goal of the intervention and the service sustainability. Scholars have used different methods of classifications (Fakoya, McCorry, and Donnelly 2020) but, as this analysis is not the objective of this thesis, it was decided to present two models considered by the author to be explicative of the possible differentiations.

Group vs one-to-one intervention

Cohen-Mansfield J. and Perach R divided the interventions in two categories: group vs one-to-one intervention. (Cohen-Mansfield and Perach 2015) Interventions that feature **group activities** are considered to be some of the most effective ways to deal with loneliness. (Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults et al. 2020) These services, in fact, are optimal to overcome the negative stigma surrounding loneliness – as the focus of the intervention is reserved to specific activities rather than to tackling loneliness itself. Additionally, group interventions permit to include multiple target groups and deliver the intervention once to a multitude of users. This allows public administration to optimize the resources available and to deliver a more cost-effective option to their citizens. (Davidson and Rossall 2015)

Group interventions usually take place in both public and private communal spaces, including day centers, gyms, social clubs or private educational institutions. Often times, said interventions are designed to encourage people in engaging with existing community services – including libraries, social events and enrolling in civic participation programs.

An additional method often used for tackling loneliness is organizing **one-to-one interventions**. This solution is preferred to target frail seniors or people unable to go out of their home, since it can be more flexible in talking the specific needs of the singular individual. (Davidson and Rossall 2015) One-to-one interventions are mainly **befriending systems**. Said systems promote the interaction between an individual and one or more staff members with the aim of providing supplementary social support (Mead et al. 2010) through affirmation and emotion-focused relationships. (Mead et al. 2010) It is usually delivered through home visits from volunteers or workers or scheduled phone calls.

Additional ways to provide one-to-one interventions are through **community navigators**. Such kind of services target people particularly vulnerable that slips from the net of social services and that are more difficult to target through other channels. The service is usually carried on by volunteers, who present the users with existing opportunities available in their community. (Davidson and Rossall 2015)

Offering typologies: support, activities, technology

This division stems from the aggregation of the categories theorized in different papers (Dickens et al. 2011; Masi et al. 2011; Poscia et al. 2018).

All the groups of scholars have found similarities in the offering typologies, which involve various forms of intervention: personal support, practical activities, and

technologies.

Personal support

Individuals need specific forms of support to help them re-engage in social activities. Tendentially, the scholars cited above all agree on the typology of offering needed in this sphere. Support, in fact, translates in the delivery of counseling, discussion meetings, eased access to therapy or forms of education that help the improvement of the individuals' interpersonal communication skills. Additionally, Masi C.M. et al. (Masi et al. 2011) underline the role of regular contacts as an impactful way to enhance social support.

Practical activities

This section is generally divided into three categories: social, educational, and physical. **Social activities** are considered to be group settings with the specific goal to help the participants to socialize. Examples of such interventions for seniors include the possibilities to share stories, memories, or skills to other people – often using an intergenerational audience. (Gaggioli et al. 2014)

Otherwise, **educational activities** where participants learn a specific skill set find a strong popularity – especially when delivered by a public service provider. Included in this activity are classes of singing, dancing, painting or horticulture.

Finally, **physical activities** tend to tackle general risk factors associated with loneliness and social isolation. Though the promotion of the engagement for activities regarding the general physical wellbeing of seniors, the participants are indirectly invited to socialize as they find themselves regularly in a specific environment (for example gyms, swimming pools or local parks).

Technology

This category encompasses both group and one-to-one interventions, integrating different level of technological application which depend on to the budget of said intervention and the typology of service provider.

One of the currently most user-friendly solutions in terms of technological literacy and accessibility of the technology is a **telephone befriending service**. Such service allows the user to receive scheduled phone calls delivered by either a volunteer or a paid staff member and agreed in advance with a service coordinator. The objectives of the service include the monitoring of the senior's physical and mental wellbeing and provide social and emotional support. Additionally, its characteristics allow this form of intervention to be low-cost, low-risk, and anonymity of its users, which help seniors overcome the shame and the stigma surrounding loneliness (Preston and Moore 2019).

Another accessible tool for socializing remotely is the use of **social media**. Social medias have been proven effective tools for the mental well-being of older people and particularly beneficial for people with mobility impairment, for those living alone or afar from their families and friends, as it adds a further support to maintain social contact (He et al. 2020).

Its usage has been classified by scholars as either active or passive. Active social media usage refers to a direct engagement between users, oppositely passive use indicates when the users monitors information shown without interactions. (Verduyn et al. 2017) This division is used to exemplify the reasons why people would engage in social media platforms – such as the access to social support and the causes of

negative comparison among users. Active social media usage in particular has been found to have an important role in mitigating loneliness (Yang et al. 2021).

In the last years there have been a great focus also on **companionship robots and devices** – starting especially in technologically advanced countries such as Japan. Companionship robots take inspiration from the success of animal therapy and have shown similar effects in fighting loneliness, in addition to the possibility to tackle additional unmet needs. (Poscia et al. 2018) These robots often take humanoid or animalistic resemblance and provide exchange of information, human-like interaction, support in daily activities, entertainment and putting the senior in contact with other people. Social robots have been proved to be able to tackle both social and emotional loneliness – even though there have been ethical concerns regarding the objectification of seniors (Pirhonen et al. 2020).

Finally, another mean of companionship devices are **conversational agents** – defined by Laranjo L. et al. as “systems that mimic human conversation using text or spoken language” (Laranjo et al. 2018, 1248). Such systems include services like home assistants like Amazon Alexa or Google Home, and AI-based services specifically designed for remote care. Conversational agents provide a series of benefits – as they are more intuitive and engaging to use. (Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults et al. 2020) However, the technological limitations in dialogue variety, technical errors, and the concerns regarding the autonomy and privacy limit the application of such tools on a wider scale. (da Paixao Pinto et al. 2021)

2.2.2. Influencing factors for the efficacy of loneliness interventions

An important segment of research regarding loneliness interventions is related to the effectiveness of said solutions. There are different parameters that influence the success in tackling loneliness; some are established characteristics that are looked out when establishing a new service, while others are newly insights that have been found from the analysis of the years of experience in such field.

Complexity of loneliness

People commonly associate interventions for loneliness as merely services to help increase social connections, however this would be oversimplifying the issue. As explained in previous chapters, the topic includes a great level of complexity caused by the great variety of risk factors involved and the complexity of human and social behavior. Scholars have urged developing more comprehensive solutions to appropriately target the nature of such condition. (Smith and Lim 2020) (Fakoya, McCorry, and Donnelly 2020) Particularly, it was highlighted the need to tailor solutions according to the specific needs of seniors, targeting them to a defined group and to specific risk factors (Fakoya, McCorry, and Donnelly 2020) (Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults et al. 2020). This need is particularly evident for the most frail and isolated elderly people, who might have more difficulties engaging with existing services and are more at risk of suffering severe depression and loneliness. (Saito, Kai, and Takizawa 2012)

During the years, both the complexity of the subject and the lack of resources employed in the design process have led to a gap between the insights about the effectiveness of certain interventions provided by the academia and the actual offerings proposed by service providers. (Fakoya, McCorry, and Donnelly 2020) This gap is particularly important to fill not only to be able to propose more targeted intervention but also since having a strong theoretical base improves the effectiveness of the intervention itself. (Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults et al. 2020, 9) Another influencing factor for the effectiveness of interventions is the absence of enough evidence that could actually help guiding the strategies used to tackle loneliness, in contrast with the flourishing research surrounding the topic. This leads to difficulty understanding the success of the interventions, even though they might present characteristics considered to be effective (Smith and Lim 2020). J. Holt-Lunstad well explains such a concept; when discussing with ABC News she declared: *"Figuring out how to promote quality relationships for older adults who are lonely is tricky. [...] While we have decades of research in relationship science that helps characterize quality relationships, there's not a lot of evidence around effective ways to create those relationships or intervene"* (Graham 2019).

Group Interventions

In the previous chapter it was explained how interventions delivered in a group settings might have higher effectiveness (Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults et al. 2020), as they provide a greater sense of belonging and perceived safety. (Poscia et al. 2018) Even though many papers support such statement, it is important to highlight how scholars such as Gardiner C. et al. have found a lack of robust evidence sustaining the argument. (Gardiner, Geldenhuys, and Gott 2018) The latter paper implies that the effectiveness is not correlated to the number of participants involved but rather to other factors, such as adaptability and engagement. This statement is supported also by Nicholson N. R., who highlights how individual interventions can lead to higher relationship quality and affect the level of empowerment to take part in social activities. (Nicholson 2012) Lastly it have been found that group interventions can help seniors with a moderate level of loneliness, generally caused by the natural increase in age (Rodríguez-Romero et al. 2021).

Active participation

The participation of seniors is an important factor for the success of an intervention (Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults et al. 2020). Participation is intended both as the users of the service and during the service ideation. As users, elders are expected to be actively involved in social relationships and in the activities performed during the service (Dickens et al. 2011). To ensure the engagement of the target audience, seniors are also included in the design process – improving the successfulness of the intervention (Gardiner, Geldenhuys, and Gott 2018). This does not come as a surprise for the design community, as co-designing has been proven to help meeting the needs of the users and developing a sense of "ownership" and belonging to the service.

Typology of goal

Focusing on certain goals of intervention has been proven to enhance the efficacy of said services. These goals include:

- the improvement of social skills and targeting the reduction of social isolation;
- addressing psychological risk factors through the use of maladaptive cognition, mindfulness exercises, and cognitive behavioral therapy;
- the proposition of educational content. (Ypsilanti 2018) (Committee on the Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults et al. 2020) (Jopling 2015) (Armitage and Nellums 2020)

Perception of the intervention and seniors' engagement

Paradoxically, many seniors don't want to engage in services that they perceive as targeting lonely seniors, even when they might be the ones experiencing loneliness. (Kharicha et al. 2017) This view stems from the idealization of elderlies as frail and weak, a direct consequence of ageism in our society and one of the risk factors enlisted previously. Consequentially, a need for services that target sociality indirectly through the conclusion of an activity has been risen, especially the ones with an intergenerational perspective. (Kharicha et al. 2017)

Another relevant issue regarding engagement is the mistargeting of needs for seniors with severe loneliness. Such problem relates to the difficulty to identifying lonely individuals due to their tendency to be also socially isolated and the stigma that limits the ability to ask for help. It is important to ensure that actions to actively attract seniors who need such interventions are taken in consideration. (Jopling 2015)

Finally, the strategies used to advertise the services can impact on the engagement and the participation of seniors. Generally, the methods used are various form of mass medias (predominantly traditional medias, such as newspapers), flyers, and posters in public spaces. Participants actively seek for engaging in the intervention and tend to self-refer themselves as lonely. This can be counterproductive in engaging seniors that feel more societal pressure in being frail and lonely and the ones needing the most from this sort of interventions. (Ige et al. 2019) A methodology that has been found positively affecting such problem is having referral systems from non-traditional sources, including actors who are at strict contact with such target group. (Jopling 2015) (Ige et al. 2019)

2.3. Seniors and the post-pandemic

2.3.1. The post-pandemic society

The COVID-19 pandemic has exposed different problematic aspects of our current society, including job insecurity, the role of essential workers, digital divide and underlying inequalities that exacerbated with such crisis. (Laranja and Pinto 2022) It is no surprise that this pandemic has been defined as “the great imbalancer”. (Carr 2020)

Socio-economical, racial, patriarchal and ageist inequalities have deepened divisions among the society, calling for new opportunities to change paradigms and propose new forms of social innovation. Such opportunities include:

- slowdown of socio-economic activities to reconnect with the environment;
- fairness in finance;
- shifting the paradigm from “working for money” to “working with meaning”;
- promote ethical and sustainable use of technology;
- boost equality and inclusivity in education;
- use a new approach to governance and leadership with an eye towards new challenges ahead. (Laranja and Pinto 2022)

Apart the clear prospects of change in the forthcoming future, COVID-19 have also impacted aspects of the daily life that are clearly visible already today. Starting from the health aspect, recovering from the disease itself can be challenging, particularly for those with underlying conditions. Around 10-20% of patients can develop “long COVID”, a series of symptoms that can cause difficulties in performing daily activities up to months after being infected by the virus. (World Health Organization 2021)

When not physically affected, people have started valuing more and more their psychological well-being. In fact, the pandemic highlighted the need for more accessibility to mental health resources, especially in countries where such topics can be seen as a taboo such as China and Italy. For example, after the first lockdown in China, researchers have found an increase interest in mental health and stronger relationships with relatives and friends.(Y.-L. Liu 2020) This trend is correlated with an augmented incidence of mental health conditions, as anxiety and depression are reported to have increased by 25% worldwide according to the World Health Organization. The same organization has urged governments to dedicate funds to the prevention and treatment of mental illnesses.(World Health Organization 2022)

Another effect of COVID-19 has been the perception of communities and the role of certain actors inside said community. The emergency caused by the sudden soar of the epidemic has shown how local associations and aid groups are vital to give support in emergency situations. This was feasible because such actors are able to promptly respond to the rising needs of their communities in both short and long term. The pandemic has made possible to highlight the importance of community engagement and the strengthening of relationships between the various local actors. (The British Academy 2021) The phenomenon is called social cohesion and it affects the way individuals interact at different scales, from the neighborhood sphere up until to the national government. The stronger social cohesion there is, the more likely it is to find appropriate and lasting interventions in the territory. (Jewett et al. 2021) It is evident the importance of such topic in the lights of crisis

like a global pandemic, where proactivity and unity of a community are key for sustaining its resilience.

The pandemic has also made even more evident the relevance technology has on the daily life. The lockdown needed to contain the epidemic has forcibly pushed for a digital transformation of the society, moving many activities that were often done physically in the digital realm – including work, education, shopping and health. The shift however has furtherly reinforced the digital divide among communities, particularly the ones living in rural areas or with lower incomes. (Roese 2021) Such digital divide is caused by both the lack of reliable access to internet connection and digital literacy. (El Kadi 2020) This is even more evident if it is considered that almost 30% of the global population still don't have access to internet in 2022, (International Telecommunication Union (ITU) 2022) or that almost half of Europeans still have insufficient digital competences. (European Commission n.d.)

Seniors have been particularly affected by the pandemic, both in terms of health and lifestyle. As the world shifted towards digital platforms, it was evident that many elders do not have the knowledge and confidence necessary to fully adopt these technologies, especially as this age group has less access to devices and internet connections. (Martinez-Alcalá et al. 2021) The exclusion from the access to digital services not only adds difficulties in supporting seniors during such crisis (Martinez-Alcalá et al. 2021) but it also leads to novel causes of social exclusion. (Seifert, Hofer, and Rössel 2018)

This social exclusion is also worsened by the increase of ageism experienced by seniors. Many elders have felt the stigma of being in the oldest age groups, avoiding adhering to preventive measurement since they didn't want to be perceived as frail and old. (Morrow-Howell, Galucia, and Swinford 2020) This perception was also caused by the way media and policymakers communicated the whole pandemic, highlighting how the vulnerability to COVID-19 was caused by the old age rather than underlying conditions. (Rueda 2021)

Lastly, the pandemic opened new opportunities on the way services for elders are provided, especially in case of homebound seniors. While at the height of the epidemic the focus was prioritizing the basic needs of the users and re-organizing the resources available, now it is clear the need to settle collaborations among actors involved in a community to guarantee the ability to adapt services and responses in an emergency. Additionally, it highlighted the necessity for more accessible services and seniors-friendly digital platforms (J. Liu, Ji, and Lou 2022).

2.3.2. Loneliness and resilience in a time of a pandemic

The lockdowns and the preventive measurements taken in place to contain the epidemic of COVID-19 has worsened and limited the opportunity of socialization for all the social groups, including seniors.

With the suspension of the majority of community activities and services dedicated to daily life task (ex. day care or meals delivered home), there have been an increase of risk factors for loneliness and social isolation. (B. Wu 2020) Particularly impactful risk factors that took the biggest toll in exacerbating loneliness in this period were lower education and income, one-person households, ethnic minorities and city dwellers. (Bu, Steptoe, and Fancourt 2020) Seniors who do not have a close social

support network and the ones relying on social service also had higher possibilities of developing loneliness. (Armitage and Nellums 2020) The uncertainty and fear caused by major events like pandemics also rises the vulnerability of individuals, even more so when it is considered the amount of information about the virus everyone was exposed with. This caused a rise of anxiety, chronic stress, and ultimately loneliness. All these factors had detrimental effects on public health sector, due to the higher exposure of neglected seniors to the possibility of catching COVID-19. (Banerjee 2020)

While social distancing was important to mitigate the spread of the disease, the aftermath has shown how it is important to maintain and work on social support in order to strengthen the resilience of the communities and the mental health status of all citizens, including seniors. (B. Wu 2020) In the moment of need, the organization of bottom-up initiatives such as socialization helplines for the most vulnerable or neighborhood-level and condominium-level volunteering groups were essential to address primary needs of the frailer citizens.

Different scholars have also addressed the importance of the use of technological interventions (Rolandi et al. 2020; Amundsen 2021), or provide physical and social activities (Sams et al. 2021) to mitigate loneliness in a crisis.

However, in general the coronavirus pandemic has highlighted two important aspects: the need to promote investments for the delivery of new loneliness interventions and the increased awareness regarding the importance of addressing such problematics. (Morrow-Howell, Galucia, and Swinford 2020)

2.4. Designing with relationships in mind

Service design has been widely used in working on complex systems, which include stakeholder ecosystems, social groups, and wider social networks. (van der Bijl-Brouwer 2022) Social aspects like human relationships have been incorporated as a design parameter since the 1990s, when it was identified the relevance of such methodologies when working in healthcare. (van der Bijl-Brouwer 2022) Since then, a relational-centered approach has been increasingly used in the public sector, to the point that now there are established concept in welfare services and in what has been described as "the relational state" (Drummond and McColl 2019).

Relational welfare services have been backed up by relevant scholars like H. Cottam, who urged the need to transition towards a culture based on the idea that every daily human relationship have a relevance and needs to be boosted and supported by the services. (Cottam 2018) Such shift is present also on a bigger scale of public intervention, with both designer agencies and scholars (Nielsen and Bjerck 2022; Drummond and McColl 2019) recalling the importance to "embrace whole communities, providing services in a more relational and less transactional way" (Drummond and McColl 2019) and to stop viewing the user as a merely passive recipient of the service itself.

Scholars have been divided regarding the terminology to identify the name of design practices focusing on human connections. Called collaborative services (Meroni and Sangiorgi 2011; Baek, Meroni, and Manzini 2015), relational services (Cipolla and Manzini 2009), or community-based services (Carla Cipolla 2008), they express the capacity of a service to embed relational qualities, connecting

the designed solution and the social networks it sparks. In these cases, users gain more control as they generate and deliver the solution collaborating with each other. The interpersonal relations established become strictly embedded with the actual service outcome. No one in the system can be easily replaced, opposite of what would happen with traditional services. (Carla Cipolla 2008) On the opposite, designers assume enablers' role, as relation cannot be strictly designed but can be fostered through design solutions. (Cipolla and Manzini 2009)

Applying service design in relational services can bring a series of benefits:

- Regeneration of the social fabric: as new bonds are being established, people start to identify themselves in a common good and identity, strengthen the community network, and gain more trust. (Muir and Parker 2014) This is especially relevant when promoting "bottom-up" interventions, as naturally the actors involved in the service system collaborate and interact in ways that are not easily trackable during user journeys. (Nielsen and Bjerck 2022)
- Improved ability to tackle complexity: particularly for the public sector, using service design can help develop outside-the-box solutions by having a systemic vision of communities and its inhabitants' characteristics. (Muir and Parker 2014)
- Higher engagement among citizens, stakeholders and professionals: by having more involved citizens in the community, they will be able to assess opportunities for their neighborhood and engage more effectively with public servants. (Muir and Parker 2014) Furthermore, this approach allows to foster relationships between actors and to become less tool-dependent during the design process. (Nielsen and Bjerck 2022)

This approach to design and its application for social networks can be impactful during and after the pandemic. It can promote unconventional solution development, and its transformative nature can support adapting to new circumstances. However, further investigation would be required to analyze the role of service design in developing relational services for a specific target group (elderlies) and its impact on communities.

2.5. Findings



This section of the findings has been written to help the reader scan the research and have a clear focus on the main insights gathered during the literature review. As the concepts described below have been furthered in their specific sub-chapters, the main insights have been clustered in macro-areas and summarized.

Loneliness in academic literature

In academic literature and commonly speaking, people often discuss loneliness and social isolation as if they are synonyms. However, loneliness and social isolation are different concepts that would need to be discussed separately since the two are not always connected (ex. a person could be socially isolated but not feel lonely). (Masi et al. 2011; Fakoya, McCorry, and Donnelly 2020)

While the focus of academic research often tackles younger seniors (generally over 65 y.o.), evidence report that loneliness is more predominant in the over 75 y.o. group, as the risk factors increase with age. (F. Wu and Sheng 2020; ISTAT - Italian National Institute of Statistics 2019)

Interventions

Many interventions focused on a specific risk factor for loneliness (mainly sociality and environmental factors), targeting only a portion of the people feeling lonely. A new approach to loneliness interventions is needed, one able to be comprehensive of different layers of approaches and needs. (National Academies of Sciences et al. 2020)

According to the academic literature, the most effective intervention strategies are not fully translated into an actual service offering. (Graham 2019)

Group interventions are considered some of the most effective to include in a service for loneliness, however doubts have been raised about their benefits for people with severe loneliness. This latter target group would benefit of a more targeted approach. (Rodríguez-Romero et al. 2021)

The evaluation of services aimed at sociality is based on the following:

- a younger target group (over 65 y.o.) (Poscia et al. 2018),
- people already engaging in social activities (Rodríguez-Romero et al. 2021; Ige et al. 2019),
- individuals might suffer from lighter forms of social isolation and loneliness, (Saito, Kai, and Takizawa 2012; National Academies of Sciences et al. 2020)
- people less prone to age-related disabilities (incontinence, mobility issues, visual and hearing impairments) (Jopling 2015).

The perception of loneliness and engagement in interventions

Seniors perceive a stigma surrounding loneliness. This makes them embarrassed to admit they are lonely, leading to disengagement from their social network and increased isolation. (Preston and Moore 2019) Severe lonely people strongly perceive embarrassment, lack of self-confidence, and have more difficulties in finding and engaging in intervention to prevent and treat loneliness.

Embarrassment due to health limitations (ex. hearing loss) and chronic medical conditions (ex. need of oxygen tanks) can affect the self-confidence of seniors and the engagement to social events. (Cohen-Mansfield and Eisner 2020)

A constant concern for many seniors is to be a burden for their family and friends. The need of a confidant to whom express their concerns without worry their loved ones is an important factor that can cause difficulties in the seniors' relationships. (Cerea 2020)

According to different socio-cultural context, elderly people have expectations towards the presence and role of family members in their daily life. These expectations have an influence on the perception of loneliness and abandonment. (Cerea 2020; Chen and While 2019)

A percentage of elders misinterpret and overlook services that focus exclusively on sociality or are targeted for loneliness. Engaging with these services would mean admitting they are lonely and old, making them feel frail and vulnerable in front of their relatives and friends. (Kharicha et al. 2017)

Loneliness and COVID-19

The long period spent socially isolated, the increased phenomenon of anxiety and depression, and the loss of family, friends, and partners due to the epidemic are all risk factors that threaten the increase in percentage of seniors being lonely.

COVID-19 increased the general sensibility towards loneliness and urged the creation of new forms of interventions. (Berg-Weger and Morley 2020)

The pandemic has heavily impacted on the mental and physical wellbeing of people, being resilient is helping people to cope with the containment measures of the pandemic and could help in the post-pandemic. (Paredes et al. 2021; BBC 2020)



3. Case study analysis

3.1. Structure and selection criteria

The second phase of the research was the analysis of a selection of case studies. The main objectives of this phase were: to understand how the current typology of intervention is delivered in Europe and Asia and how said interventions are delivered on Italian territory.

The analysis was divided into two different steps, firstly, a macro-analysis of socialization services in Europe and Asia was organized. In this step, the aim was to deepen the knowledge regarding the typology of intervention available, starting from the following questions raised during the literature review:

- Is the risen sensibility of the loneliness issue visible in the service offerings of the public sector? What kind of intervention do they propose?
- Are services that target specifically over 75 y.o. seniors offered to the public? What do they offer?
- Do interventions targeting seniors particularly at risk of loneliness exist? How do they engage seniors?
- What is the proportion of the various level of interventions? Is there a predominance of certain models of intervention?
- Do services targeting different risk factors of loneliness exist? What is their approach?

Secondly, a selection of 5 case studies set in Italy was used to investigate the variety of offerings and the structure of stakeholder and economic flows. Finally, a series of questions were formulated from the previous analysis:

- Is there an increased demand for these services during/after COVID? Is there any change in terms of users of these services?
- What is the incidence of users' demographic in services for seniors?
- How are seniors targeted and engaged in the services?
- Do interventions targeting particularly seniors at risk of loneliness exist? How do they engage seniors?
- Who engages predominantly with services aimed at boosting sociality?

These questions were used to delineate the general objectives of this phase, for each case study the questions were declined according to the information available regarding the service and specific scopes to analyze. Per each case study, a coordinator of the service was contacted and interviewed.

Selection criteria

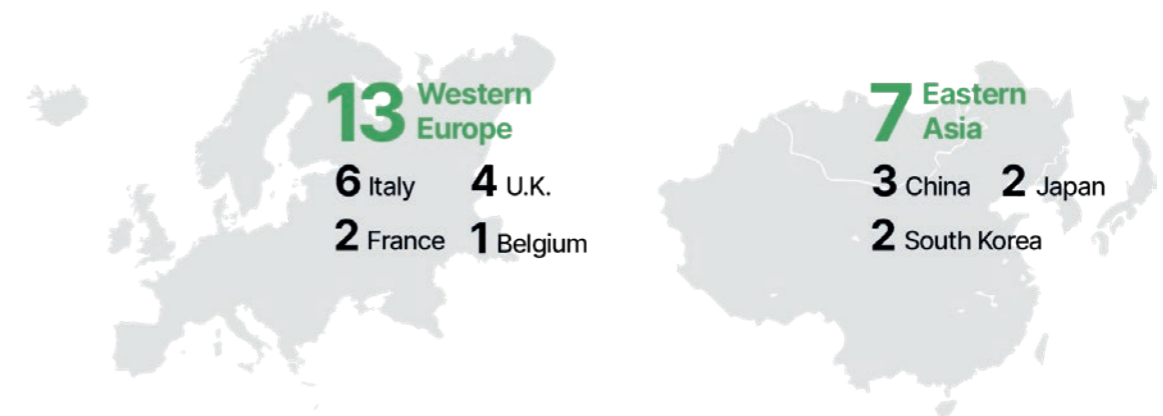
The case studies were selected according to three macro parameters: geographical location, the intervention's target group, and the intervention's typology.

The selected services had to be either in Western Europe or Eastern Asia. The latter has been identified as the area that comprehends China, Japan, South Korea, and Taiwan. In terms of the target group, the widespread definition of "senior" as a person aged over 65 years old and the scarcity of services targeting specific groups inside this macro-category has required a digression from the target age analyzed in this thesis. It was decided to include only case studies targeting over 65 y.o. people still living in their own houses, excluding services associated with retirement homes.

Services targeting specifically over-75-year-old seniors have been highlighted in the study. The housing condition highlights another characteristic of the interventions selected: their emphasis on home delivery of services and the presence of offerings that can be used by the senior individually. Besides the home-centred perspective, the interventions had to focus on reaching lonely seniors, particularly those with a long history of social isolation and loneliness and had to be delivered in the last ten years or still be available.

3.2. Interventions for socialization among over 65-year-old seniors

A total of 20 case studies have been selected for the primary analysis. The interventions are primarily located in Europe, focusing on the ones in Italy. This selection was required to have a good pool of services to involve in the secondary part of the investigation. The selection comprises 13 Western European case studies (6 Italy, 4 U.K., 2 France, 1 Belgium) and 7 Eastern Asian (3 China, 2 Japan, 2 South Korea).



The interventions focus primarily on offering befriending and companionship services, educational and entertainment mediums, promoting communication with relatives, co-housing, psychological support, and promoting independence through health monitoring and running errands. Such offerings are delivered through the employment of a person (paid personnel or volunteers), phone/video calls, and technological devices.

In next page

Table 3.1 Table of the case studies analyzed. Source: the author.

Name of the case study	Country	Location	Dimension of the city	Micro/Meso/Macro level	Actors' profile	During COVID	Engagement of seniors	Mean of delivery (calls, volunteers...)	Keywords	Is it still active?	When it was established	Methods used, if any
1 Anima Domus	Italy	Figline e Incisa	10k to 25k	Meso-micro	Support, psychologist, social services, volunteers	Initially the project was organizing home-visits to keep company to the elderly. Having started the service with the pandemic it was decided to organize the service remotely	Referrals of seniors from individuals, healthcare professionals and the community	Videall and phone calls to keep company, support and check the senior	Company, Psychology, Health monitoring	YES	2021 - started the ideation in 2019	NOT REPORTED
2 bfriend	UK	Doncaster	100k to 200k	Meso	Seniors: over 65 y.o. (in many cases they are much older) Volunteers: Various people interested in helping an living in the neighbourhood where the service is active Students from the local college also participate by doing befriending services and organizing the social meetings (quiz, classes...)	Searching new volunteers for befriending activities, organized phone activities such as a quiz held by college students	Online websites, Social Media, Referrals of seniors from individuals, GPs, district nurses, friends or families.	Volunteers that decide to dedicate their time to the organization	Company, Community activities	YES		co-design
3 Community Navigator	UK	Northern Ireland	----	Macro	Seniors: over 50 y.o.	---	Referrals of seniors from individuals, healthcare professionals and the community	Phone calls to get to know the service and to arrange meetings Volunteers and professionals that become Community Navigator and establish connection with seniors at their home	Company, Health monitoring, Community activities	YES		NOT REPORTED
4 Emergenza solitudine	Italy	National	----	Micro	over 60 seniors professional psychologist and volunteers	Created specifically for the COVID pandemic	Facebook page, digital flyer,	Calls and volunteers	Psychological support, Resilience, Company	NO	2020	NOT REPORTED
5 Everytime.com / 每周次网	China	Hangzhou - National	----	Meso	Any middle age person and senior comfortable with technology, accessing Apps and navigating online	---	Though WeChat, social media, media and word of mouth	Website and App to access to the system Wechat account to get general informations about the company	Socialization, Educational, Entertainment, Social clusters	YES	2017	NOT REPORTED
6 Grammediays	Belgium	Various cities	----	Meso	Seniors (no age specified) Families and relatives that want to share photos and news about the family and live far from the seniors	In partnership with King Baudouin Foundation and similar services (Famileo - FR and Tibu News freely for 3 months to 1300 people in April 2020.	Printed magazine created by the family	Printed magazine created by the family	Company, Communication	YES	ND	NOT REPORTED
7 Intergenerational Empathy Under One Roof	Korea	Seoul	1M to 10M	Macro	Seniors: over 60 years old and over, who owns a house and have a free apartment (main users are 70 y.o.) Hosted University students between 18-30 years old from rural areas, available to spend time with the seniors	---	In collaboration with Seoul 50 Plus, promotion activities, events in university apartment welfare centers, and senior citizens' homes	Company, co-housing	Company, co-housing	YES	2012	NOT REPORTED
8 Laoyou Live / 老幼直播	China	National	----	Macro - Meso	Actors: mostly middle-aged people between 35-55. Seniors - no specific age, have to be comfortable with technology, accessing Apps and navigating online	---	---	Live broadcasts and videos on demand through the App and computer platform	Entertainment, Live streaming	Like YES	2016	NOT REPORTED
9 Lo so che non sono solo	Italy	Verona	100k to 200k	Meso	Seniors over 80 years old	Started during COVID pandemic to provide support to seniors not followed by the municipality's social services	8700 letters to over 80 y.o. seniors living alone in Verona, flyers with the explanation to the service about it; a variety of phone numbers related to the specific area - to simplify the management of the service	Public phone number, one generic about the service and to offer information with the "Summertime guidelines for seniors"	Herrands, Health monitoring, Delivery	YES	2020	Interviews and questionnaires
10 Myrdi blue	France	Paris	1M to 10M	Micro	Not just seniors, any person suffering from depression Marketed to healthcare professionals	---	---	bracelet can record various physiological data (heart rate, blood pressure, temperature body etc.) but also some behavior of an individual, his environment or electronic emissions to which they are exposed to App that will collect all the data and share it with health professionals	Psychological support, health monitoring	NO	2015-2016	NOT REPORTED
11 Nippon Active Life Club (特定非営利活動法人ニッポンアクティブライフクラブ)	Japan	National	----	Macro	elder primarily seniors	---	---	Volunteers	Small herrands, health monitoring, general support	NOT REPORTED	1994	NOT REPORTED
12 No alla Solit'Udine	Italy	Udine	50k to 100k	Meso-Macro	over 65 y.o. residing in Udine, living alone, without family networks, in poor health, cases of fragility, due to states of poverty or socio-economic situations of considerable criticality.	Supported the Protezione Civile in delivering services for the entire city (not just seniors) Free public phone number, available during week days operated by volunteers Free public phone number, available during week days operated by volunteers Municipally website	Printed Media (flyers), Referral system (NGOs, family and friends can refer seniors to the social service database, Municipally website)	Free public phone number, available during week days operated by volunteers Free public phone number, available during week days operated by volunteers	Transport, Delivery, Errands, Home Company	YES	2004	NOT REPORTED
13 Nonni con Lode	Italy	Turin	500k to 1M	Meso	Volunteers: university students, particularly the ones who have just moved to Turin to study Seniors: over 60-years-old, living alone and/or in critical socio-economic situations	---	Official website	Official website	Learning, Activities, Cross-generation	YES	2016	NOT REPORTED
14 Nugu	Korea	National	----	Macro - Micro	All age groups- from kids to seniors	---	---	Aia Ai system (electronic AI speaker Nugu) for seniors and young people. Capable to recognize users is having an emergency checks the situation and alerts support in case of need	Health monitoring, Communication, Entertainment	YES	2019	in-depth survey of 670 users (seniors living alone) to identify usage patterns and effects of AI Care. The average age of the respondents was 75 years and the gender proportion was 30 percent male and 70 percent female.
15 Papero - 「ハート」	Japan	Fujieda	100k to 200k	Meso-Macro	Households aged 65 and over who are alone or who are identified as requiring support or nursing care	The service was ideated and delivered during COVID and provide companionship while ensuring social distancing	Municipally website	Emergency number organized by a security company (NEC) and coordination by the Community Comprehensive Care Promotion Division (municipality)	Health monitoring, Entertainment, Communication	YES	2020 (3-month pilot program between July and September - active since October)	NOT REPORTED
16 Telefono d'Argento	Italy	Correggio	25k to 50k	Meso / Macro	People over 65 who live alone or who are alone during the summer months. Seniors: over the age of 50, able to care for themselves Volunteers: Members can be volunteers, the idea is that younger adults take care of the older ones	Opened during also spring time	Phone calls to the seniors, posters around the city, flyers?	Phone calls made by public health staff, volunteers of local organizations (volontari AVO) and social workers	Company, Health monitoring	YES	2017	NOT REPORTED
17 The Circle	UK	London, Rochdale	50k to 100k	Meso-Macro	Seniors: over the age of 50, able to care for themselves Volunteers: Members can be volunteers, the idea is that younger adults take care of the older ones	Shifted their offering online	Flyers, Posters in community areas	Calendar and newsletter material delivered physically by the Post or via email Socialization and hobby-dedicated events hosted in local shops and cafes, have access to dedicated discounts Walking and trekking events seniors	Company, Small herrands	YES	2015	Co-design, interviews
18 The Silver Line	UK	Nationwide	----	Micro/Meso	Seniors: over 65 y.o for the general offering for the Telephone friendship: over 60, own direct telephone number (landline or mobile), able to use the service over the phone, can commit to talking to someone at the same time every week Trained volunteers	---	Website, Social media, Word of mouth	Phone calls made by trained volunteers of different charities (The Silver line and Age UK)	Company, Health monitoring	YES	2012	NOT REPORTED
19 Time Bank for the Aged	China	Various cities	3M to 26M	Meso-Macro	Volunteers: open to all adults, particularly to younger seniors aged between 50 and 70 Seniors: over 70-years-old, living alone	---	Flyers, Posters in community areas, WeChat, Bank of China website	WeChat miniprogram through which elders can post their needs and volunteers can see and connect with them. There are area coordinators that keep track of the interventions, the number of seniors and volunteers engaged and the time cons exchanged. Service station in the community to ask for help in case seniors have problem with using WeChat	Health monitoring, Herrands, Delivery, Home Company	YES	2011 circa	NOT REPORTED
20 Vellier Sur Mes Parents ("Watch Over My Parents")	France	National	----	Meso / Macro	Seniors: Service providers: Postmen specially trained in relations with seniors, with the collaboration of gerontologists and psycho-gerontologists from the Gérontopôle des Pays de la Loire, Call center staff	Made the home visit service free for everyone in need once a week, ensuring social distancing and protective measures. They could require the service by calling the number of the Poste (8000 application in March)	Registration on the post website, publication on specialized medias (website/ social media page)	Postmen that deliver interventions and keep company to the seniors Call center to provide everyday support	Company, Small Errands, Health monitoring	YES	2017	NOT REPORTED

Case studies



Figure 31 Presentation of Anima Domus with the stakeholders. Source: <https://www.gonews.it/2021/03/24/figline-combatte-la-solitudine-da-pandemia-con-animadomus/>

Anima Domus - Figline e Incisa, Italy

Anima Domus is home-based assistance and befriending service located in Figline e Incisa, Italy. It is delivered in collaboration with the municipality of Figline e Incisa and a series of local associations. The seniors involved in the service are assigned to a dedicated social worker, who sets up a specific intervention plan based on their needs and the discussion with their families. In addition, thanks to the volunteers of the associations, the seniors get weekly remote meetings to socialize over the phone or via video call.

Additionally, seniors get periodically monitored regarding their health condition and progress, which are tracked through evaluation forms filled out after each call. The data collected are being used to help the service provider and the municipality to understand the impact of Anima Domus and to design future interventions for the frailer seniors. (Paoletti 2021; Ufficio Stampa - Comune di Figline e Incisa 2021; Venturini 2021)

Actors targeted:

Seniors

Support: psychologist, social services, volunteers

Engagement of seniors:

Not listed

Main touchpoints:

Videocall and phone calls to keep company, support and check the senior

Volunteers

During the COVID-19 pandemic:

Initially the project was organizing home-visits to keep company to the elderly. The service was started during the pandemic, which led to the requirement of delivering the service remotely.



Figure 3.2 Social activities offered by b:friend. Source: b:friend Facebook page

b:friend - Doncaster, U.K.

b:friend is a volunteering befriending service that proposes one-to-one befriending activities and social clubs for seniors. Volunteers go doing weekly visits to the senior's home, lasting one hour each. The two actors are paired based on location and personal interests to facilitate the conversation. The elders receive regular support throughout the process to ensure they benefit from the project.

Additionally, b:friend organizes social clubs held in Doncaster, where seniors are entertained with various activities, including culinary experiences, dancing, physical exercise, and makers labs. Some of these meetings are held in collaboration with students from the local college, who organize dedicated activities such as quizzes and classes. b:friend is coordinated by the association that carries its same name. (Sheffield City Council 2021; b:friend n.d.)

Actors targeted:

Seniors: over 65 y.o.

Volunteers: living in the neighborhoods where the service is active, workers or students from the local college

Engagement of seniors:

Online websites, Social Media, Referrals of seniors from individuals, GPs, district nurses, friends or families

Main touchpoints:

Volunteers

During the COVID-19 pandemic:

It launched a campaign for enrolling new volunteers to be deployed to the befriending activities. In addition, phone activities were organized in substitution of the social clubs, such as remote quizzes held by college students.



Working with the Northern Health and Social Care Trust to link older people to services and activities within their local community



The Community Navigator service is a partnership project delivered throughout the NHSCT area by Age NI, Building Communities Resource Centre and Mid & East Antim Agewell Partnership funded by NHSCT and the Public Health Agency.



Community Navigator - Northern Ireland, U.K.

The Community Navigator is a service delivered by the section of Age UK in Northern Ireland. The intervention helps older people access local services and activities, monitors their health and personal independence, and links them to the community and volunteering associations. The volunteers involved support the local health and social trust by providing them insights into the needs of the local seniors and mapping existing services. (Department of Psychiatry 2019; Age NI 2021)

Actors targeted:

Seniors: over 50 y.o.

Engagement of seniors:

Referrals of seniors from individuals, healthcare professionals, and the community

Main touchpoints:

Phone calls to get to know the service and to arrange meetings

Volunteers and professionals that become Community Navigator and establish connections with seniors at their home

During the COVID-19 pandemic:

Not reported

Figure 3.3 Poster presenting the Community Navigators. Source: <https://www.ageuk.org.uk/northern-ireland/services/carewellbeing-services/community-navigator/>

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Figure 3.4 ADV poster for Emergenza Solitudine. Source: <https://www.csvtaranto.it/blog/emergenza-solitudine-il-servizio-telefonico-gratuito-per-gli-anziani-soli>

Emergenza solitudine - Nationwide, Italy

Emergenza solitudine is a call service that offers psychological and companionship support to the seniors in need. It was established to support the elders during the lockdown in April 2020 by Senior Italia FederAnziani, in collaboration with the WINDTRE, SIPEM SoS, and Società Italiana di Psicologia dell'Emergenza. (Senior Italia FederAnziani 2020b; 2020a)

Actors targeted:

Over 60 seniors

Professional psychologist and trained volunteers

Engagement of seniors:

Facebook page, digital flyer

Main touchpoints:

Calls and volunteers

During the COVID-19 pandemic:

It was created specifically for the COVID pandemic

Everytime.com | 每次网 - Nationwide, China

Everytime.com is a platform targeted at people aged over 50 years old, promoting active ageing. The service offers information and services related to lifestyle and daily care.

Included in the offering, seniors can be clustered in social circles according to their interests and preferences. These circles are independently created by the users and follow a specific topic, for example travelling or life skills. Seniors can also learn, share knowledge, find hobbies, and interact with friends.

The platform also offers content created by field experts regarding active ageing and social welfare products (such as pension, retirement financial management, medical consultation), presented through online meetings and dedicated activities. A point system ensures to reward the most active seniors on the platform, promoting a caring and dedicated community. The points allow users to enjoy badges, dedicated promotions, targeted activities, and other services. (Everytime Technology 2018)

Actors targeted:

Any middle age person and senior comfortable with technology, accessing apps and navigating online

Engagement of seniors:

WeChat, social media, media and word of mouth

Main touchpoints:

Website and App to access to the system
WeChat account to get general information about the company

During the COVID-19 pandemic:

Not reported

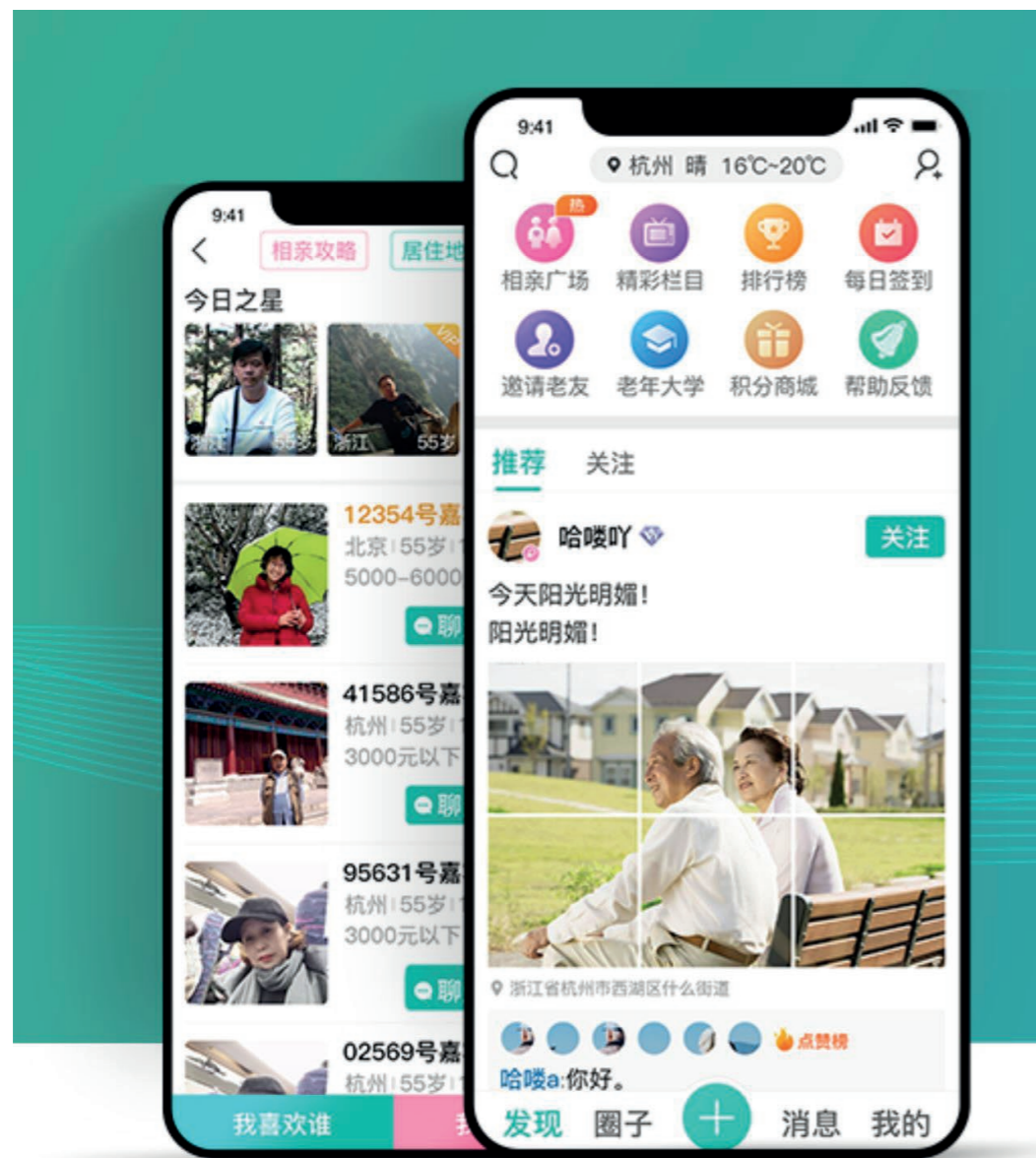


Figure 3.5 Screens of the Everytime app. Source: <https://www.mclife.com/shared-app.html>



Figure 3.6 Example of a magazine by Granniedays. Source: <https://www.webkonijn.be/creatieve-valentijn/>

Granniedays - Nationwide, Belgium

Granniedays is a side offering of a company called Happie Days, that offers a similar service. Every week the older person receives a newspaper that keep them informed of what is happening in the life of their loved ones. Children and grandchildren participate in the development of the paper by uploading photos and text to a dedicated app or the website, using a series of templates. The template chosen is then printed and sent to the recipient's home. (Granniedays n.d.; AGE Platform Europe n.d.)

Actors targeted:

Seniors

Families and relatives that want to share photos and news about the family and live far from the seniors

Engagement of seniors:

Website, Social Media

Main touchpoints:

Printed magazine created by the family

During the COVID-19 pandemic:

In partnership with the King Baudouin Foundation and similar companies located in other countries (Famileo - FR and Tribu News - UK), the service was offered freely for 3 months to 1300 people in April 2020.



Figure 3.7 Interaction between seniors and students. Source: <https://www.asiaone.com/singapore/nus-students-help-seniors-age-well-home>

Intergenerational Empathy Under One Roof - Seoul, Korea

The program matches older homeowners with university students from the remote countryside, who have difficulties in finding adequate places to live. Homeowners lease their spare rooms to the students at half the market rate and the students provide the old people with some practical services, such as running errands and doing chores. Older people benefit economically and emotionally while university students get secure, low-cost, good-quality housing near their campus.

Collaborating with Seoul 50 Plus, the Generational Empathy Coordinators conduct programs to promote local activities (promoting the business, new application reception, and consultation), match support (operational support for matching between college students and seniors), and follow-up management (monitoring of participants). (Suh 2020; Housing Policy Division n.d.)

Actors targeted:

Seniors: over 60 years old and over, who own a house and have a free spare room

Hosted: University students between 18-30 years old from rural areas, available to spend time with the seniors

Engagement of seniors:

Promotion activities, events in university districts, libraries, senior citizen welfare centers, and senior citizens' homes

Main touchpoints:

Volunteers

During the COVID-19 pandemic:

Not reported.



Figure 3.8 Laoyou Live app. Source: https://www.laoyouzhibo.com/home/about_us

Laoyou Live | 老柚直播 - Nationwide, China

Laoyou Live is a broadcast platform that supports middle-aged and older people to chat and share their interests. The platform is structured to give a karaoke-like atmosphere and provides a catalogue of old songs to enjoy. The app also offers group chats, one-click live broadcasts, filters, and colourful gifts and emojis. (Zhihu 2019; Laoyou n.d.)

Actors targeted:

Cater primarily seniors

Engagement of seniors:

Not listed

Main touchpoints:

Volunteers

During the COVID-19 pandemic:

Not reported.



Figure 3.9 Old lady doing a phone call. Source: Flickr

Lo so che non sono solo - Verona, Italy

Designed by the municipality of Verona, the service is dedicated to the social support of seniors fighting loneliness and isolation. It was ideated to be active primarily during summertime, as in this period people flee the city, services close and seniors find themselves frailer and with less support from their relatives. Through a telephone system, the service monitors the elderly by chatting with them and giving help with their daily needs, such as shopping and small errands. The service is delivered by the local community centres and 5 associations of the territory to substitute the existing recreational services. (Ufficio Stampa - Comune di Verona 2020a; 2020b; Assessorato ai Servizi Sociali - Comune di Verona 2022)

Actors targeted:

Seniors over 80 years old, living alone, residents of Verona

Engagement of seniors:

8700 letters to over 80 y.o. seniors

Flyers with an explanation of the service included in the "Summertime guidelines for seniors"

Main touchpoints:

Public phone numbers: a general one dedicated to offer information about the service and a series of phone numbers dedicated to each area of the municipality, aimed at simplifying the management of the service.

During the COVID-19 pandemic:

Lo so che non sono solo solo was started during the COVID pandemic to provide support to seniors who were not followed by the municipality's social services. After the pilot was held in the summer of 2020 and with the extension of the lockdown measures, it was kept active also during winter.



Figure 3.10 Example of a wearable device for e-Health. Source: <https://www.docwirenews.com/docwire-pick/future-of-medicine-picks/top-5-wearable-medical-devices/>

Mynd blue - Paris, France

Mynd blue is a service system that collects biological biomarkers for depression, one of the major psychological risk factors for loneliness.

The patient is monitored through a wearable device, which collects medical-grade data related to physiology, sleep, and the environment. Artificial intelligence analyses the data identifies individual biomarkers, and finds patterns. Clinicians can verify the insights and use the information to find alterations to the patient's needs and to adjust interventions and treatments. When warning signs of depression are detected, doctors receive an alert through the website or app. This allows them to take proactive measures to contrast the starting phases of depression or structure a treatment. (Myndblue n.d.; Editorial Staff - Silver and co. 2019; Diament 2016)

Actors targeted:

Any person suffering from depression
Marketed to healthcare professionals

Engagement of seniors:

Not listed

Main touchpoints:

Bracelet able to record various data (heart rate, blood pressure, temperature body etc.)

App that collects the data and share it with health professionals

During the COVID-19 pandemic:

Not reported

Nippon Active Life Club | 特定非営利活動法人ニッポン アクティブライフ クラブ - Nationwide, Japan

The service is based on the concept of time banks. People can exchange "time-dollar" by offering to volunteer and do any skills they have, according to their availability. Members contribute to their local communities by helping with household chores, picking up and dropping off residents, providing care to the elderly, and helping out at welfare facilities.

Seniors send a request to NALC, who will contact volunteers that can either accept or not the job. After being completed, NALC assigns the time points to the volunteer. (Ng 2017)

Actors targeted:

Cater primarily seniors

Engagement of seniors:

Not listed

Main touchpoints:

Volunteers

During the COVID-19 pandemic:

Not reported



(NPO法人)
ナルク入会ご案内
(NALC)

特定非営利活動(NPO)法人 ニッポン・アクティブライフ・クラブ
事務局:〒540-0028 大阪市中央区常盤町2-1-8親和ビル4階
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ホームページ <http://nalc.jp>



あなたと一緒にナルクのシステムで
“未来創り”に参加しませんか?



人生80年の時代。たっぷりある時間を、あなたはどのように過ごされますか。
「ナルク(NALC)」は「自立・奉仕・助け合い」をモットーに、夫婦で参加する画期的なボランティア団体です。社会と人に役立ち、「健康」と「生きがい」を得、支え合えるアクティブシニアがたくさんいます。「生涯現役」を合い言葉に、さあ一緒に活動しましょう。

ナルクの事業

- 会員それぞれの経験や特技・能力を生かした社会貢献活動をする中で素晴らしい仲間と出会えます。
- 高齢者・障害者の支援や介助、三世代子育て支援、道路・河川などの環境美化のボランティア活動が柱です。
- 福祉サービスの充実を図るために、第三者評価、外部評価、介護サービス情報の公表などの調査・評価に係る活動。
- 企業と協力して生活研究アドバイザーが調査研究、各種研修事業、会報及び映像、出版物などの発行。

困ったときはナルクがあります

- ナルクは全国ネットとして、各市町村毎に活動拠点を増やすことを目指しています。
- ナルクの大きな特長は、時間預託制度です。ボランティアをした時間を点数に換算し、貯めておくことで、将来、あなたや配偶者、ご両親などがボランティアが必要なときに、点数を引き出し、電話一本でボランティアを受けることができます。また地域の河川敷や公園の清掃など会員が協力して行う奉仕活動や、ハイキング・カラオケなど健康のための自立活動も活発です。

Figure 3.11 Presentation of the NALC offering. Source: http://nalcmobara2.g2.xrea.com/nyukai_goannai.pdf



Figure 3.12 Presentation of No alla Solit'Udine with the stakeholders. Source: <https://www.telefriuli.it/cronaca/progetto-no-alla-solitudine-rinnovato-il-protocollo-d-intesa-tra-comune-e-associazioni/2/212602/art/>

No alla SolitUdine - Udine, Italy

No alla SolitUdine is a service coordinated by the city of Udine and delivered by a series of local associations on the municipal territory. Although the name recalls the social sphere of the intervention, being called in Italian "No to loneliness", the offering includes both initiatives to fight loneliness and support to daily life activities.

Initiatives for loneliness include providing information about initiatives for active ageing and providing home-based companionship, which includes readings, walks and conversation opportunities. The support for daily activities composes a remarkable section of the offering, as it includes the delivery of medical reports and medications, running small errands, grocery shopping, minor home repairs, transport, and booking medical visits or exams.

Volunteers collect requests to be registered to the service through a toll-free phone number. The applications are collected in a digital register, from which volunteers can assign the elder the adequate services needed and refer them to the local NGOs or to the program's volunteers. A project director does the coordination between associations, municipality, social services, and staff.

In 2020, No alla SolitUdine won the award "Premio Persona e Comunità 2019" for its social contribution; the prize was assigned by the Centro Studi Cultura e Società of Turin, Italy (Assessorato alla Sanità, Assistenza, Sociale, Rapporti di Udine 2021; "Il progetto No alla Solit'Udine 2020 - 2022" 2020).

Actors targeted:

Seniors over 65 y.o, residing in Udine, living alone, lacking family networks, with varying degrees of fragility, low socio-economic or poverty status

Engagement of seniors:

Printed Media (flyers), Referral system (seniors are recommended by associations, family or friends), Public social service database, Municipality website

Main touchpoints:

Free public phone number, available during weekdays operated by volunteers
Front offices, open in the weekdays (morning) operated by volunteers

During the COVID-19 pandemic:

No alla SolitUdine supported the Protezione Civile (Civil Protection) in delivering services targeted to the entire citizenship, including grocery delivery, medicines and masks. Additionally, it kept the transport and companionship services available to the seniors.



Figure 3.13 Presentation of Nonni con Lode to university students. Source: <https://www.universitari.to.it/2018/11/nonni-con-lode.html>

Nonni con Lode - Turin, Italy

Nonni con Lode is an intergenerational volunteering program ideated to put in contact with older seniors and university students. The service aims to build relationships of mutual support through the organization of meetings and the exchange of competencies. Students can learn several skills: sewing, cooking, ironing, gardening, repairing small appliances, and art.

Seniors and students get matched together according to the skillset selected. The pairing gets to meet five times in total. The first three times are held at the senior's house, where they held their lessons to the volunteers. After that, two meetings are dedicated to accompanying the elder in two activities chosen with the volunteer. At the end of the series of encounters, both parties get to do a questionnaire regarding the satisfaction of the activities done.

Nonni con Lode is delivered in collaboration with Ufficio Pio della Compagnia di San Paolo and the Pastorale Universitaria of the diocese of Turin (Servire con Lode n.d.; Pastorale Universitaria Diocesi di Torino 2018; Futura Magazine 2020; Vinci 2019)

Actors targeted:

Volunteers: university students, particularly the ones who have recently moved to Turin to study

Seniors: over 60-years-olds, living alone, and/or in a critical socio-economic situation

Engagement of seniors:

Official website (only channel reported), the service was reported by different news outlets in the past

Main touchpoints:

Volunteers, website of volunteering association

During the COVID-19 pandemic:

Not reported



Figure 3.14 The Ai speaker NUGU. Source: <https://www.behance.net/gallery/72198995/SKT-NUGU-Candle>

NUGU - Nationwide, Korea

NUGU is an e-Health service that uses AI to interact with and manage data from seniors. The service was developed and delivered using Aria AI system, Telecom's AI speaker NUGU, the ICT Care Center, and ADT Caps. Home speakers, 5G network, and virtual reality programs allow to offer remote care services to 3,200 people living in Korea.

The system provides notifications for taking medicines, helps physical and psychological health, connects the seniors with their doctor, and schedules reminders. Seniors can also have a small chat with the device and be greeted daily. During these chats, NUGU is trained to recognize trigger words and to recommend a visit by public health officials.

In Seoul, a pilot offering provides social workers access to the digital dashboard, allowing them to contact or visit the seniors when they do not use the device for more than 24 hours. An SOS service allows the senior to warn in case of an emergency. When the individual says "Aria, help!" or "Aria, Emergency SOS!" the speaker will automatically report the alert to the CT Care Center and ADT Caps. Both actors will check the situation and contact the emergency services in case of need. (Eun-jin 2020; NUGU n.d.; Associated Press - New York Post 2020)

Actors targeted:

All age groups - from kids to seniors

Engagement of seniors:

Not listed

Main touchpoints:

Aria AI system

Telecom's AI speaker Nugu

ICT Care Center and ADT Caps

During the COVID-19 pandemic:

Not reported



Figure 3.15 PaPeRo communication robot. Source: <https://www.city.fujieda.shizuoka.jp/soshiki/kenkofukushi/chiikihokatsu/oshirase/14958.html>

PaPeRo | 介護ロボット - Fujieda, Japan

The service, fully named “Mimamori Papero”, offers entertainment, socialization opportunities and support to seniors living in the city of Fujieda.

The offering is delivered through “PaPeRo”, a humanoid communication robot equipped with a screen to access visual contents. Seniors can use the robot for a multitude of purposes, including:

- Have a conversation with PaPeRo,
- Socialize with up to 20 relatives and friends by calling them or sending text, voice messages and pictures,
- Do gymnastic exercises,
- Watch videos on YouTube.

The device also allows monitoring of its user’s health by recognizing activity patterns. When PaPeRo does not detect the senior’s face three times in a row during the day, an alert is sent to a security company, the family and the municipality. Furthermore, an emergency button allows full access to Fujieda City’s emergency call service.

The service has a monthly rate of 700 ¥ if the house is equipped with Wi-Fi, otherwise the price rises to 1,580 ¥/month. (NEC 2020; Fujieda City 2020; Urru 2021)

Actors targeted:

Over 65-year-old households, living alone or certified as requiring support or nursing care

Engagement of seniors:

Municipality website

Main touchpoints:

PaPeRo

Emergency number organized by a security company (NEC) and coordinated by the Community Comprehensive Care Promotion Division, a subdivision managed by the municipality

During the COVID-19 pandemic:

The service was ideated and delivered during COVID to provide companionship while ensuring social distancing.



Figure 3.16 Poster of Telefono d'Argento. Source: <https://www.comune.correggio.re.it/emergenza-coronavirus-ritorna-il-telefono-dargento/>

Telefono d'Argento - Correggio, Italy

Telefono d'Argento is a summertime-only call service to support fragile elderlies in Correggio's municipal area. The intervention aims to increase access to social support and to map this group in the area in order to be able to offer more targeted services to citizens in the future.

Seniors can call for the support of small chores and company during the summer. In addition, elders can be referred by the service to health operators, who contact them to get information on their health status and to give information about additional services available. The service is funded by Lions Club of Correggio e Fabbrico and delivered in collaboration with the AUSL Reggio Emilia, the municipality, the regional social service, the Caritas of Correggio, and the association AVO Correggio. (Ufficio Stampa - Comune di Correggio 2018; 2020; Ordine Professioni Infermieristiche - Bologna 2017)

Actors targeted:

People over 65 who live alone or who are alone during the summer months

Engagement of seniors:

Phone calls to the seniors, posters around the city, flyers

Main touchpoints:

Phone calls made by public health staff, volunteers of local organizations (volontari AVO) and social workers

During the COVID-19 pandemic:

The service was available also during the spring time



Figure 3.17 Meetup of the Circle's volunteers. Source: The Circle Facebook page

The Circle - London and Rochdale, U.K.

The Circle is a membership-based service open to anyone over 50. Initially designed by Participle for the city of London, in 2012, the original project was readapted and re-proposed in Rochdale by the Heywood, Middleton & Rochdale Circle. The service builds a community that includes over 50-year-olds by providing a rich and diverse offering to support the older and frailer members.

Each membership includes a series of benefits, including contacting one of the local volunteers to ask for help with gardening, technology, and household tasks. Each month there is a series of social gatherings organized by the Circle, including lunches, day trips, labs, and structured activities. The price starts from £20 yearly and couples adhering to the service can access dedicated discounts. (Heywood, Middleton & Rochdale Circle 2021; Cottam 2018)

Actors targeted:

Seniors: over the age of 50, able to care for themselves

Volunteers: Members can be volunteers, but younger adults are preferred

Engagement of seniors:

Printed ADV, including flyers and posters in community areas

Official website of Heywood, Middleton & Rochdale Circle

Main touchpoints:

Calendar and newsletter material delivered physically via post or via email

Socialization and hobby-dedicated events are hosted in local shops and cafés, where volunteers can have access to dedicated discounts

Walking and trekking events for seniors

During the COVID-19 pandemic:

It was decided to shift their offering online



Figure 3.18 Senior using the Silver line. Source: <https://mcf.org.uk/2020/01/silver-line-brings-christmas-cheer-to-older-people/>

The Silver Line - Nationwide, U.K.

The Silver Line is a free helpline for seniors that need a confidant or want to have a conversation with someone. The service ensures confidentiality, so seniors can open up with volunteers and discuss their problems or concerns. In case of abuse, seniors are reported to the social service of the area or to the police to receive support. The Silver Line is delivered by a branch association of Age UK, firstly started by Dame Esther Rantzen when thinking of her firsthand experience with loneliness.

Additionally, seniors can register for the "Telephone Friendship Service", delivered in collaboration with Age UK. It is a free telephone friendship service for people aged 60 and over who'd like to talk to someone on a regular basis. Seniors express their interests and are matched with a volunteer for a weekly chat over the phone at a scheduled time. (Age UK 2021; The Silver Line 2021)

Actors targeted:

Seniors: over 55 y.o for the general offering
for the Telephone friendship: over 60, own direct telephone number (landline or mobile), able to hear and be understood over the phone, can commit to talking to someone at the same time every week

Engagement of seniors:

Official website of the association, Social media, Word of mouth

Main touchpoints:

Phone calls made by trained volunteers of different charities (The Silver line and Age UK)

During the COVID-19 pandemic:

Not reported



Figure 3.19 WeChat mini program for the Time bank. Source: <https://www.shine.cn/news/in-focus/2101082894/>

Time Bank for the Aged - Various cities, China

The service consists in an online platform that connects volunteers with elderly people in need, based on the concept of a time bank. The intervention was developed by the Bank of China and incorporated already existing associations that had experience in supporting seniors locally.

The community of associations and volunteers help the elderly citizens to publish the errands they need. People can then propose themselves as volunteers to tackle the tasks; each hour of service equals a one-time coin, which can be used to request services from other volunteers.

The most requested tasks required by seniors are company, small errands such as grocery shopping, health monitoring, help with household chores, and support in daily activities. (Shengjie 2021; D. Liu 2020; Yan 2021; Xinhua 2019)

Actors targeted:

Volunteers: open to all adults, particularly to younger seniors between 50 and 70.

Seniors: mainly over 70-years-olds, living alone.

Engagement of seniors:

Flyers, Posters in community areas, WeChat, Bank of China website

Main touchpoints:

WeChat mini-program through which elders can post their needs and volunteers can see and connect with them. There are area coordinators that keep track of the interventions, the number of seniors and volunteers engaged and the time coins exchanges.

Service station in the community to ask for help in case seniors have problems with using WeChat

During the COVID-19 pandemic:

Not reported



Figure 3.20 A user of the service and a mail carrier. Source: <https://www.newyorker.com/culture/annals-of-inquiry/in-france-elder-care-comes-with-the-mail>

Veiller Sur Mes Parents - Nationwide, France

Veiller Sur Mes Parents, which translates to “Watch Over My Parents” in English, is a comprehensive service delivered by the national post service La Poste. After paying a subscription fee, seniors and their families access a series of offerings, including home health services, companionship, support in daily tasks and financial services. (Poll 2019; Mes Médicaments Chez moi n.d.; La Poste n.d.)

The most relevant offerings for the scope of this analysis are:

- Elders and families can keep in touch thanks to the mail carrier’s visit, who passes from one to six times a week to the senior’s house. To detect the needs of the elderly daily (breakdown service, repair, shopping, outing ...) and to inform relatives, at the end of each visit, the postman produces a report via the “Watch over my Parents” Dashboard, available on the La Poste site and the dedicated app. Included in the service, seniors can receive a monthly personalized gazette called “Famileo”. Famileo is an entirely private family site that allows the family to send news (messages, photos) to seniors who are not used to digital platforms. All messages are automatically laid out and printed as a journal and bimonthly magazine.
- The 24/7 remote assistance to ensure independence of the seniors safely at home. In case of need (fall, faintness, etc.), thanks to a connected device, the seniors are immediately in touch with a Tele-assistance platform, which contacts the relatives and organizes help if necessary.
- La Poste sells specially designed devices for elders to navigate online. The price includes the cost of the device and access to an internet connection.

Actors targeted:

Seniors

Service providers:

Postmans specially trained in relations with the elderly, with the collaboration of gerontologists and psycho-gerontologists from the G erontop ole des Pays de la Loire

Call center staff

Engagement of seniors:

Registration on the post website, publication on specialized medias (website/social media page), Printed media

Main touchpoints:

Postmen that deliver interventions and keep company to the seniors

Call center to provide everyday support and remote assistance

During the COVID-19 pandemic:

The home visit service became free for everyone in need once a week, guaranteeing social distancing and the use of protective measures. Anyone could require the service by applying on the website of La Poste. In March 2020 it was reported to have collected 9000 applications nationally.

3.3. In-depth analysis of 5 Italian case studies

The limitations of information available for certain case studies have led to the decision to proceed with an in-depth analysis of a selection of case studies. Five Italian case studies were selected according to the variety and typology of offerings provided and were contacted for an interview. The interviews were held with a coordinator of each service in Spring 2021, focusing on the role of the stakeholders in the service, segmentation of the offering, funding, engagement of the seniors, and advertisement.

Following, the main information collected about the case studies have been presented in chronological order.

3.3.1. No alla SolitUdine

Interviewee and date: Municipal coordinator of the project - 16th April 2021

Typology of intervention: Meso-Macro

Why was it chosen: service that includes various local actors and proposes different levels of interventions, its longevity and ability to adapt to the new needs of the seniors and of the associations

Information analyzed: organization of the service, the role of the stakeholders - particularly associations, how the service is perceived, target users, the impact of the service

Organization of the service:

The service is carried out by dedicated municipal staff and volunteers from various associations of Udine. The municipal staff comprises three phone operators who manage requests and coordinate interventions and a person dedicated to the coordination of the project as a whole, including the management of the various associations.

Citizens contact No alla SolitUdine through a toll-free number and a public office open during the week. Both touchpoints are managed by municipal employees, which can be limiting as the service is active only during municipal office hours (08.30-13.00). In the afternoon, the staff manages the requests collected during the morning. To date, the service has also been extended to loneliness caused by COVID.

Stakeholders:

No alla SolitUdine incorporates 20 associations, the majority of which have been present since the set-up of the service (2004), as they represent its "core". Throughout the years, the only changes among the pool of associations have been correlated to the closure of the NGOs themselves.

There are two types of associations:

- Associations with the direct participation of volunteers help to deliver the offerings and to reach the target locally.
- Associations that offer social and organizational support are mainly involved in general activities for citizens, such as meetings on active ageing.

These latter participate in the project to obtain local and European funding. As they are more experienced actors, they are more capable of accessing opportunities and funding.

No alla SolitUdine collaborates with these actors on two levels: delivering interventions tailored to the users' needs and establishing a network of actors supporting the municipality. This cooperation is promoted by supporting the organizations in the enrollment of new volunteers through dedicated courses. In addition, the activities aim to fulfil a relevant association problem: the generational turnover of volunteers who start volunteering after retirement. An additional benefit provided to the organizations is the municipal funding assigned directly to the association. Despite being a modest amount, the contributions are stable over time. In addition, extra contributions and municipal funding have arrived to contribute to the new costs the associations have faced due to the pandemic, intending to reward and reimburse them for the risk of contagion.

"The associations are really the core of No alla SolitUdine, without them the service would not be here"

Users:

While the service is targeted at over-65-years-old people, with COVID and the consequent quarantines, the age range of its users has decreased. During the pandemic, some regular users died, and many people regressed socially and physically. An example is that those who had more contacts and participated in the activities are now more worried about going out, afraid of catching the virus and of the limitations imposed for the containment of the pandemic. Moreover, many elderly people have become more introverted and isolated, increasing their difficulty in asking for help. Compared to 318 users of 2019, in 2020 No alla SolitUdine quadrupled its audience to a total of 1300 users, who often requested only listening or information.

The advertisement techniques used are printed materials and word of mouth. In addition, a flyer was created and designed with associations to promote the project in public places, such as bars, pharmacies, and GP's offices.

During the first lockdown of the pandemic (March-May 2020) the toll-free number was advertised by Civil Protection, which had the number on the sides of the car. The toll-free number of No alla SolitUdine was the reference telephone number of the Civil Protection for the pandemic. Furthermore, the number was advertised by the remote assistance service offered in the area by the private company Pro Senectute. Pro Senectute has also remodelled its offering to propose a series of services for proximity and socialization, organizing daily phone calls in collaboration with the service. However, it was found that some perceive daily calls as an invasion

of their privacy. A group of seniors interested was included in a pilot, and now participants are growing as home company services have been suspended.

While No alla SolitUdine aims at offering practical assistance to a wider audience, the adherence to the "Città Sana" project has allowed to offer services for frailer seniors. In collaboration with the World Health Organization, the project focuses on proposing experiences and psychological support. The offerings are designed to target specific age groups, enhancing the socio-psychological components of each one.

Satisfaction for the service

To collect the feedbacks of the users, in 2019 the service has organized a round of questionnaires. When an operator passed to the senior's home to deliver the intervention, they also interviewed the user and filled in the questionnaire. This method of conduction questionnaires was chosen as the organizers felt that giving paper and pen to an elderly person was less reliable than interviews. Volunteers have built a relationship of trust with the senior, making the interview an occasion to chat.

A questionnaire was submitted to associations to understand the effects of COVID on their activities. The questionnaire dealt with the changes in the way of relating with the various stakeholders, the economic impact on associations, and the impact on volunteers (for example, longer time scales to carry out the same activity). The interviewee reported that they thought an interesting opportunity would be to make a comparison between pre and post-COVID by submitting new questionnaires to the elderly previously involved.

"2 years of difference constitutes a great leap for the elderly on a physical and cognitive level"

In addition to the questionnaires, No alla SolitUdine has 17-years-worth of data, mainly collected on paper. Only in the last few years the service moved to a digital recording system, which is being filled in with the older paper records to track the activities across time by some volunteers. Although its potentiality, the data have never been processed and there are no impact metric parameters.

The longevity of the service is to be attributed to the strong support of the associations who believe in the project and their collaboration. The network of associations that was created around the project encourages the active participation of the actors and the collaboration among associations. Although it has been considered an important offering to show closeness to the citizens, during the years the investments for the project have been limited and there is little political sensitivity which then turns into concrete support.

"On a political level, in fact, redoing a road or parking lots offer a greater return of votes, while welfare programs does not give the same platform. [...] The elderly, in fact, although they constitute 25% of the inhabitants of Udine, do not expect much (from the municipality) and do not make the news, as they will hardly go protest."

3.3.2. Emergenza solitudine

Interviewee and date: Spokesperson from SeniorItalia - 23rd April 2021

Typology of intervention: Micro

Why was it chosen: one of the few services that focus exclusively in micro and home-based interventions, delivered at the national level

Information analyzed: organization of the service, target users, reasons for suspension, perception and impact of the service

Organization of the service:

SeniorItalia established the project in partnership with an association of psychologists who frequently collaborate with Civil Protection during natural disasters or earthquakes. As they specialized in emergencies, SeniorItalia deemed them the most qualified to respond to the specific hardship linked to the current pandemic situation. As a result, 70 psychologists and operators were employed for Emergenza Solitudine to answer phone calls. Additional service partners included a phone company and a software company that supported the management of the calls. When calling a toll-free number, the elderly would hear a recorded voice explaining the service offering and privacy policy, after which the user would be directed to the first available operator.

SeniorItalia is a national federation with 3700 affiliated centers for seniors nationwide, making it possible to give a capillary response to the needs of citizens. While the associations in the network are the ones offering actual services, the federation carries out coordination operations and projects.

Emergenza solitudine was funded by the project's sponsors, as it would be impossible for the federation to carry out this kind of project individually. While it was set to be suspended in autumn, the protraction of the emergency led to its reopening during the Christmas period (between 26 November and the end of February). The decision was supported by the fact that the Christmas period is the most difficult for the elderly due to the co-presence of the winter season and the holidays. 40% of those over 75 y.o. declare that they have no one to talk to, as during this period many vital socialization centres are vital but closed.

Users:

Most users of the service were concentrated in the over-75 bracket since those over-65-year-olds tend to be more active and have higher social connections.

Although, geographically, no differences were found at a territorial level, the requests from users were generally equal throughout the national territory.

The daily calls to the project averaged around 150, with peaks after television commercials. Among these calls, many people used the service several times, often presenting strong psychic discomfort. Patients who needed prolonged help over time were invited to contact the local structures if present by making a report; however, these people frequently did not want to approach more long-term forms of support.

Perception and impact of the service:

To investigate the needs of the over-65-year-olds, an online survey was conducted among the Federation members via email. A total of 650 questionnaires were collected, divided into two periods: during the spring 2020 lockdown and in the autumn. In both cases, the need for psychological support was evident, as local associations already offered practical support.

In the second questionnaire administered in October, the psychological state of the elderly after several months of the pandemic was investigated. This resulted in a different type of discomfort, in fact, at the beginning, there was a greater sense of fear for the situation while later there was a greater sense of absence of hope for the future.

To raise awareness regarding loneliness, press office activities were carried out mainly through television, advertising on popular social media for the age group, and an email was sent to the associations of the Federation. The capillarity of the local centers allowed SeniorItalia to get in touch with seniors from different regions through digital channels.

Shortly after the launch of the service, the government offered a similar service for all age groups. However, the benefit of having associations organizing services of this sort is that they can manage greater flexibility of intervention and higher reactivity in response to the citizen's needs. The project's feedback was positive from all parties involved, especially from the psychologists, although this group found it more difficult to manage the most critical callers. Beyond the verbal feedback, however, the project's impact has not been further assessed. However, once the need to find and offer psychological support has been identified, it would be ideal to have a psychological support system for the elderly via telephone.

3.3.3. Anima Domus

Interviewee and date: Coordinator of the project from association Cooperativa Nomos - 26th April 2021

Typology of intervention: Meso-Micro

Why was it chosen: one of the few services that include both meso and micro interventions, delivered in a smaller municipality - analyze the feasibility, mainly delivered by private actors

Information analyzed: organization of the service, the role of the stakeholders, target users

Organization of the service:

Anima Domus is a project ideated pre-pandemic to tackle the risk of isolation in the elderly already noticed in the area, particularly considering the percentage of homebound seniors in the area. Originally, the service was structured to be delivered in presence, however, the need for social distancing forced the associations to restructure the offering to be used via phone calls or WhatsApp.

The Cooperativa Nomos coordinates the service, which organizes a board of directors, including an in-house social worker, representatives of the other associations involved, and the municipality. Anima Domus' user journey starts with a visit to the seniors' home by a social worker, focused on understanding the level of frailty and their needs, and creating a profile to develop a personalized intervention plan.

Based on the data collected, it can be decided whether to involve a psychologist or a social worker in public health services. The latter, however, primarily supervises the intervention and contacts the municipality to get proper social services organized. In drafting the intervention plan, the frequency and timing of making calls with the volunteer are also organized to create a fixed appointment for the elderly during the week.

The Tuscany region funds the project with a small budget used, among others, to pay the psychologists.

Stakeholders:

The feasibility of the service is correlated with the collaboration between local associations. The Cooperativa Nomos is responsible for the project management, providing trained figures, and supporting the professionals involved, including a municipal social worker, three psychologists and a group of social workers in public health service.

The network of associations called "Il Giardino" provides volunteers for daily phone calls. When calling elderlies at risk, the volunteers are supported and trained by a psychologist. The training includes operational tools to manage the patient and how to socialize with them. If there are signs of severe depression, the psychologist intervenes with a plan of tackling the seniors mental health.

The psychologists involved in the project are specialized in geriatric psychology

or neuropsychology, with a specific training for dementia or Alzheimer's. This background allows them to understand the cognitive impairment of the participants based on the reports compiled by the volunteers during the weekly calls. In this way, people at risk can be referred to the geriatric department of the local health authorities and to the social workers.

“The fact that an agreement between municipality and associations was done is an uncommon thing to do, this is a sign of trust and indicates the relevance of the project”

Families are passively involved in the service offering. The family members can only refer their loved ones to the system and get informed about the intervention plan. This decision was taken to ensure the functionality of the Anima Domus without relatives, as there might be elderly without strong family ties.

Relationship between volunteers and seniors:

The relationship between volunteer and elder is one-to-one to build trust between the two. In addition, the volunteer can follow more people, as the interviews last about 40 minutes and are carried out from home. Before the calls, they get informed by the coordinator on the case and relevant information, but do not have access to sensitive information.

The volunteer is matched to the senior according to common interests and to the preferences expressed by the participants. Once a month, the volunteer and the social worker have a meeting to evaluate using monitoring forms filled in by the volunteer, a summary of which is also shown to the three psychologists of the project. In addition, the social worker contacts the elderly person to hear their feedback.

“Many seniors expressed preferences regarding the volunteers: some wanted younger volunteers to be able to discuss with people different than them and to talk about the latest news.”

Users:

At the moment of the interview, the service was launched as a pilot, with seven active users assisted by Anima Domus. The current age group tackled is over 85 years old. No specific distinctions are made in terms of fragility; all requests received are accepted; however, younger seniors and those who still manage to go out on their own tend to be less likely to call.

The project is advertised through the social workers of the municipality, through the partner associations and their volunteers - who can report possible cases that need attention - and through printed media, mainly leaflets and posters.

3.3.4. Nonni con Lode

Interviewee and date: Coordinator of the service - 20th May 2021

Typology of intervention: Meso

Why was it chosen: an intergenerational program that fosters new social connections among people that would not be traditionally part of the “community”, how people new to a specific neighbourhood can be a support to the local seniors

Information analyzed: organization of the service, target users, perception and impact of the service

Organization of the service:

Nonni con Lode is based on offering five scheduled meetings between seniors and students to exchange skills. It is usually held at the turn of the academic year (November-July), but it was suspended during the lockdowns to ensure social distancing.

The Ufficio Pio association manages Nonni con Lode, a foundation connected with the bank Intesa San Paolo. The association Ufficio Pio primarily offers and distributes economic aid for people on the poverty line; however, they realized that the individuals they helped suffered both economic and relational poverty. To support this need for socialization, this actor developed a conviviality service that maintained an active and involving approach to socialization. This approach aimed to avoid developing a social welfare service where the elderly are passive actors.

The project has two main responsibilities for service delivery: the first is dedicated to managing the requests for financial support - totalling around 1000 applicants - and is in charge of the coordination of the project. A second actor is in charge of “Servire con Lode”, a volunteering platform connected to the local Catholic diocese. Servire con Lode is closely linked to the universities of Turin and is actively involved in recruiting volunteers among students. To enrol on the project, students would submit a request via the Serve con Lode portal. Then, interviews would be conducted to get to know the student and match them with a senior. At first, two students would be paired with a senior, as they were shy to meet with an older person.

In the first meeting between the two, the service manager accompanied the students to their senior's house and introduced them. This allowed the group to break the ice and exchange telephone numbers, letting students and seniors organize themselves independently. Two meetings were then used to teach a skill to the student, while the others were dedicated to organizing activities that would appeal to the elderly. The manager kept in touch with both parties to monitor the situation and if the students noticed particular needs of the senior, such as unsafe appliances.

“I asked the students, for example, to report if the elderly had a broken iron or a cord ruined so that he can have a new one and ensure their safety.”

Stakeholders:

Ufficio Pio is the only service provider, while Caritas Young, Catholic scout groups, the diocese of Turin and the association collaborate to advertise the service among young people. To engage with young volunteers, the actors have collaborated with university residents to have presentations about the project. The main project coordinator and the seniors would go to the residences or the universities, letting the participants present the project and the skills they would teach the students.

The project needs a low budget to run, as the coordinators would be paid by the association regardless of the service, and the costs of managing the service are limited. For some time, an additional cost was the salary for a young student who managed the communication of the project.

Users:

Thanks to the economic aid distributed, Ufficio Pio is already in contact with around 600 people aged between 65 and 100. Many of them have been in contact with the association for up to 20 years prior to the establishment of the Nonni con Lode.

The elderly involved in the project share a situation of poverty – on average with an income under 6000 euros/year - and a low cultural level. However, although being in a situation of indigence, the seniors have a series of skills that they could offer - the service aimed at highlighting them.

Home delivered forms, and the volunteers collected information regarding what the elderlies would want and what they could teach, from which Ufficio Pio created a catalogue of records and one of the skills. Those who seemed more competent and with more skills to teach were asked to participate and the project. In 2019 Nonni con Lode included 20 students involved and 20 seniors.

Impact:

A particularly positive impact has been seen on seniors. Although, they reported not expecting to be asked to support university students in learning how to be on their own, they felt proud and surprised by this choice. Furthermore, often the pairings met more than the five times agreed upon, highlighting how these meetings help build stronger relationships than expected.

For example, a group composed of an older woman and two students decided to meet weekly to learn how to iron and later cook. Additionally, each Saturday, the students would carry groceries and tupperwares to the lady's house so that she could cook them homemade meals.

“With these weekly meetings to prepare homemade food, the lady became an adoptive grandmother to these students.”

It was decided to use focus groups instead of questionnaires to evaluate the project's impact and possible improvements. The decision was taken as both the intervention and the research wanted to focus on the community-level rather than the individual one. The relationship between the various people and how they found each other was thus placed at the center of the research.

The focus group with students and elders highlighted what both parties have learned from the experience: students learned relational skills and emotional intelligence. In contrast, seniors improved their relational skills and availability for others. The insights gathered led to an implementation of the offering. A series of collective meetings and socialization opportunities were added to promote socialization among the various participants.

In 2020, it was planned to hold such group meetings but were stopped by the pandemic. However, this offering was estimated to substantially increase the project's cost, as it was budgeted to be around 2500 euros. Projects for relational poverty have been reorganized for 2022, when regulation for COVID prevention would be more precise, with the proposition of new projects for sociality similar to Nonni con Lode.

3.3.5. Telefono d'argento

Interviewee and date: Coordinator of the service - 7th June 2021

Typology of intervention: Meso-Macro

Why was it chosen: remote and home-based intervention for loneliness included a healthcare monitoring dimension in a smaller local reality

Information analyzed: organization of the service, target users, perception and impact of the service, fundings

Organization of the service:

Telefono d'Argento was founded to solve the need of the Emilia Romagna region to monitor the elderly during the summer heat waves - considering the percentage of elderly people arriving at the hospital in need of assistance.

Doctors and social associations were asked to report frail seniors and the ones living alone. At the same time, a nurse was employed to assess health needs to report any problems and relevant interventions. The reports are collected by a social worker who monitors the number of users, their data privacy and safety. The elderly and the caregiver are then informed on who will make the phone calls and when they will take place to ensure transparency and avoid scams. Each volunteer calls the senior for at least two continuous weeks to ensure continuity on a relational level. In the beginning, seniors could not directly call Telefono d'Argento but would be required to enrol in the program first. Nowadays, the service is open to both scenarios.

Connected to Telefono d'Argento, associations such as Auser have started promoting additional socialization services.

Stakeholders:

A network of volunteers and associations was established to collaborate and increase the possibilities of socialization, interconnecting actors to create a system that allows seniors to participate in the events of the neighbouring municipalities.

Every two months, all the associations at a provincial level meet and discuss common problems and support each other in interacting with seniors. The meetings also allow making a comparison regarding individual cases and activities of the associations, thus optimizing the resources and events organized. Currently, the network has involved hundreds of elderly people in Correggio and the bordering cities.

The result of this coordination is a series of activities proposed during the pandemic, for example:

- “Infiorata”, the ladies of the municipality were asked to collectively create knitted flowers to display at fairs and municipal events. In addition, the group was challenged to coordinate autonomously to collaborate with each other, using phone calls as a means of communication.
- People who knew how to sew were asked to make cloth masks to give to the municipal school students - this made the seniors feel part of a project and that they had an impact on community life.

COVID has required associations and volunteers to reinvent themselves. As the Emilia Romagna Region had allocated 20,000 euros of regional funds to carry out socialization activities, it was necessary to reinvent the projects that had been designed pre-pandemic for these funds.

Additional funding arrived privately from the Lions Club, who was interested in financing an intervention in Correggio’s health district (ASL). This second funding was spread over 3 years, to cover the costs of the activity of the service in the summertime. These private funding allowed to experiment with new types of interventions launched initially as a pilot. With the pilot’s conclusion, a collaboration with the mayors was created to identify volunteer associations in the area willing to work on the project in the long term.

Seniors’ associations have been involved in advertising the service and making referrals of seniors. This resulted in more targeted advertising and support from the seniors, additionally, this mean of communication portrayed its trustworthiness. Some forms of printed media - i.e. newspapers - were considered possible sources of “shady exploitation of the service”, as Telefono d’Argento could become a cover to perform scams to seniors. The service provider also hoped to include general practitioners, but they found limited collaboration from them. Doctors are some of the few touchpoints seniors meet obligatorily with whom they have built a trusting relationship. Even though they could be a reliable source for referring frail seniors, doctors mainly reported extreme cases that needed a major intervention.

“General practitioners have a different perception of what frailty is in the elderly – they have a perspective more linked to the clinical picture than to psychological and social health.”

Users:

The users of the service can be either self-sufficient or non-self-sufficient older adults. The latter group is less numerous since most of the participants wanted to have a chat. People who use the service tend to be over the age of 65, but the selection criteria for the service is to be in general good health and not to have cognitive impairments. Among the users, there is a higher incidence of over-75-year-old people joining the service.

The pilot in 2016 included 45 participants; the service reached 134 people in 2020. Although associations’ activities were suspended during the lockdowns, Telefono d’Argento noticed increased users during the said period. The increase in participants is related to the increased social isolation to contain the epidemic and the requests to run errands due to quarantine.

Many adults at home from work supported the service by running errands and making deliveries for the people confined at home. In addition, volunteers traditionally deployed in other offerings suspended by COVID were also enrolled in the service to support the requests. The new volunteers were directed towards this kind of activity, as the trained ones kept carrying out the telephone calls with the elderly.

“While before COVID there was a hard-core of elderlies in need, now there are more people in need of company phone calls and who reports depressive symptoms.”

Perception and impact of the service:

Initially, the participants were hesitant about the service and afraid of being scammed. However, when they built trust in the system, they enjoyed it and stayed engaged for a long time. There were additional difficulties in engaging the seniors, as many perceived they did not need such service and found it hard to ask for help. In many cases, volunteers became proper confidants in discussing their problems. Seniors preferred to interact with a volunteer as they felt volunteers were not forced to befriend them and wanted to genuinely be part of the seniors’ life. The volunteers must notify the families in case of specific problems or if the need for additional assistance arises.

The latter aspect was essential to identify possible health decline that the elders avoid highlighting not to trouble their loved ones. However, targeting this type of problem as early as possible makes a big difference in its treatment.

The service found difficulties in estimating the number of frail seniors in the territory due to the complexity of the parameters. However, the providers consider the service results as “above expectations”. Particularly, the coordinator highlighted the importance of creating a network with the local associations as advantage of such a system. Said network not only allowed the coordination of the offerings in the province but also enriched the support among actors.

3.4. Findings

The analysis of the case studies gave an overview of the typology of interventions available for lonely seniors, using the lenses of the division between micro, meso and macro intervention presented in chapter 2.2.1 - "Intervention typologies".

This first phase highlighted the following insights:

- The home-based services selected predominantly target a younger audience over 60-65 y.o. seniors, however, two case studies have highlighted how their core demographic is composed of those over 70 y.o. individuals (see the Circle and Intergenerational Empathy Under One Roof).
- Offerings were mainly composed of macro and meso interventions aimed at improving social connections, supporting independence and wellness, and helping seniors in everyday tasks. Meso-levelled interventions aimed at improving the sociality of seniors, helping them connect with new people and fostering conversation.
- Different services targeted families primarily in their communication strategies, highlighting a more passive role of the senior in both the targetization and offering of the service.
- Many cases selected are from the UK: considering this country is the only one examined with a public ministry for loneliness, there could be more sensibility to developing interventions for such a topic, specifically home-based ones.
- The primary means to deliver interventions are: using volunteers, AI-based services and robots. It would be interesting to investigate how these AI systems impact seniors' sociality.
- In Italy, the pandemic has boosted the public discussion about loneliness, and new services have been created to tackle the issue. The interventions focus on direct forms of socialization and on supporting seniors in running small errands (see Emergenza solitudine, Anima Domus, Lo so che non sono solo).

The continuation of the study with the interviews of the five Italian case studies provided a series of relevant insights, especially concerning the interaction between stakeholders, their roles and the users' engagement.

Regarding the stakeholders, it was evident the importance of the associations for the delivery of such interventions. The organizations' willingness and passion in supporting the local community ensures the service sustainability over time and longevity. Furthermore, being independent entities from public administration, they can intercept the needs of the seniors faster than other actors, ensuring to reach a large pool of volunteers and elders.

An important element highlighted is the limitation of services in replacing the work of volunteers and family members. Services with paid staff are trusted for routine or health problems, oppositely for socialization, the volunteer becomes a sort of friend/confidant and gives the elderly an idea of normality. Volunteers are also essential to portray the service's trustworthiness, being perceived as a more friendly way to deliver interventions.

The service delivery actors are divided into non-profit and for-profit organizations. They are equally involved in the projects according to the type of funds available

(municipal/regional level); nonetheless, the non-profit ones provide the volunteers to offer a capillary reach of the service while the for-profit organizations are involved in coordination and advertisement. The downside of employing non-profit associations is the presence of mainly older volunteers which reduces the time the volunteers can participate in the service. Additionally, they struggle to engage new people to become volunteers, causing a shortage of personnel. Some municipalities try supporting the research of new candidates (see No alla Solit'Udine).

Political proactivity and institutional support are essential in creating local services and supporting the associations, strongly influencing the establishment and funding of such services. Alternatively, the ability of the associations to aggregate and collaborate with important sponsors is the engine for creating services at a national and local level.

The great amount of case studies from the United Kingdom highlights one of the limitations of the first part of the study. As the research has been mainly done in English, only services that presented resources in said language have been analyzed. This could limit access to information regarding other interventions in non-English-speaking countries. Such a theory is particularly relevant for Eastern-Asian countries, where the language barrier of the author of this thesis could have caused a limited selection of case studies from said countries.

The second limitation regarding the case study selection regards the words used to search for such services. For example, words including "loneliness", "seniors", "elderlies", "socialization", and "befriending" have been used in the research; however, it was found that such terms can be perceived by the target users of the interventions as negative and discriminating. The use of these terms could have limited the study and the identification of more innovative forms of intervention.

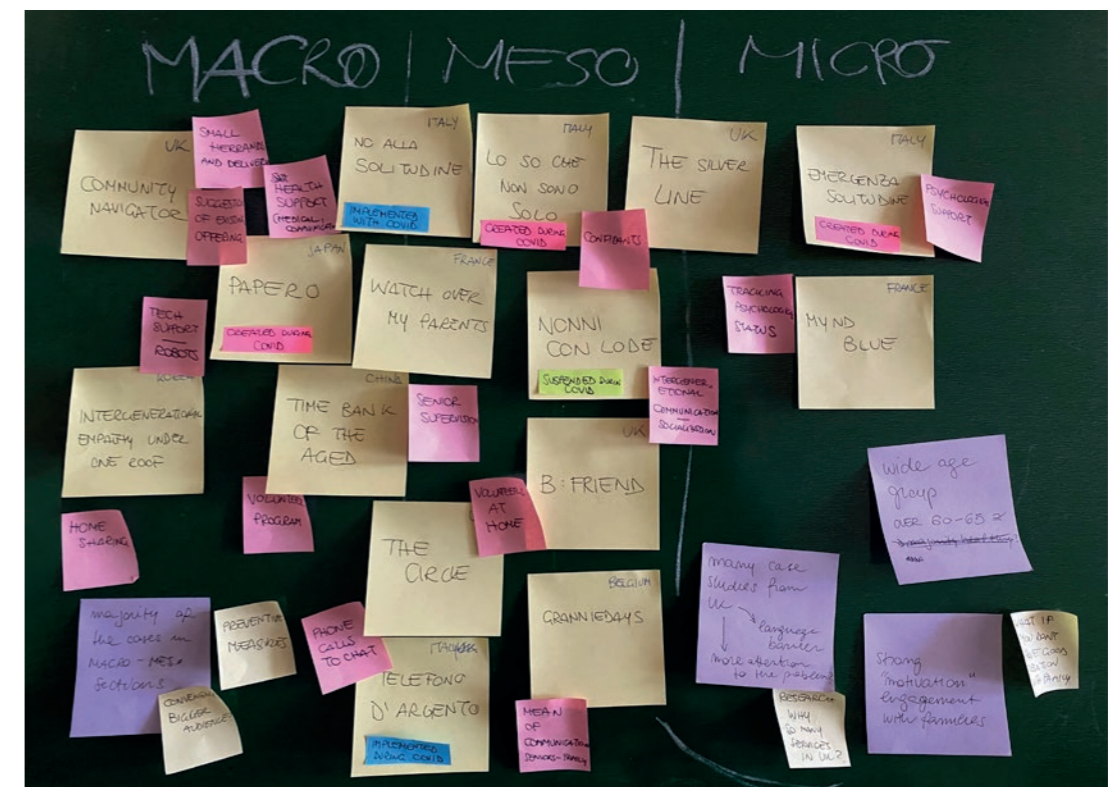


Figure 3.21 Clustering of the case studies according to the typology of intervention. Source: the author.



4. Fieldwork

4.1. Interviews

The field research uses interviews and cultural probes to investigate various goals. Interviews aim to analyze the role of associations and the municipality in delivering loneliness interventions and portray the current status of said services in Pordenone. Oppositely, cultural probes have been used to study local seniors' social networks and needs.

4.1.1. Plan and organization

Locating the research in Pordenone

Pordenone is a municipality of 51,000 inhabitants, where the homonymous province is set. Main city of the western side of the Friuli Venezia Giulia region, it is located along the Noncello river. Pordenone is the centre of an urban area of about 86,000 inhabitants together with the municipality of Cordenons and Porcia, positioned at the two sides of the city.

The decision to focus on the city of Pordenone was considered for various reasons. First, Italian medium-dimension cities – identified as cities with a population ranging between 50,000 and 100,000 inhabitants – are particularly at high risk of loneliness for seniors. While 48% of Italians declare to feel lonely, the highest incidence is in people living in said cities (Pagnoncelli 2020).

Furthermore, there is a higher incidence of seniors in medium-dimension cities compared to areas with a lower population density. For example, in the case of Pordenone, 25.65% of the inhabitants are over 65 years old (ISTAT - Italian National Institute of Statistics 2018), data similar to cities with over 100,000 inhabitants, such as Udine and Venezia.

In particular, the Friuli Venezia Giulia (FVG) region has one of the highest percentages of over 65 y.o. people in Italy (Info Data - Il Sole 24 Ore 2019), equal to 26.6% of the total population (Giunta regionale del Friuli Venezia Giulia 2022). Such incidence poses active ageing and targeting loneliness at the centre of the interest of the regional administration (Giunta regionale del Friuli Venezia Giulia 2022). Moreover, around 64 euros are invested in services for seniors per person in this region, almost four times the national average (Openpolis 2020), making FVG the region with the highest expenses per capita.

Lastly, during the research, the evolution of the pandemic in Italy led to different national and regional restrictions, which were updated regularly to respond to the seriousness of the epidemic. The restrictions included limitations of movement across municipalities. Therefore, to ensure the project continuity and avoid the risk of suspending the process with the worsening pandemic situation, the author favoured cities closer to their location – making Pordenone the preferred choice.



Figure 4.1 Aerial picture of Pordenone. Source: <https://www.comune.pordenone.it/it/citta/scopri/luoghi>

Organizing the interviews

The interviews were organized with the president of one of the associations of Pordenone and a municipality representative.

The association Tempo Scambio was selected among the ones present in Pordenone for its proactivity in proposing services for socialization during the pandemic. Additionally, Tempo Scambio coordinates the associations dedicated to such type of offering in Pordenone; its role territorially has ensured a strong collaboration with the division for social services of the municipality. The interview was held in November 2021 in the association's office, located inside the town hall, and was set to last approximately one hour. During the interview, the nature of the association itself, the local loneliness interventions and the collaboration with other stakeholders were discussed.

Oppositely, an interview with a municipality representative was held in July 2022 to investigate the objectives of the current administration in services dedicated to seniors. The interviewee was the supervisor of European Policies, an actor coordinating European projects held in Pordenone. This session was organized in the town hall and lasted one hour. During the meeting, it was discussed about general interventions of the municipality and the European-funded project SIBdev.

4.1.2. The association Tempo Scambio



Figure 4.2 Associates of Tempo Scambio association. Source: Tempo Scambio Facebook page

The association Tempo Scambio was founded in the 1990s, and it has existed ever since without suspension. Nowadays, there are around 60 volunteers, all of whom are registered as associates of the organization. The association was originally founded to be a time bank. In this system, volunteers offer services in exchange for “time points”, which can be used to access services offered by other participants.

This offering was suspended as seniors had issues trusting strangers coming home to volunteer, to the point that it compromised the system itself. Additionally, Tempo Scambio had difficulties communicating why people would come over to the senior’s house to help them; however, as the association is planning to re-integrate the time bank in the future, they are evaluating a new strategy to solve such issues.

The association is a beneficiary of both municipal and regional funding.

The municipal fundings are yearly around 2,500 euros, in addition to petrol reimbursements to all volunteers who travel by car for activities in the area. On the contrary, regional funding is predominantly dedicated to projects involving youth and essential needs support. To access both fundings, every year, the association must send a report indicating activities are done and the budgets to the region to be validated and signed.

Tempo Scambio collaborates and coordinates with various local actors, including high schools to recruit students to volunteer for the association and organizations such as the Storica Società Operaia. Since its foundation, the association has collaborated with the municipality, gaining a more predominant role over time.

4.1.3. Services for seniors delivered by or in collaboration with Tempo Scambio

As a major partner for the municipality, Tempo Scambio collaborates with a series of actors to deliver a wide range of offerings on the local territory. Most of the services are targeted to over 65-year-old seniors, either living in their private or retirement homes.



Figure 4.3 Carta d'Argento. Source: <https://www.comune.pordenone.it/it/comune/comunicazione/comune-informa/notizie/nasce-la-carta-argento-cinema>

Carta d'Argento

Tempo Scambio manages and delivers the “Carta d'Argento” on behalf of the municipality. Carta d'Argento (Silver Card) is a card offered to every citizen over 65 to receive discounted prices for various activities and discounts in shops, generally dedicated to clothing and household products. Among the activities available, there are discounts to practice physical activity, go to cultural events, and entertainment. The list of offerings is called “Colora il tuo tempo” and can be accessed only using the card (Comune di Pordenone 2022).

When a senior turn 65, they receive a letter home informing them about the initiative. Every three months, the municipality’s social services provide a list of people who recently turned 65 y.o. to Tempo Scambio, who then distribute the cards to the seniors in a dedicated town hall office. The association support also elderly citizens by distribute flyers about all the services available to them and responding to possible questions. Thanks to this offering, the association can connect with over 4000 people over 65 y.o living in Pordenone.

Furthermore, a dedicated cinema card for seniors has been established in collaboration with CinemaZero, the local cinema. By offering tickets at the cost of 3 euros per film, this offering is particularly popular and appreciated by the citizenship.



Figure 4.4 Thumbnail of the video dedicated to the Social call center. Source: <https://www.comune.pordenone.it/it/comune/comunicazione/comune-informa/notizie/call-center-solidale-unisciti-alla-squadra-il-tuo-aiuto-e-prezioso>

Social call center

The lockdowns to contain the pandemic have raised the need for other forms of socialization that could momentarily replace suspended activities. In collaboration with the municipality and strongly supported by the council member for welfare programs of the time, Tempo Scambio organized a phone call service for loneliness to tackle such need. The service was designed using insights from a report developed by two psychologists, highlighting a need for psychological support to loneliness. These psychologists were collaborating with the municipality's social service workers and had direct contact with seniors supported by social services and their caregivers.

Using the phone numbers collected when taking the cinema card requests, the associates made between 3000 and 4000 phone calls to seniors considered to be socially vulnerable. The calls were aimed at chatting and catering to additional needs reported by the seniors. In fact, other than the need of socialization, some seniors reported the need to run some errands, such as getting medicine or food. These people were referred to the Protezione Civile to receive such support.

The phone call service was promoted on the official Facebook page and on the municipality's website. To ensure to reach also seniors who do not have access to social medias or do not use internet, a local journalist was involved and asked to present the project on a local tv channel, TelePordenone. This advertisement was needed to reach both seniors and possible volunteers, as there was a strong need by the association to enrol new people to sustain the requests.

Although the phone service was suspended in the first months of 2021, some seniors still call to chat, leading to the decision to reactivate this service for Christmas and give birthday wishes. The service has also helped identify cases of neglect or novel assistance requests for social services. Overall, however, the association found an evident need for telephone and in-person socialisation.



Figure 4.5 Mi Go Talent show in September 2019. Source: <https://www.instart.info/storica-societa-operaia-mi-go-talent-inizia-la-tournee-delle-ragazze-del-novecento-della-societa-operaia/>

Mi Go Talent

Mi Go Talent is an educational project organized in collaboration with the Storica Società Operaia. Before the pandemic, the group of over 85 years old participants met once or twice a week to have singing and dancing classes with a tutor. With the pandemic and the service suspension, these people lost this socialisation opportunity. Some seniors reported that often they did not even bother turning on the TV, showcasing a switch towards a more passive approach to daily life.

It was then decided to repropose the service remotely by using tablets, which were bought and distributed to seniors previously participating in the project. These tablets were modified to make them senior-friendly; only three apps were available: calls, video calls and WhatsApp. Seniors had different problems using the tablet and had to call volunteers for support. One of the main reasons to ask for help was that the seniors' grandchildren would use the tablet and download games, confusing the elderly as they could not find the three apps they were used to. Additional reason for support was the lost of sensitivity caused by the drying of the seniors' digits, not allowing them to scroll smoothly when using the touch screen.

The group of seniors was coordinated by one of the participants, an 87-year-old man, whom contributed in helping them bonding.

Società operaia also offers theatre and beauty classes for seniors. The theatre group also has a recital at the end of the course open to the public.

Nonni Ridenti

Nonni Ridenti is a project awarded in Turin for its peculiar offering. The project involves pro-bono dentists who offer free visits for dentures or dental check-ups. The visits are held in the "Casa Serena" nursing home, where people living in the nursing home or the area meet with said doctors. During the visits, caregivers needed to be present to calm seniors, as they often felt embarrassed or had difficulty showing themselves as they opened their mouths. Before COVID-19, these

visits were organized twice or three-times a week. Nonni Ridenti was suspended during the pandemic since the restrictions did not make visits to the nursing homes possible, especially with the same characteristics it had beforehand. However, many people hope the project will restart as families much appreciate it.

Tanti amici, tanta solidarietà

Tempo Scambio collaborates with the region and the local high schools to host students to volunteer for the association. Students are in charge of filling documents on the computer, do data entry, talk and collaborate with seniors. This program is particularly popular among male students and the ones attending social studies schools.

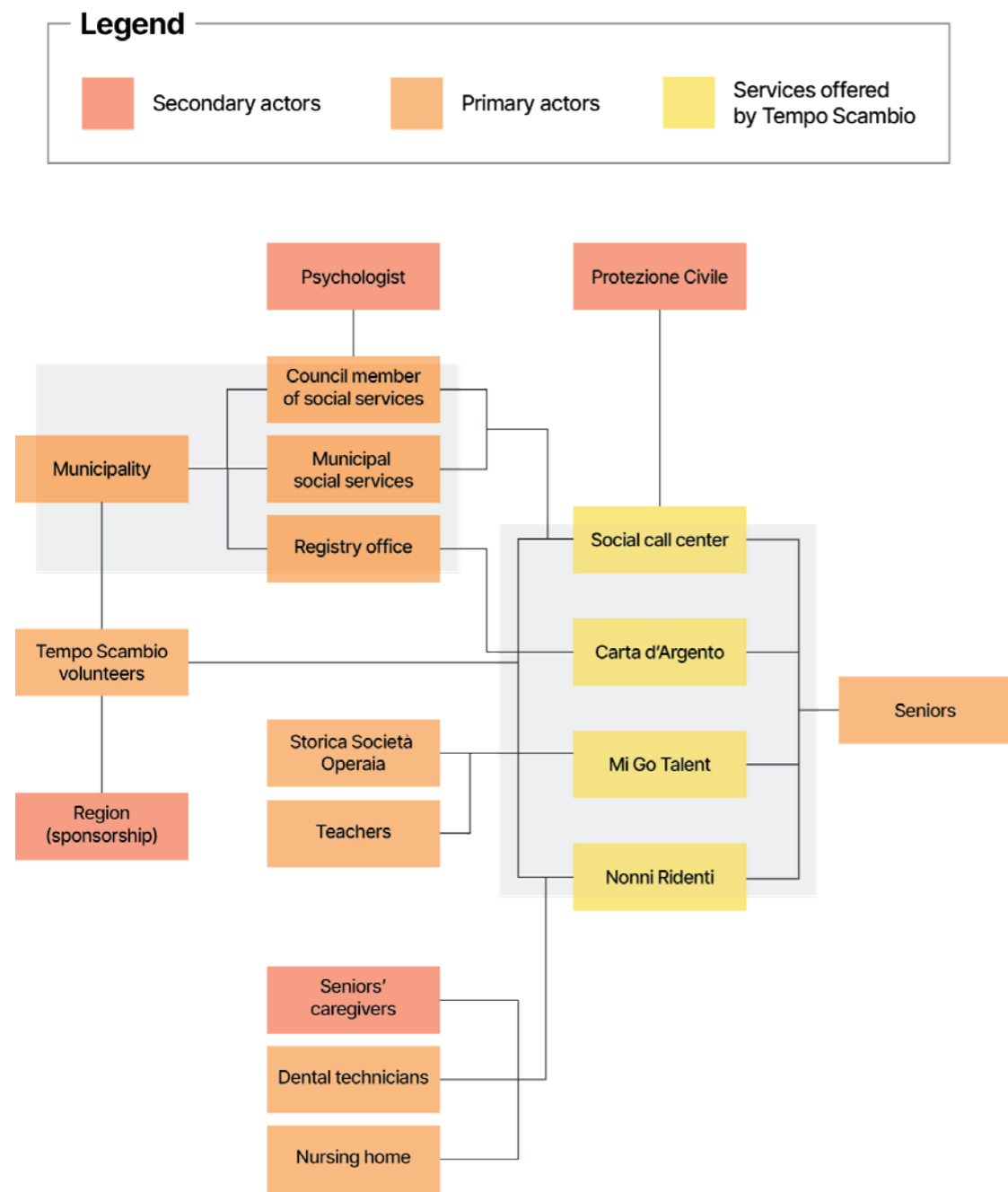


Figure 4.6 System map of the services offered by Tempo Scambio. Source: the author.

4.1.4. Other services for seniors in Pordenone



Figure 4.7 Representatives of the public administrations participating in URBACT. Source: Urbact Radlin's Twitter account

European projects – SIBdev

URBACT is the European union program that focuses on developing mobility planning policies, sustainable urban development and revitalising historical centres. It includes a whole range of sub-topics, from the circular economy, to mobility, to city centre development. While URBACT is the macro-project for urban planning, SIBdev is the project in which Pordenone is a partner. SIBdev is centred on the concept of social impact bonds, a financial instrument used to measure with the social impact of projects. Social impact bonds were the topic of another European project, where partners theoretically learned about them with the scholars who conceived this method.

To also cover this aspect of SIBdev, the European project coordinator of Pordenone and the Social Service office of the municipality are curating a strategic report. In the report, readers can find the analysis of the local economic and social context, the municipal action plan, and the municipal policies that the administration wants to develop. In general, the municipality's objectives include the development of the suburbs, neighbourhood interventions for urban and social redevelopment, a plan for the quality of living (especially cohousing projects, where social impact bond were applied to tackle such issue for the elderly population), and active ageing.

To develop the interventions expected from this European project, the partners must use the URBACT methodology – a participatory work approach involving various stakeholders. At the start of the partnership, the administration was asked to choose three areas of intervention: the elderly, migrants, or unemployed young people. Starting from the topic chosen, the municipalities are encouraged to start by mapping the stakeholders at the city level. Said stakeholders are all included in the "Committee for Active Aging", including the association Tempo Scambio, to develop and coordinate the interventions, especially the co-housing system.

Casa delle attività

For SIBdev, it was decided to focus on the neighbourhood of Vallenoncello. Here, an urban requalification was carried out using regional contributions, aiming at creating a new communal building called "Casa delle attività - House of activities". The regional contribution covered only for the building of the structure. However, it was necessary to define the activities carried out and how to make this location as a reference point for the community. A tool used in URBACT, called "small case actions", was used to design the interventions for Vallenoncello. The method organizes micro-services and activities to offer on a smaller scale and then implements progressively in other contexts inside the municipality. It was necessary to use this tool to access the fundings of URBACT, out of which 10,000 euros were allocated for Vallenoncello. The offerings were designed to bridge the gap between the public administration and the citizens, using a participative approach to gather the neighbourhood's needs. In this case, both municipality and the citizens of Vallenoncello presented proposals of interventions.

In collaboration with the cooperative Itaca and the Fondazione RIG, a series of workshops and laboratories were organized in the Casa delle attività, including activities to learn about the history and an intergenerational course of photography. Around 15 young people and 12 seniors were involved in these labs. The photos taken during the course were then exhibited in the Casa delle attività and showed to the European project committee, who were visiting Pordenone during February 2022.

"One thing that impressed me was seeing how, for example, the elderly and young people photographed the same subjects (of the neighbourhood ndr) but from different angles and perspectives."

The collaborative nature of the methods used was particularly relevant in this context due to the conflicts internal to the neighbourhood. In fact, it incorporates historic residents closely associated with local history and identity; and newly built condominiums with a higher incidence of foreigners. The latter finds it difficult to integrate into community life, and the two groups do not interact with each other, causing tensions on a social level. The house being in the middle of the neighbourhood had to act as a collector of more souls in the neighbourhood, in such a way as to integrate the families of the condominiums and the elderly of the neighbourhood.

Another important insight gathered was the fact that the community of Vallenoncello fears that once the local café closes, as the owners are about to retire and their children do not want to take over the property, they will possibly lose a vital meeting point. This reason, in addition to the missing compliance of safety standards of the Casa delle Attività, led to the decision to organize the project APPeritivo in the café. APPeritivo is an initiative where young people teach the elderly how to use their smartphones during digital aperitifs. Lessons included how

to book medical appointments, use the regional health platform, buy a bus ticket or a ticket for the theatre. This activity was greatly appreciated, with requests even arriving from neighbouring cities. A total of 60 requests were selected due to the anti-COVID limitations regarding social gatherings.

Initially, it was expected that a group of students would teach seniors digital skills. However, at the time, many students still did not receive the COVID vaccine, which could have put seniors at risk to catch the virus, so just one of the students attended.



Figure 4.8 Poster of APPeritivo. Source: <https://www.comune.pordenone.it/it/file/notizie/apperitivo-urbact.pdf>

Co-housing

Innovative living solutions are one of the municipality's objectives, especially as the pandemic has highlighted all the painpoints of retirement homes for seniors. However, this topic that has always been dear to Pordenone. Already 14 years ago, in fact, Pordenone was a pioneer of co-housing thanks to the project "Abitare Possibile". The project started with Casa Colvera - a building divided into various apartments now predominantly occupied by seniors. Although not envisioned at the time of establishment, now many tenants are not self-sufficient, turning Casa Colvera into a concept similar to a retirement home.

The municipality recently purchased a building in front of Casa Colvera. The projects called Casa San Quirino consists of 8 apartments given to tenants with a higher level of autonomy and are well connected to the neighborhood life. The inhabitants can access the activities offered at Casa Colvera, which are mainly targeted to seniors. The municipality and the stakeholders are currently working on how to use the space between the two buildings and how to organize shared activities. It was hypothesized to use the common area to create a glass corridor or to create a social garden.



Figure 4.9 Presentation of Casa Egidio. Sources: URBACT Twitter account

Other examples of co-housing offered in the area is Casa Egidio and Corte di Naon. The first is located in Vallenoncello and is targeted for people over the age of 65, who are hosted in the 25 apartments of the complex. Meanwhile, Corte di Naon has an intergenerational approach where apartments are assigned to vulnerable families through a contest. The inhabitants must be available to do services for the rest of the community, such as preparing a group barbecue or babysitting the children of couples who work during the day.

4.2. Cultural probes

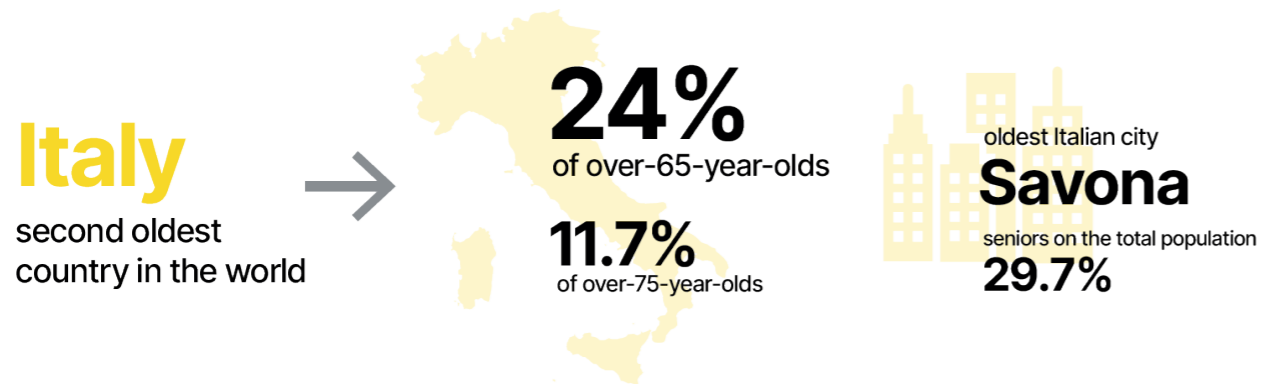
4.2.1. Target

Prior to the development of the cultural probes, it was important to understand better the target to analyze, especially in the Italian context. Italy is the second oldest country in the world after Japan (PRB 2019), where almost one-quarter of the population is composed of over-65-year-olds (The World Bank n.d.). As in 2022, various cities reached well over such incidence of seniors per total inhabitants. Savona was the oldest city of Italy, with 29.7% of its citizens being over-65-year-olds (Bagnasco, Casadei, and Finizio 2022). Meanwhile, the oldest seniors, the age group over 75, are the 11.7% of the national population (ISTAT - Italian National Institute of Statistics 2020).

When looking at the living situations, almost half of over-65-year-old Italians live alone (ISTAT - Italian National Institute of Statistics 2021), while just 38.2% of the over 75 y.o. group lives in similar conditions. Among the latter age group, it is important to note the extreme difference between men and women. Half of the over-75-year-old women live alone, oppositely to just 21.7% of men (ISTAT - Italian National Institute of Statistics 2020). The highest incidence of seniors living alone can be seen in urban regions (European Commission and Eurostat 2015). Additionally, as a senior ages, the chances of changing their accommodation increase, moving either in retirement homes or with relatives (European Commission and Eurostat 2015). However, the diffusion of E-Health and new technological advancements for home-based services are leading to inverse such trend, as they help seniors live longer alone or in their own residence (Troia 2019).

With the process of ageing, it is visible to see an increase of age-dependent illnesses, many of which are noncommunicable and chronic diseases including cancer, arthritis or dementia (World Health Organization 2015a). The health deterioration heavily affects the self-sufficiency of older people, about 20% of seniors are not autonomous and the percentage doubles in individuals over the age of 80 years old (Associazione Abitare Anziani and Piccolino 2020).

Occupation-wise, 7% of over 65-year-old seniors are still employed (Eurostat 2017). It is important to note how retirement triggers loneliness, as seniors lose their daily routine and part of their social network (Segel-Karpas, Ayalon, and Lachman 2018). Lastly, compared to the rest of the European Union, Italy has a higher percentage of seniors who are not tech-savvy, as half of elderly citizens declare to have never used the internet.



in Italy



seniors live alone
higher incidence in urban areas



20%
of over-65s are non-autonomous
doubles in the over 80



1 in 2
older adults have never used internet



10%
of over-65s never see friends or do not have friends



21%
of over-75s never see friends or do not have friends

Bagnasco, Giacomo, Marta Casadei, and Michela Finizio. La qualità della vita nel 2022: indice per fasce d'età (2022)
European Commission and Eurostat. People in the EU: Who Are We and How Do We Live? (2015)
Associazione Abitare Anziani, and Fabio Piccolino. Anziani soli: Una emergenza silenziosa (2020)
EUROSTAT. Ageing Europe (2019)
ISTAT. Aspetti Della Vita Quotidiana: Incontri Con Amici - Età Dettaglio (2019)

4.2.2. Cultural probes

As explained in section 1.4.2. "Main methods", a series of cultural probes (Gaver, Dunne, and Pacenti 1999) were designed to collect qualitative data about the social circle of seniors and their daily habits. It was decided to focus the research on seniors aged over 75 years old, as this age group is more prone to experience loneliness (F. Wu and Sheng 2020). Additionally, the literature review highlighted the need to target specific sub-groups inside the senior citizenship to tackle loneliness efficiently.

The objectives of the cultural probes were:

1. How many people do they meet or contact daily?
2. Who are the people they meet/contact? How often do they meet?
3. How do seniors perceive loneliness? Do they perceive themselves as lonely?
4. Do they engage with services dedicated to seniors? How?

Each objective was included in one of the cultural probes designed.

Five participants aged between 75 and 90 years old were selected to participate to the investigation. While all participants lived in the municipality of Pordenone, 3 out of 5 individuals lived alone. All the seniors were handed a kit containing the following material:

- Introductory document,
- Tool 1: Questionnaire and collage of daily activities (objectives 1&4),
- Tool 2: Convoy model (objective 2),
- Tool 3: Loneliness questionnaire (objective 3),
- Material to write and prepare the collage, including pens, markers, post-its, colourful paper, scissors, and glue.

Figure 4.10 Infographic about seniors in Italy. Source: the author

Introductory document

Ensuring transparency in this phase of the research process was fundamental, especially considering the social stigma surrounding the subject and the vulnerability participants may feel in discussing a such topic.

An introductory document was used to explain to participants the research objective and give full consent in the data collection. The information contained in the document were the following:

- the purpose of the research,
- how the information will be stored and used,
- how to ask clarification about the research,
- how to withdraw their participation to the research.

Tool 1: Questionnaire and collage of daily activities

The first tool was structured in three parts. An introductory part was used to collect general information about the participant, including age, sex, and household status (living alone or with others).

To investigate the first objective, it was decided to ask seniors to explain how they spend a typical day during the week using a collage. As a tool, collages are considered elderly-friendly activities, suitable for people with impairments such as dementia (Stallings 2010). The props provided (picture of activities, pens, post-its) aimed at giving seniors the freedom to explore and express themselves freely. Additionally, this data collection method was more accessible for individuals who might have difficulty holding a pen for a long time or who might become frustrated in not writing readable words.

Lastly, a questionnaire was dedicated to local services targeting seniors, in which participants were asked the following questions:

- Do you use any local service provided by volunteering / no profit associations?
- Do you use municipal services dedicated to seniors?
- How did you know the service used?

CIAO!

Grazie per partecipare a questa avventura!

Iniziamo dalle presentazioni: mi chiamo Francesca e sono una studentessa di Laurea Magistrale del Politecnico di Milano e della Università Tongji a Shanghai, Cina. Attualmente sto svolgendo la mia tesi, il cui tema è lo sviluppo di un servizio per aiutare i Pordenonesi che hanno un'età superiore ai 75 anni a fare amicizia e conoscere nuove persone.

Per sviluppare il mio progetto però avrò bisogno del tuo aiuto, ed è infatti qui che entri in gioco tu! Prima di iniziare però ci tengo a darti qualche informazione aggiuntiva:

Perché sto raccogliendo i dati?

Per sviluppare la mia tesi ho bisogno di raccogliere informazioni su come le persone a Pordenone vivono la propria quotidianità, studiando come passano la propria giornata. Questi dati serviranno come fondamento per capire come realizzare il progetto di socializzazione che sto sviluppando.

Come utilizzerò questi dati e cosa sarà pubblicato sulla tesi?

I dati che utilizzerò saranno legati alle tue abitudini ma non saranno riconducibili alla tua persona. Non pubblicherò nomi e cognomi, indirizzi, numeri di telefono o eventuali informazioni che possano permettere di risalire a te come singolo cittadino o ai tuoi cari. Le uniche informazioni che pubblicherò per lo studio sarà il tuo genere (uomo o donna), se abiti da solo o con qualcun altro e la tua fascia d'età (ma NON la data di nascita), in modo da capire come cambia la quotidianità dei cittadini senior nel corso del tempo.

Come le informazioni raccolte saranno conservate?

Le informazioni raccolte con questa ricerca saranno identificate tramite un codice identificativo, il quale permetterà di rendere anonime le informazioni che rilascerai qui. Saranno inoltre tutte schedate su un file protetto da una password in modo che nessuno abbia accesso alle tue informazioni senza permesso.

E se avessi altre domande o dubbi?

Se hai altre domande sull'utilizzo dei dati raccolti, dubbi sul materiale o non volessi più partecipare a questa ricerca, puoi chiamarmi a questo numero di telefono 3400 614261.

Figure 4.11 Introduction document. Source: the author

ATTIVITÀ UNO

QUALCHE INFORMAZIONE SU DI ME

Età

Sesso

Uomo Donna Preferisco non specificare

Abito...

da solo/a con un coniuge con uno o più familiari

DURANTE LA SETTIMANA, NELLA MIA GIORNATA TIPO...

... utilizzo servizi offerti da associazioni locali per socializzare / divertirmi, come attività della Pro Loco, attività parrocchiali, AIFA, Auser...

No, non li uso

Si, li uso...

Più di una volta alla settimana Almeno una volta alla settimana Più volte in un mese

Almeno una volta al mese Meno di una volta al mese

Figure 4.12 Tool 1 - Collage of daily activities. Source: the author

Inserisci nel diagramma le persone a cui sei più legato in base al livello di confidenza e di vicinanza che ha con quella persona:

- 1 Persone a cui ti senti così vicino che è difficile immaginare la vita senza di loro
- 2 Persone per le quali potresti non sentirti proprio così vicino ma che sono ancora molto importanti per te
- 3 Persone che non hai già menzionato ma che sono abbastanza vicine e abbastanza importanti nella tua vita da dover essere inserite nella tua rete personale.

Ricordati di inserire il grado di parentela che hai con quella persona o come viene identificata da te (ad esempio: figlio/a, nipote, amico/a, conoscente)

Esempio



Figure 4.13 Convoymodel.
Source: the author

Quanto spesso incontri / senti al telefono / visiti le persone inserite nel diagramma precedente?

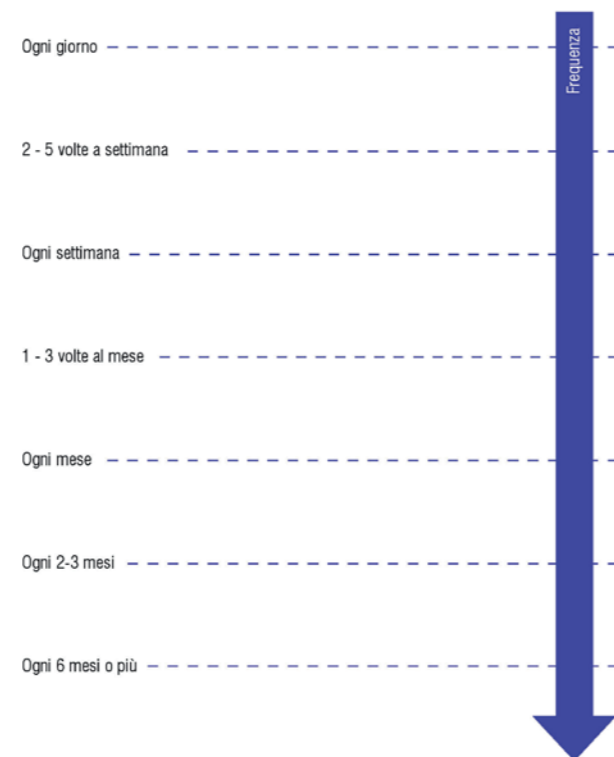
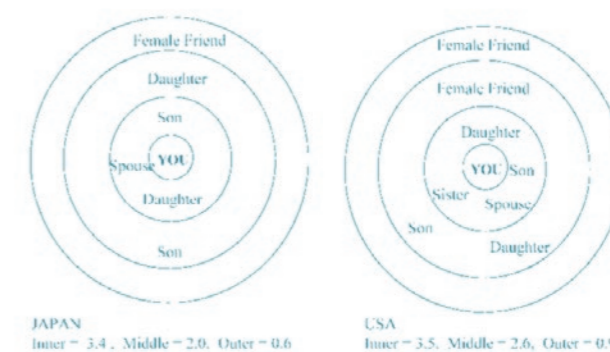


Figure 4.14 Diagram measuring the frequency of socialization.
Source: the author

Tool 2: Convoymodel

To respond to the second objective, a convoymodel (Antonucci, Akiyama, and Takahashi 2004) was used to trace the quality and typology of the seniors' relationships, by categorizing them according to the intimacy of the relationship itself. Starting from a diagram adapted from Antonucci TC. et al (Antonucci, Akiyama, and Takahashi 2004), seniors were asked to place their closest connections inside three concentric circles which represented three level of intimacy. The inner circle was used for confidants, the central one for friends and relatives, and the outer one for acquaintances. Participants were also asked if there were any relationship that they would like to change the placement of.

A second diagram was used to collect information about the frequency seniors would meet or get in contact with the people inserted in the convoymodel, ranging from daily meetings to every six months or more. These data allowed to make a comparison between the intimacy and the regularity of contact among the people in the senior's life.



Convoymodel Composition for Age 70-79

Figure 4.15 Example of convoymodel. Retrieved from: Toni C. Antonucci, Hiroko Akiyama & Keiko Takahashi, *Attachment and close relationships across the life span* (Attachment & Human Development, 2004), pag. 364

Tool 3: Loneliness questionnaire

The De Jong Gierveld Loneliness Scale is an academic research tool designed to investigate the level of loneliness in older adults. The scale provides a distinction between emotional and social loneliness, where social loneliness (SL) occurs when someone is missing a wider social network and emotional loneliness (EL) indicates a missing "intimate relationship". This distinction allows to understand the kind of intervention needed and the causes of loneliness in the researched group. Additionally, this scale has been widely applied in a great variety of studies across Europe and has been validated by many scholars (De Jong Gierveld and van Tilburg 2006; Campaign to End Loneliness UK and Age UK 2015).

The tool is expected to be used as a questionnaire, where seniors need to reply to a series of questions with Yes/ More or less/ No. To each response with "Yes" and "More or less", the interviewee gains a point. The higher the number of points, the higher the loneliness level perceived by the seniors.

The questions posed are divided according to the typology of loneliness investigated:

- I experience a general sense of emptiness [EL]
- I miss having people around me [EL]
- I often feel rejected [EL]
- There are plenty of people I can rely on when I have problems [SL]
- There are many people I can trust completely [SL]
- There are enough people I feel close to [SL]

For the sake of this research, the questions have been translated in Italian and presented to the seniors as a questionnaire.

Con questo breve questionario si va a ricercare come percepisci il concetto di solitudine, rispondi barrando una crocetta sulla risposta che ritieni più opportuna.

1. Provo un senso generale di vuoto emotivo

Sì Abbastanza No

2. Mi manca avere persone intorno a me

Sì Abbastanza No

3. Mi sento spesso rifiutato

Sì Abbastanza No

4. Ci sono molte persone su cui posso fare affidamento quando ho problemi

Sì Abbastanza No

5. Ci sono molte persone di cui posso fidarmi completamente

Sì Abbastanza No

6. Ci sono abbastanza persone a cui mi sento vicino

Sì Abbastanza

Figure 4.16 Loneliness questionnaire.
Source: the author



Figure 4.17 Cultural probe kit given to the senior.
Source: the author

4.3. Insights

The interviews and the cultural probes helped give a more localized perspective on the topic, showcasing the needs and necessities of the three main actors of public interventions for loneliness: municipality, associations, and users.

It was insightful to find through the fieldwork a complex system of intervention for the general welfare of seniors and a wide variety of offerings for entertainment. Although such a rich offering, the lack of engagement of a significant portion of seniors in Pordenone was evident. There might be different causes for such phenomenon:

- **Economical limitations**

Different offerings for entertainment, education and physical activities are services for a fee, generally with a discounted price point. Although it is not always possible to offer interventions free of charge, it is evident that indigent seniors will have higher difficulties in engaging in such services.

- **Mobility limitations**

Seniors with mobility impairments or without a private means of transport have more difficulties using services across the city. Mobility impairments cause the seniors to be essentially housebound, especially if they do not have a caregiver to help them move. Otherwise, even if a senior has some form autonomy when walking, they might find it difficult to reach the service location without using a car or a scooter. In fact, public transport in the area might not have a fitting scheduling for bus rides or it might not be feasible for a senior to reach and wait at the bus stop.

For examples, discounts and dedicated activities at the municipal swimming pool might be less appealing to elders since the swimming pool is in an industrial area close to the highway. It is not possible to easily reach it by bike and it is not always sustainable to use public transports, as seniors might need to change bus line long or walk to reach the bus stop.

- **Physical impairments**

Incontinence, visual and hearing impairments can influence the way seniors access to offerings available locally. These limitations can undermine seniors' confidence and cause them embarrassment, similar to what happens during social encounters.

- **Trustworthiness**

During the interviews, it was highlighted how trust was fundamental in the service delivery, to the point that offerings like the Time bank had to be suspended in Pordenone. The fears of being scammed and robbed have to be addressed when designing loneliness interventions for the target group.

With the pandemic and the development of services focused on home-based offerings, the positive response among the citizens was visible, both due to the suspension of other socialisation opportunities and the reaching of newly targeted seniors. Home-based offerings, such as the Social call service, help mitigating the pain points that prevent the engagement to social activities listed above. Additionally, there is a clear lack of such services on the local territory. The absence of remote offerings might be caused by the lack of volunteers that can be employed

for such offering, as traditionally such services require a broad pool of volunteers to be delivered.

Cultural probes were particularly useful in investigating the differences between loneliness levels and social connections, although they confirmed the impact of the risk factors for loneliness in triggering such condition. It was evident the importance of children in the daily socialization of seniors, as the participants who had higher levels of loneliness were the ones with children living afar or who had less contacts with their family members. Health issues played a significant role in the proactivity of seniors, as there was a direct correlation between the general health status of the seniors and the severity of loneliness.

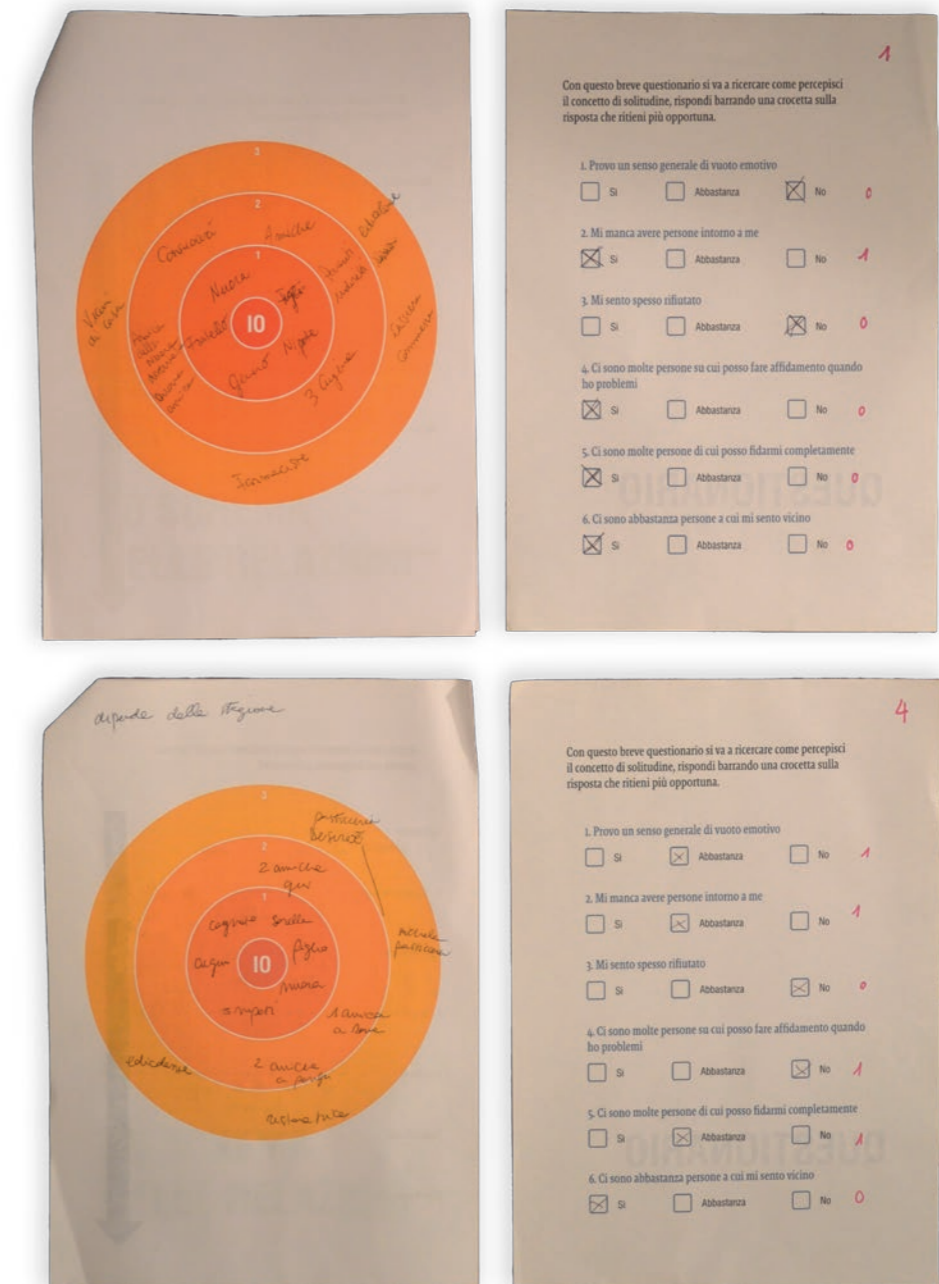


Figure 4.18 Comparison of the convoy models of the person rating lowest and highest in the De Jong Gierveld Loneliness Scale. Source: the author

The complete list of insights have been divided according to the actor analyzed.

Association Tempo Scambio

Seniors had issues trusting strangers coming home to volunteer, causing the suspension of time bank offerings in Pordenone.

Seniors had difficulties using devices with touch screens due to a lack of sensitivity in their fingertips, additionally, the devices were often being "hijacked" by their nephews, which caused confusion in less tech-savvy individuals.

The association reported the need of local services for socialization both remotely and in person.

The interviewee feels the need for new ideas regarding services for loneliness and entertainment. However, they pointed out that there is a lack of people and funding who can help delivering said ideas.

To get new ideas and to have support delivering services, Tempo Scambio contacted an association in Emilia Romagna region to understand how to repropose similar services in the area. The partnership highlighted the need of associations for support in delivering effective interventions.

Volunteers are often seniors themselves - which can limit the volunteers' availability in the long term. As they are in a similar age group of the users, it allows to obtain service already designed with the point of view of the possible users.

One association (Tempo Scambio) coordinates the service delivered locally, becoming the reference point for both the municipal social service office and other associations operating in the territory.

Strong public administration support helped deliver meaningful interventions (i.e. social phone service) smoothly.

Public administration, specifically the municipal department for Social Services and European projects, is heavily involved in the design and set up of the services.

Possibility to reach a wide audience through the data of the services already established.

Municipality

Active ageing is one of the macro-objectives of the municipality, investments for services targeting seniors focus predominantly on cohousing, general wellbeing, and lifestyle.

In Pordenone, there is a strong focus on cultural events and initiatives, as they are a driving force for tourism and the economic turnover they generate. The events have different themes, including books, movies, music, art and design.

The municipality does not have a long-term and systemic vision on how to use resources and spaces. Investments for new buildings, like Casa delle Attività, and common spaces are made, however there is no project on what to offer in these spaces.

It was evident the interest and proactivity for participatory approaches for service design.

Pordenone strongly engages and participates in European social innovation projects, especially for the topics of active ageing and local youth.

There is a rich network of associations and cooperatives active in Pordenone and its province, showcasing the vitality of the area in welfare and social services.

Seniors

Social and daily life

Seniors perceive their children and daughter/son in-law as their emotionally closest links.

The most socially active seniors have a solid familiar life. The lowest scores on the De Jong Gierveld Loneliness Scale were obtained by seniors who lived with a partner and had different close relatives visiting regularly (minimum once a week).

Another factor indicating a robust social life is having a strong neighbourhood and community life. For example, they regularly visit neighbours or meet a friend in church.

Among friends and acquaintances listed on the convoy model, many were people the interviewee met at work.

On average, seniors are more likely to do basic daily activities in autonomy (cooking, cleaning), receive visits/called their children, and engage in low-energy activities (watch tv, read books/magazines, crosswords).

Health issues

There is a dichotomy between the way people perceived their disabilities and the limitations they had, in some cases there is more of a psychological limitation rather than a physical one.

Mobility and hearing issues were listed as the most common reasons they did not go out or socialise.

Loneliness questionnaire

The average score on the De Jong Gierveld Loneliness Scale was 2 out of 6, with an equal emotional and social loneliness score.

In the questionnaire, when the results between emotional and social loneliness differed, interviewees obtained a higher score regarding emotional loneliness. This suggests the need of more intimate relationship more than the need of a wider social network.

The individual with the highest score did not have social contact daily and contacted her only son once a week. Additionally, people in the closest ring of the convoy model, the one connected to the confidants, all lived abroad.

Services

Municipal services and discounts dedicated to those over 65s are known thanks to the Carta d'argento and from the seniors' relatives primarily, however, none of the interviewees uses them.

For two reasons, seniors might not engage in interventions targeted for their age group. First, they might not be interested in the services proposed or they might

not use them due to the lack of autonomy in moving outside their home and due to physical impairments (incontinence, visual and hearing impairments).

Relevant quotes were collected during the cultural probes with the seniors, including the following:

“In the evening I often visit my ninety-year-old neighbour, sometimes I’m too tired and I don’t want to go but I know she’s waiting for me”

Woman - 83

“I don’t leave the house often because I’m afraid of falling, [...] even when I have to cross the street (in front of my house) I fear I’ll trip on the crosswalk”

Woman – 80

“(I like watching movies but) I do not go to the cinema usually, here films do not have subtitles so I cannot understand the movie due to my hearing impairment “

Woman – 78

“Every week I go with my cousin to walk for two hours in order to spend time together “

Woman - 78

“Before the Covid, I used to go to have an aperitif after mass with my friends but now I can’t do it anymore (I don’t have anyone taking me to church)”

Woman – 85

“Once I attended a university of the third age to study English, but I quit when my grandchildren were born”

Woman – 85

“With my hearing loss, I no longer feel like taking the car to go out”

Male – 90



Figure 4.19 Older lady using the tool 1 of the cultural probes kit. Source: the author



Figure 4.20 Older lady writing on the convoy model. Source: the author



Figure 4.21 Older lady in her kitchen during the cultural probes. Source: the author

Understand RC

2. PROBLEMS / PAINS

Which problems do you solve for your customer?
There could be more than one solution for a problem
eg. existing solar solutions for private houses in the UK
a good investment (1)

X

TOO MANY
POINTS FOR
PERSON

TOO MANY
TABS

hard to
bookings
a group.

5. Research summary: findings and conclusions

The insights collected with the literature review, the analysis of the case studies and the fieldwork showcase underlying common themes, sparking ideas and opportunities to develop a new service for the municipality of Pordenone. To simplify the fruition of the insights, they have been divided into six clusters identified during the data analysis

5.1. Loneliness interventions

Interventions targeting loneliness delivered by the public sector mainly focus on macro and meso-level services, which are declined in offering socialisation opportunities, supporting independence and wellness, and helping seniors in every-day tasks. Such services often tackle general risk factors for loneliness correlated with the general wellbeing of the target group. This approach ensures to optimize the investments of the public administrations by delivering these offerings to the biggest pool of potential user possible. However, at the same time, such broad offering does not allow to properly target the various declinations of loneliness in seniors, stressing the need for a holistic yet systemic approach to loneliness interventions (National Academies of Sciences et al. 2020; Rodríguez-Romero et al. 2021).

5.2. Effectiveness of the interventions

While in chapter 2.2.2 it is possible to read the influencing factors for the efficacy of loneliness interventions”, some common points can be seen across the research.

When volunteering associations are involved in all the steps of the projects, the interventions are by default, co-designed by seniors, as volunteers are mainly seniors themselves. Consequently, various case studies analyzed, and local services of Pordenone inadvertently use a participatory approach in the design process, ensuring both sustainability of the interventions and targetization of the final users. Additionally, the creation of a network of stakeholders locally collaborating help deliver more impactful services and develop more complex service offerings.

When interviewing the association Tempo Scambio, they reported that they partnered with other associations to be tutored and to adapt offerings from the Emilia Romagna region for the context of Pordenone. Therefore, volunteers could benefit from peer support in the design of the intervention, for example, by making case studies accessible and providing information of virtuous interventions.

Lastly, to ensure seniors’ engagement in the intervention, it is essential to transmit a sense of trust among the end users, primarily when the offering is delivered at the seniors’ home. The vulnerability of seniors and the fear of being scammed make the target group suspicious of new services involving known public figures and recognized authorities, such as doctors, could help transmit a sense of reliability.

5.3. Advertisement of the services

Different seniors do not wish to identify themselves as lonely or with being old due to views connected to ageism (Kharicha et al. 2017) and the social stigma perceived. Nonetheless, many services still use “negative” wording which recall concepts as aging and loneliness when presenting the service, involuntarily pushing away the frailest section of the target audience.

Additionally, advertising services through posters around the city or social media can be ineffective for seniors who don’t have internet access or are housebound. There was no apparent marketization of the services, and the services were frequently accessible to any senior who wished to apply. Frailty was an aspect encouraged to target but was not the focal point of the intervention.

5.4. Seniors and their social life

While home-based case studies target a younger audience of predominantly over 60-65 y.o. seniors, three case studies have reported how their core demographic is actually composed by over-70-year-olds (the Circle, Emergenza solitudine, Anima Domus).

Generally, the identification parameters of lonelier individuals among case studies and literature review were similar: low income, low socio-cultural level, lower connection to family, lacking meaningful social connections. The connection with the family is critical in countries like Italy, where the social support of seniors is a responsibility of the family (Cerea 2020).

The cultural probes helped unveil that the most socially active seniors and the ones who have lower levels of loneliness:

- had daily contact with their children, either for a short visit or to have a phone call,
- had at least one child living in proximity to the elder, averagely between 2 and 10 km,
- had at least one nephew visiting them once a week.

Neighbours and old colleagues are also a vital part of the social life of seniors, particularly in highly populated neighbourhoods that allow small-scale communities.

Among the elders of Pordenone, loneliness was either detected as equally social and emotional or predominantly emotional, suggesting the need for more intimate relationships rather than a wider social network.

5.5. Role of the stakeholders

Among the stakeholders, the associations' role is vital for delivering interventions aimed at sociality. The relevance of the volunteering association is connected to different factors:

- their ability to offer services that can quickly intercept the needs of the citizenship before the public sector,
- the possibility of reaching a large pool of volunteers and a wide range of seniors,
- their willingness and passion in supporting the local community, helping the sustainability of services throughout time.

On the other hand, municipalities and the regional administration assume the role of coordinator and financier of the interventions. The local administration's political support of the services ensures consistent funding and the promotion of measures to ensure the long-lasting duration of the offerings. In the following figure, a rich picture of the stakeholders involved has been structured, detailing the power plays and the needs of each actor.

Table 5.1 Rich picture table reporting the stakeholders involved in the intervention's delivery, considering the case studies and the insights of the interviews in Pordenone. Source: the author

Actors	Seniors	Volunteers	Associations	Municipal social service staff	Municipality	Public-owned and private businesses
Interest	<ul style="list-style-type: none"> Access to targeted services to support daily needs (food, home care, entertainment) Be able to use accessible and inexpensive services Be safe when going out, participating to activities or doing daily chores Feel being taken care of Feel as valuable members of their family/ community/ society Create new friendships / meet new people 	<ul style="list-style-type: none"> Have an occupation during the day and free time (either payed or not) Partaking in activities that can help others Feel as valuable members of their community and society Feel safe and capable of delivery the intervention Create new friendships / meet new people 	<ul style="list-style-type: none"> Establish collaborations with municipality, region, foundations and other associations Reach economic sustainability through donations / external fundings Become a valuable and reliable actor for the community Provide a valuable support for their associates 	<ul style="list-style-type: none"> Safeguard the seniors and frail people of the municipality Easily coordinate the service offerings Engage with people in need of support 	<ul style="list-style-type: none"> Have a impact on the life quality of the citizenship Obtain political consensus Offer economically accessible services Use public funds wisely 	<ul style="list-style-type: none"> Engage with people in need of support Offer interventions able to target the needs of their customers Reach economic sustainability through public funds / subscriptions / revenues Have loyal and stable customers
Power	<ul style="list-style-type: none"> Actively engage in community life Trace the history of the community Create and support social capital Support their community and acquaintances with skills and life knowledge 	<ul style="list-style-type: none"> Create social capital Support their community in delivering interventions 	<ul style="list-style-type: none"> Deliver the designed interventions in a economically sustainable way Connect and co-create systemic solutions for welfare 	<ul style="list-style-type: none"> Overview of the social status of the most fragile strands of the population Coordinate the actors involved in the delivery of interventions 	<ul style="list-style-type: none"> Fund association to deliver interventions Collect fundings from the region, nation, or from European Union Provide a database of the seniors living in the municipality 	<ul style="list-style-type: none"> Have a stronger workforce that can ensure the delivery of interventions throughout time Deliver interventions that are not possible by volunteering associations (ex. psychological support)
Practice	<ul style="list-style-type: none"> Collaborate in the identification and enrollment of new seniors Support the delivery of the intervention - become volunteers 	<ul style="list-style-type: none"> Deliver the intervention, being the front -end 	<ul style="list-style-type: none"> Offer the necessary tools to volunteers to deliver the interventions 	<ul style="list-style-type: none"> Collaborate with volunteers in providing support for the most extreme cases (people in severe neglect, with health issues, low income seniors) 	<ul style="list-style-type: none"> Offer fundings and access to databases to ensure economic sustainability of the service 	<ul style="list-style-type: none"> Deliver the intervention, being the front -end Support associations and municipalities

5.6. Consequences of the pandemic

The pandemic has opened new opportunities to expand the offerings locally. While macro - meso interventions are currently the most common offerings, there is the possibility to promote more vertical services in contrast to loneliness, such as the social call centre. The positive reaction towards such services has led to the decision to keep these interventions in the future. Specifically, COVID-19 caused a rise of home-base services which were not available before in Pordenone. In addition, such offerings allowed to reach new users that have never been targeted, stressing the importance of promoting different levels of loneliness intervention in the municipality.

5.7. Conclusions

The insights gathered throughout the research process express a clear need for a more comprehensive and targeted approach for designing loneliness interventions.

The analysis of the five Italian case studies and the interviews carried out during the field work pointed out the need for in-depth knowledge of the loneliness phenomenon. The lack of understanding of the phenomenon's complexity is strictly related to the shortage of resources and time available to properly investigate the matter. This limits the ability to design proper solutions and risks to invalidate their efficacy. Fortunately, the collaboration among associations nationwide and the research tools used ensure the tailoring of the service offering and to obtain feedback about the best practice to use.

The literature review and the cultural probes reported insights regarding the need for more inclusive and accessible offerings, especially for vulnerable people and individuals with underlying disabilities. When discussing with service providers, most reported not having considered specific disabilities during the design process. The lack of consideration for these aspects furtherly restricts the pool of seniors who can engage in the activities offered, aggravating the gap between socially active and inactive individuals. As the ageing population and the incidence of seniors with chronic illnesses will grow in the next decades, using an approach that promotes inclusivity is essential in every field of public administration.

Other factors, such as stigma, embarrassment, and trust, need to be addressed in the next generation of services for sociality. A psychological-centred approach could be beneficial in targeting such risk factors and could be helpful to add another layer of depth in the tailoring of novel interventions. Although they might be considered minor issues, the research highlighted how said factors must be managed to ensure that the service offered is well acknowledged by its users.

Lastly, it is important to note the lack of understanding and investigation surrounding the role of the associations in the service delivery of public services. Associations are the backbone of welfare programs, especially in smaller realities like Pordenone. Nonetheless, said actors are clearly struggling to access funding and promote an intergenerational succession of volunteers. New opportunities to address such issues have risen and further research would be needed to find solutions to support these stakeholders.

INDIVIDUAL SETTING

GOALS

WHAT IS THE SERVICE OFFERING

HOW

WHY THESE CHOICES

MESO INTERVENTION = social norms + social skills

Create socialization opportunities

MICRO INTERVENTION = address...

have the community

INDIVIDUAL LEVEL
volunteering telephone service through discussion of media

interconnect people who go to public screening and people in community

public screening of med films open to everyone

meet-up attend wks regarding the topics

create a committee based on participant from both activities

publishing the reviews in public spaces

pairing of seniors by a coordinator with people living by

Facebook group with all the participants

opportunity for seniors from scheduling to participate

organize to get all together in one place

create a committee based on participant from both activities

reviews from the individual attending since are selected

media piece (over a book) is delivered by a volunteer (do not enter home) call each other for discussion to support socialization

offer to see more + open

offer to help them organize the review exhibition

reviews are prepared for display by volunteers

a group coordinator

reviews are prepared for display by volunteers

packed over the review is written outside

bridging of the gap bet insight activities

WHY THIS SOLUTION IS RELEVANT

services that do not focus directly on socialization are preferred by seniors -> swim/punch

incorporating the focus of the municipality for culture in the service offering

few volunteers = need to optimize their time and energies

have a physical outcome to show concrete the seniors can contribute

existing interventions focus on seniors as passive users -> promote participation

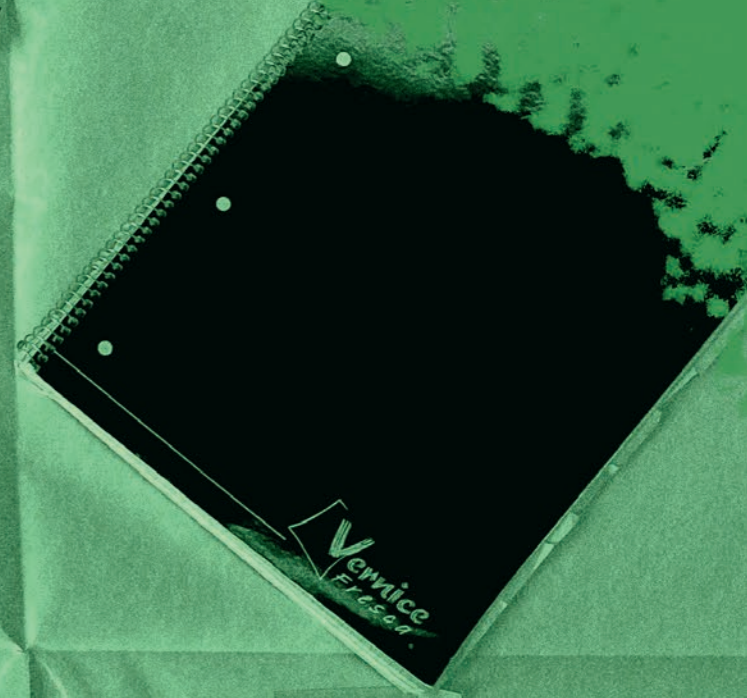
using existing resources to reduce economic investment

bridge the gap bet insight activities

promote inclusivity mobility

news are published by volunteers
show more outside the bounds of the book with group
SOCIAL COORDINATOR
1 coordinator + 1-2 volunteers to do del - borrowed but with 20% deposit
if seniors do not have dial player - borrowed but with 20% deposit

6. Ideation



6.1. Frame design challenges and opportunities

The overall insights were the starting point for the ideation of a project for the municipality of Pordenone. As cited in chapter 1.4. "Research approach and methodology", a synthesis wall (Service Design Tools n.d.) was developed to cluster the insight cited above in different areas, which was included as classification in chapter 5 "Research summary". The rest of the insights were used to develop personas and user stories. Such methods aim at re-elaborating the point of view of the actors directly involved in the service: seniors, the president of the association and volunteers. Meanwhile, case study positioning allowed the author to identify opportunity scenarios and develop a metaphor of intervention, from which a design question was defined.

6.1.1. User stories and personas

Maintaining the focus on the stakeholders and the service users was needed to design a tailored solution for the specific context analyzed. User stories (Stickdorn et al. 2018) were used as the first step of data interpretation and were then partially used to create the personas. The user stories were structured to express the needs and aspirations of the seniors, newly trained volunteers, experienced volunteers and the association's president. Each card included the actor analyzed, the desired action and the resulting expected outcome.

User stories - Coordinator of the association

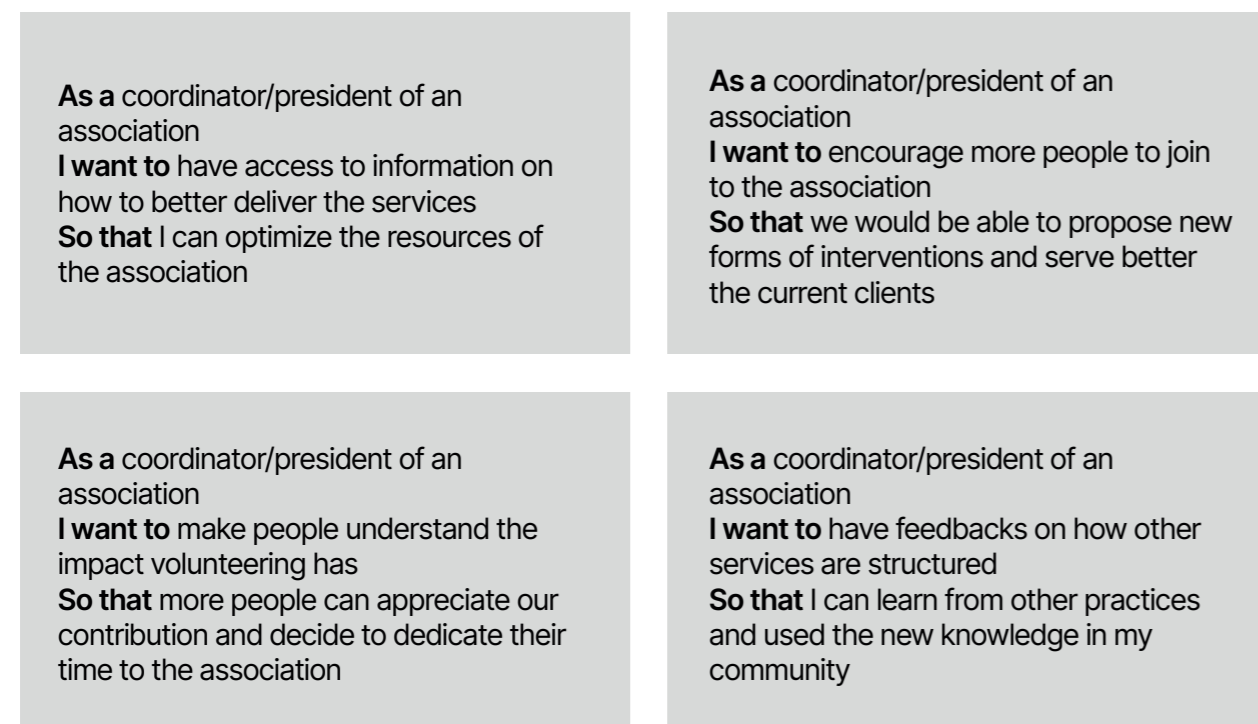


Figure 6.1 Users stories about the association coordinator. Source: the author

User stories - Volunteers



Figure 6.2 User stories about volunteers. Source: the author

User stories - Seniors



Figure 6.3 User stories about seniors. Source: the author

Personas

Personas represent the archetypes of a specific group of individuals that share common characteristics (Stickdorn et al. 2018). Four different profiles were developed, aiming at interconnecting the challenges of each actor with their necessities and limitations. For example, two personas were dedicated to the seniors, as they are the ones with the most complex cases; oppositely, one persona was dedicated to volunteers and one to the coordinator.



Coordinator of the association

Valeria Santarossa

Age: 71 **Sex:** F

Household: two people household (lives with a partner)

Impairment and accessibility issues: none

Description

Valeria has been a volunteer for the last 10 years in one of the associations of Pordenone. She progressively dedicated more and more time to the association and now she has become its president.

As the president, she has to collaborate with social workers and council members to design and implement local services. Additionally she ensures the services provided by the association are correctly delivered to the citizenship.

Quote

"This association is like a family to me, we hang out together frequently and I get to know very interesting people"

Needs

- Support in understanding how to propose new forms of interventions
- Finding new volunteers for the association
- Promote the activities of the association in the territory

Challenges

- Help raising funds for supplies
- Making people understand the importance of volunteering
- Support the municipality in delivering services

Figure 6.4 Personas regarding the coordinator of the association. Source: the author



Volunteer

Marco Turchet

Age: 65 **Sex:** M

Household: two people household (lives with a partner)

Impairment and accessibility issues: visual impairment

Description

Marco recently retired from his job in a local factory. He always liked the idea of volunteering but never had time before to dedicate himself to such activity.

He likes hanging out in the local café at the end of the day to meet his friends and get updated about the daily local news.

Quote

"I like being a pensioner but I cannot stand staying too much at home, it would drive me crazy!"

Needs

- Having some occupation during the day to keep him busy
- Feeling like a support to his district and helping people he knows

Challenges

- Be supported when learning about volunteering activities
- Get to know about the advantages of volunteering and about volunteering associations

Figure 6.5 Personas regarding the volunteer. Source: the author



Senior

Elvira Boscolo

Age: 83 Sex: F

Household: single-person household

Impairment and accessibility issues:
mobility issues
visual impairment

Description

Elvira lives in her family home in Pordenone. Her only son lives a couple of hours from her, so they call each other every day to get life updates. A couple of months ago, Elvira fell on the street and had to go to the hospital. Now she is afraid to walk alone for long distances or walking down the stairs, so she doesn't leave home frequently anymore.

Quote

"I used to go at least to the butcher or to the market, now it is impossible to me due to my hip."

Needs

- Being more autonomous in the daily
- Seeing more frequently her nephew
- Having a more diversified weekly routine

Challenges

- Walk for long distances and standing for a long time on the bus
- Let her know about possible offering happening locally

Figure 6.6 Personas regarding seniors. Source: the author



Senior

Anna Maria Martin

Age: 87 Sex: F

Household: two people household (lives with a partner)

Impairment and accessibility issues:
hearing issues
visual impairment

Description

Anna Maria lives with her husband in the outskirts of Pordenone. She has three children that live in the same province. One of her sons has lunch with her almost every day, while the others call her on the daily.

She likes going to the cinema and the theatre but she have difficulties hearing clearly the audio of the film. Additionally her husband stopped driving recently so he cannot take her by car any longer.

Quote

"I like that Matteo comes here at lunch with me, it gets me going knowing that I have to prepare a meal for him."

Needs

- Being able to enjoy watching a movie or a play again
- Getting help taking care of her garden

Challenges

- Have someone able to give her a lift
- Have access to subtitles or forms of accessible media

Figure 6.7 Personas regarding seniors. Source: the author

6.1.2. Case study positioning

All the case studies analyzed and the services offered by the municipality of Pordenone were inserted in a quadrant diagram to identify intervention opportunities. The two axes were based on influencing characteristics of the cases themselves:

- the vertical axis reported the **typology of interventions**, according to the definition proposed by Samia C. Akhter-Khan and Au. Rhoda – explained in detail in chapter 2.2.1. *"Intervention typologies"* (Akhter-Khan and Au 2020). The cases are positioned starting from macro-level interventions at the top of the chart. In the middle are meso-level interventions, while at the other extreme micro-level interventions are positioned.
- the horizontal axis reports the user's **level of participation in the service delivery**, emphasizing the relationship between customer and the service provider. As explained in chapter 2.2.2. *"Influencing factors for the efficacy of loneliness interventions"*, efficacy is directly correlated to the active involvement of seniors in the activities performed during the service (Dickens et al. 2011). On the left side of the chart, seniors have a passive role and are recipients of outer intervention. Oppositely, on the right side of the graph, there is an equality between seniors and service providers, blurring the line of interaction.

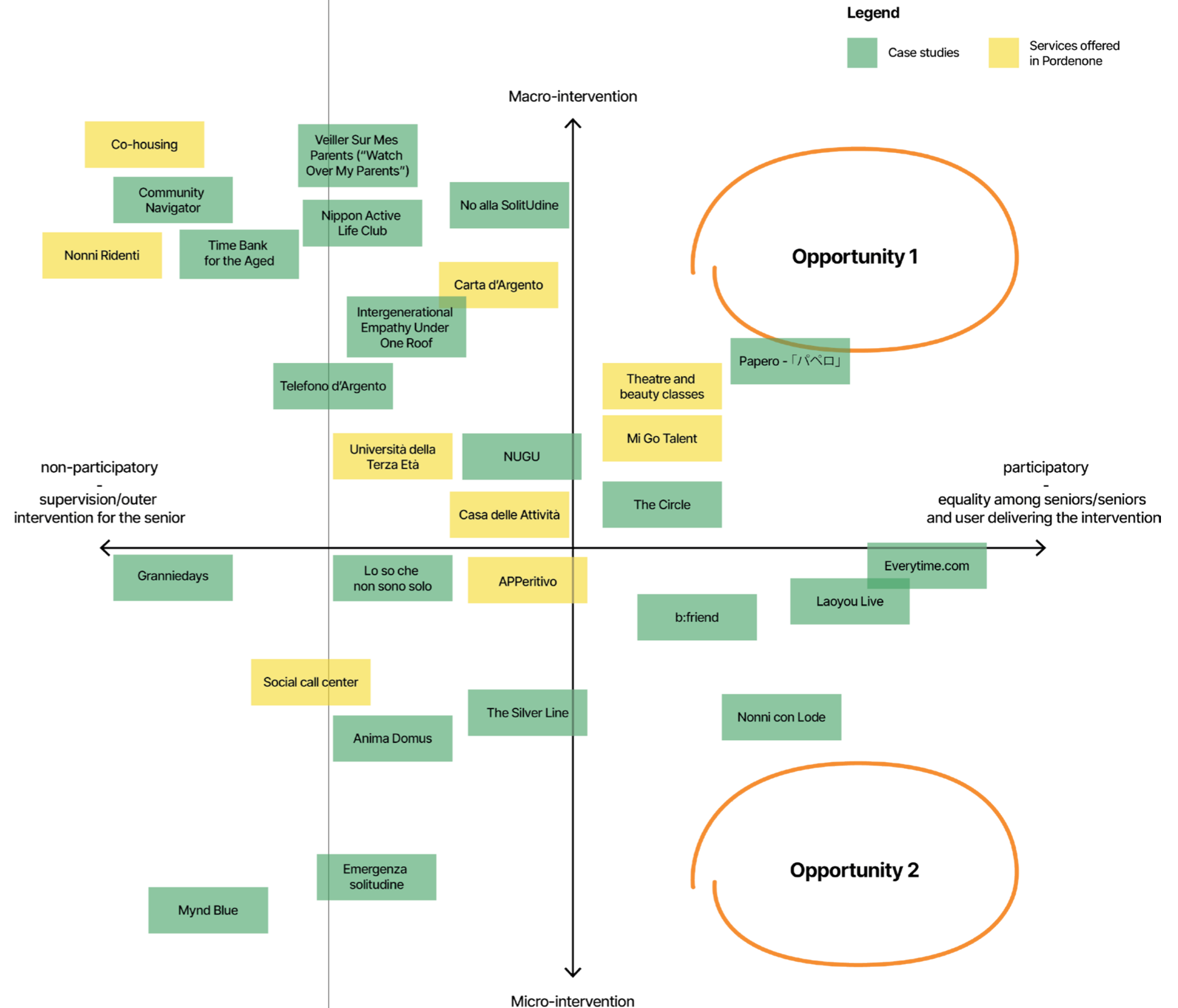


Figure 6.8 Quadrant diagram with case studies. Source: the author

Each quadrant of the diagram was assigned to an opportunity scenario, outlining the main characteristics of a possible service. Each area presented a metaphor, a brief description of the interventions' characteristics and a user story, similar to the previous ones. The four quadrants presented the following scenarios:

- **Guardian** (macro-meso vs outer intervention): the service provider offers support for the general wellbeing of the senior, including housing, support in daily tasks and errands. The senior is merely a receptor of the service.
- **Psychologist** (meso-micro vs outer intervention): the service offers support at a deeper level, working with the senior in their emotional sphere. The relationship between service provider and senior stays on the "doctor-patient" level.
- **PR manager** (macro - meso vs participatory intervention): the service offers activities and tools to promote socialization and general wellbeing. The senior can learn new skills and has the power of choice in the level of socialization they want to engage with.
- **Mental coach** (meso - micro vs participatory intervention): service provider offers tools and events to promote a close relationship and participation between a small community. The senior has the power to contribute to the delivery/development of specific touchpoints, giving them higher independence and boosting engagement to the service itself.

The author decided to work in the parameters of the "Mental coach" scenario, as it allows to design services that promote the active participation of the seniors while blurring the interaction line in the service offering. Additionally, there is a lack of services in this quadrant and, in general, targeting micro-interventions. This approach to the service offering guarantees a higher success rate and efficacy since it improves the engagement level to the project.

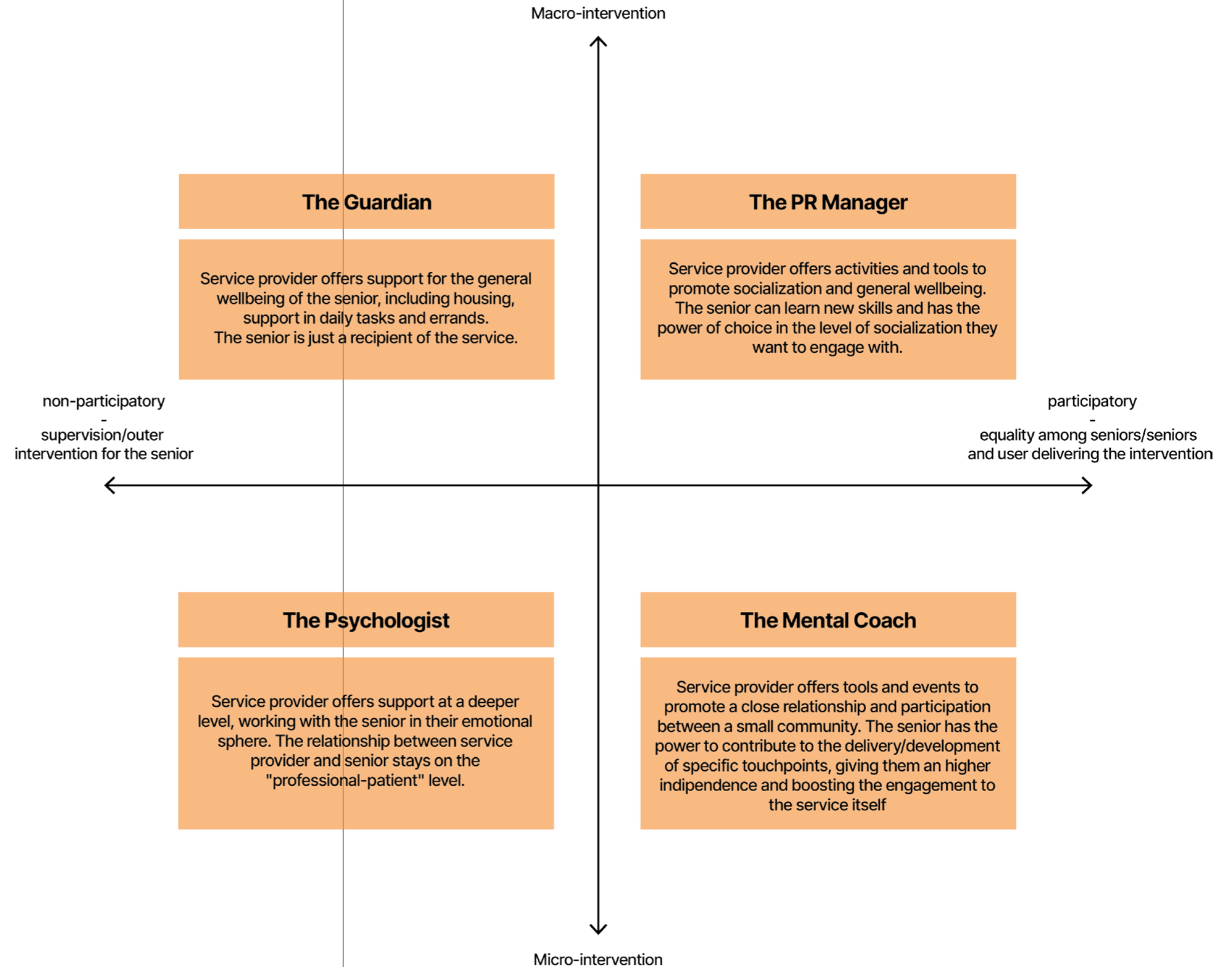


Figure 6.9 Matrix with the design scenarios. Source: the author

6.1.3. Design question and intervention metaphor

The quadrant diagram's outcome led to the design question's development and a metaphor of intervention. The *"Mental coach"* scenario allows to sum of two contrasting yet consequential factors identified in the research. First, from the seniors' point of view, the participatory approach of interventions could help tackle the incidence of emotional loneliness in Pordenone's citizenship. Feeling respected and regarded is an impactful way to approach social cognition and an effective solution to tackle this aspect of loneliness.

Oppositely, from the associations' point of view, the difficulties of recruiting new volunteers and their average older age compromise the sustainability of public services for welfare in Italy, particularly on a long term. This constitutes a pain point also for municipalities, as generally, services of this kind require the support of associations for their delivery.

This contrast led to the development of the following design question and sub-question:

How can seniors be more involved in service delivery while enhancing their level of empowerment?

How can the service promote socialization opportunities while boosting the seniors' social cognition?

An intervention metaphor helped the author synthesize the design direction and highlight the shift from the current circumstance to a new intervention model proposed in this thesis. Currently, seniors take the role of recipients of the service offering purely. Nevertheless, this thesis proposes a shift towards a more central role, encouraging seniors to become content creators for the intervention. This approach results in a series of benefits for all the system actors. Seniors receive support in boosting their self-confidence and changing their perception of their community role. At the same time, this shift helps decrease the resources provided by the association to deliver the intervention. The metaphor will also require a network of local entities, promoting collaboration among new stakeholders.

To summarize, the model encourages elderlies to turn into "protagonists" of the service, as visible in the figure 6.10.



Figure 6.10 Intervention metaphor. Source: the author

6.2. Idea generation and selection

6.2.1. Designing empowerment in seniors

Before going into detail on designing the actual intervention, it was necessary to dive deep in one of the keywords of the design question: empowerment in seniors.

Designing for empowerment in this age group requires the ability to balance between four conflicting aspects (De Witte and Van Regenmortel 2019):

- The need for independence vs the increasing frailty of seniors, mainly caused by health deterioration,
- Empowerment to enable support, collaboration and connectedness vs to enable strength, influence and control.

The second point present conflicting yet consequential factors. In fact, seniors in a rich social network obtain influence over the people in the group, the same can be said for the other way around (De Witte and Van Regenmortel 2019). This example showcases how empowerment can be a relational construct. While the individual proactivity influences self-efficacy, it cannot be translated into social influence without engagement with others (Dong and Dong 2018). Such aspect highlights how empowerment represents the society's state-of-art, interconnecting personal, social and societal factors together. When looking at individual level, empowerment comes from a combination of intrapersonal, interpersonal and behavioural components – as summarised in the figure below (De Witte and Van Regenmortel 2019).



Figure 6.11 Diagram of the components for individual empowerment. Redesigned diagram retrieved from: Jasper De Witte, and Martine Van Regenmortel. "SILVER EMPOWERMENT. Loneliness and Social Isolation among Elderly. An Empowerment Perspective (Leuven, Belgium: HIVA - Research institute for work and society, 2019)

Finally, the central focus in giving power to the individual is the ability to conjugate their strengths without disregarding personal needs and vulnerabilities (De Witte and Van Regenmortel 2019). Additionally, giving empowerment is linked to enabling the participation to the individual. A flexible solution without strict boundaries of delivery help promote participation, as it lowers the threshold to activate the person (Dong and Dong 2018).

It is important to note that "one cannot be given empowerment: one has to acquire it. However, it is up to those who have more empowerment to create the conditions to make empowerment possible for those who are less empowered" (Steenssens and Regenmortel 2007, 16–17, translated).

6.2.2. Setting the concept in Pordenone: the focus on culture

Pordenone is locally well known for its cultural dynamism. As presented in chapter 4.3. "Insights", the interest in cultural activities is connected to the rich landscape of associations and foundations that propose a comprehensive system of events and activities. The proactivity of these actors is supported by the municipality and the region, as such events are a driving force for tourism and generate a high economic turnover. These occurrences are focused on specific fields, including books, movies, music, art and design. The three main cultural events of Pordenone are:

pordenonelegge

Called also "the book festival with their authors", pordenonelegge is a literary festival organized by the pordenonelegge.it foundation during September. Well known at a regional and national level, the festival hosts almost 600 guests in more than 300 events spread across the municipal territory and eleven other cities, including the regional capital Trieste (Fondazione Pordenonelegge 2022). pordenonelegge has become a literature institution in the area and is widely popular among the citizens.



Figure 6.12 One of the events of pordenonelegge in 2019. Source: http://www.marcolincovering.it/news_detail/46.aspx

Pordenone Silent Film Festival

Originally known as the “Giornate del Cinema muto”, this world-renowned film festival specializes in presenting silent films. The festival’s popularity is connected to the unique possibility of viewing films that have become part of cinema history while being accompanied by a live orchestra. This is made possible by the collaboration between the Cineteca del Friuli and a local association that manages the municipal cinema called CinemaZero (Cineteca del Friuli 2022).



Figure 6.13 Poster of the Pordenone Silent Film Festival. Source: https://www.repubblica.it/spettacoli/cinema/2021/10/04/news/giornate_del_cinema_muto_al_via_l_edizione_numero_40-320271436/

PordenonePensa

Organized by the Circolo Culturale Eureka, PordenonePensa is a festival founded in 2009 to propose free and informative cultural events. It is held in spring and autumn sessions, following different thematic strands, including crime news, the scientific world, and current events.



Figure 6.14 One of the events of PordenonePensa. Source: <https://www.pnpensa.it/>

The cultural dynamism of the pordenonese community enriches the intervention metaphor presented previously – seniors as content creators – by providing a new layer of meaning to the concept. Additionally, focusing on culture allows access to higher resources and funding from the stakeholders.

6.2.3. Parameters of intervention

The new intervention proposed in this thesis will have to adhere to specific parameters identified in the previous research and ideation phases.

The main area of intervention is designing a service able to bridge meso and micro-interventions, meaning that socialization opportunities and social cognition must be targeted in the service delivery.

The goals for the project are to:

- Improve social cognition and attributional style of the participants by focusing on the individual and community perception and personal empowerment,
- Optimize the resources available on the municipal territory,
- Support the connection of the seniors with the surrounding community.

The achievement of such objectives is influenced by the presence of design challenges, which stemmed from the stakeholders’ pain points. Accessibility of the service has been proven to be an untargeted factor in Pordenone, especially considering people with low mobility and hearing impairments.

The communication of the service and its offering must be mindful of the loneliness stigma and bias regarding socialization interventions to ensure inclusivity and service engagement. For service providers, it is essential to simplify and reduce the amount of work allocated to volunteers, as well as optimise funding and resources to deliver the intervention. Furthermore, the resources used for the service delivery have to comply to a series of specifics:

- They can be easily accessible and affordable, aiming to promote inclusivity to people with a lower income who are at higher risk of loneliness.
- The resource is already available to the municipality, reducing the initial investment to set up the intervention.
- It has significant relevance to the city itself.

6.2.4. Idea generation

Regarding methodology, the idea-generation process started with developing a mind map that combined the intervention metaphor – seniors as content creators – the cultural context of Pordenone and the parameters mentioned above.

The concept of being a content creator was declined in different cultural and social contexts, proposing solutions that could put the seniors at the centre of the intervention while showing their contribution to the surrounding community.

The ideas generated were the following:

Community committees

The concept was based on community committees popular in countries like China and Korea. Each committee was in charge of promoting cultural activities in the local area by using available public spaces (ex. Casa delle Attività or the common spaces of the co-housing projects) and of tracking the health status of the senior population. This idea was based on strengthening the connection between the older citizens and the public administration stakeholders.

Cross-exchange of knowledge

Collaborative groups where seniors were encouraged to exchange knowledge among peers. Participants of the intervention organized a workshop to teach a skill set using third spaces, such as cafès and public spaces across the municipality.

Guardians of Pordenone

The strong identity of neighbourhoods like Vallenoncello could be tracked through the “guardians”, seniors who maintained the historical memory of the neighbourhood alive while tracking the current evolution of the area. Additionally, guardians curated a journal available to the citizenship, where they reported the local events from the seniors’ point of view.

Book reviewers

The idea was structured in two segments: a postal book exchange and a collaboration with pordenonelegge. The first offering was a remote book club in which seniors would share a book from the library, give their opinion and present the outcome at the local library. Furthermore, the collaboration with pordenonelegge allowed to give a public stage for seniors to showcase their outputs in a valuable context.

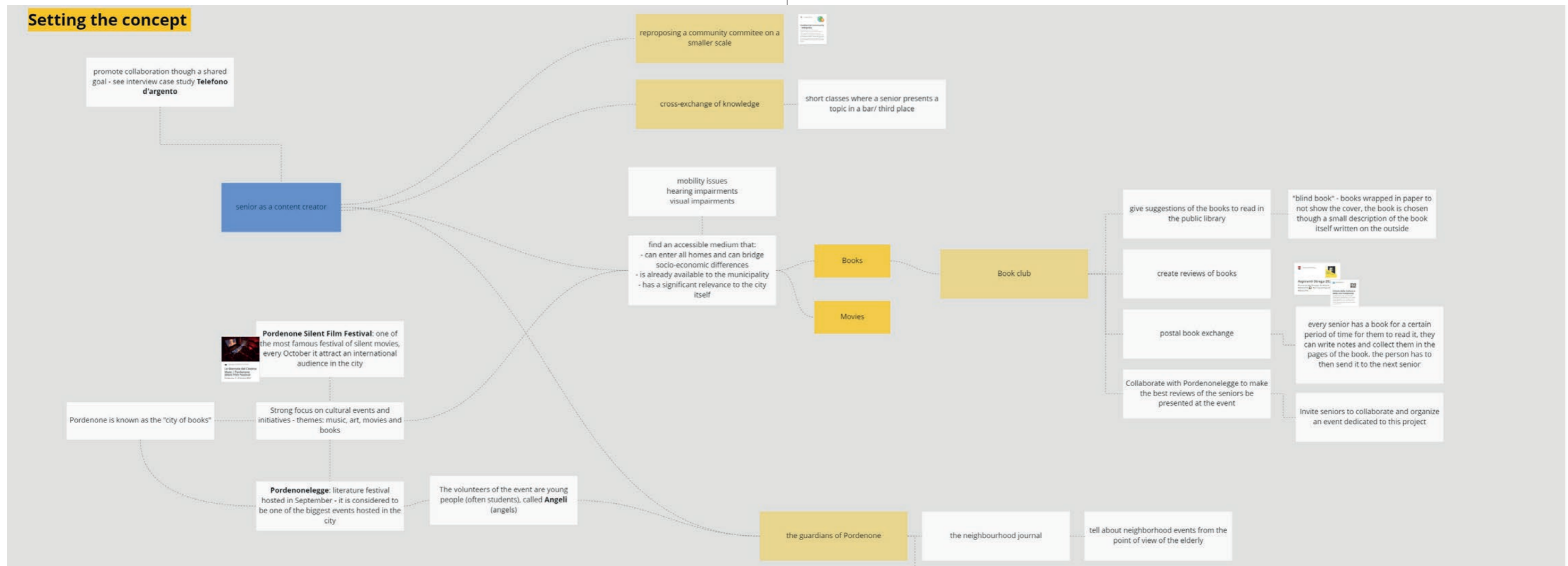


Figure 6.15 Mind map used during the idea generation. Source: the author

6.2.5. First iteration of the ideas with the association

Including stakeholders in the design process is essential to promote the co-design and co-development of the service, especially in relational and community-based services. As in such methodology, the delivery of the offering is shared between user (the senior) and service provider (the association) (Carla Cipolla 2008), participation in the design process become even more valuable to understand the role of each actor. Therefore, a partnership between the author and the association Tempo Scambio of Pordenone was established to ensure to have their perspective on the proposed solution. In June 2022, a first meeting with the president of Tempo Scambio was organized to discuss the four ideas generated – community committees, cross-exchange of knowledge, guardians of Pordenone, and book reviewers.

In the meeting, the author presented the main insights regarding loneliness in Pordenone and the possible form of intervention through a mind map. While discussing the feasibility of each intervention, different insights helped define the design direction.

Cross-exchange of knowledge:

- The attention span of seniors is minimal, corresponding to a maximum of 30 minutes, after which they start chatting.
- Difficulties for seniors in talking to the public and preparing lessons.

Book reviewers

- Less than a quarter of seniors would be interested in reading books and preparing reviews, such as retired teachers. In addition, many seniors take months to finish reading a single book.
- Movies would be a more feasible medium for a larger audience. Not only are movies a more accessible form of media to consume, but cinema discounts are highly requested among the target group. The association collected more than 2000 requests in six months.
- Blind books could be an interesting idea to make the seniors more actively involved. This idea was presented as a concept to display the reviews. Books are wrapped in paper not to show the cover, while a short description of the book itself is reported on the outside to let people choose the book without knowing the author or title.
- The association never thought about collaboration with realities like pordenonelegge, it could be interesting to use this opportunity to showcase also the activity of the association itself.
- Among the major cultural events of Pordenone, the Silent Film Festival is a niche with not many enthusiasts. Pordenonelegge and PordenonePensa are better options to attract people with different tastes and interests.

Book reviews and Guardians of Pordenone

- Writing would be better for creating content than taking pictures or video alone. However, if contents are created in a controlled environment where seniors can get support, videos could be a good mean of communication.

Finally, the author decided to re-elaborate the idea of the book reviewers, as it was particularly appreciated by the association for its offering and collaboration with other actors.

6.3. Concept development

6.3.1. Focusing on cinema – new concept

The first iteration with the association Tempo Scambio pointed to the benefits of using films to socialise. Locally, different foundations are dedicated to distributing and viewing movies, including the Cineteca Friuli and CinemaZero. Other actors focus on educational activities about cinema, as the Università della Terza Età. The presence of different actors interested in cinema has led to the establishment of various movie festivals interconnected and in contact with regional and international festivals, as the Venice Film Festival.

The author adapted the book reviewers' concept of movies as a medium. Considering the need to deliver both micro and meso-interventions, it was decided to develop a mixture of home-based and public service offerings. As a meso-intervention, the service offers three activities:

- Befriending telephone service was developed to promote 1:1 socialization, where conversation is facilitated by the discussion of movies, which are delivered home to the seniors by using DVDs,
- Group meetups that explore the theme of cinema and culture,
- Labs and educational meetings concerning cinema, as cinema history or music composition.

As a micro-intervention, an exhibition committee was ideated to encourage seniors to participate in the design of an exhibition dedicated to their work. The aim of such offering is to boost their self-perception by developing tangible outcomes visible to the outer community. Additionally, in this realm, the opportunities to showcase the reviews done during the phone calls help boost empowerment in seniors.

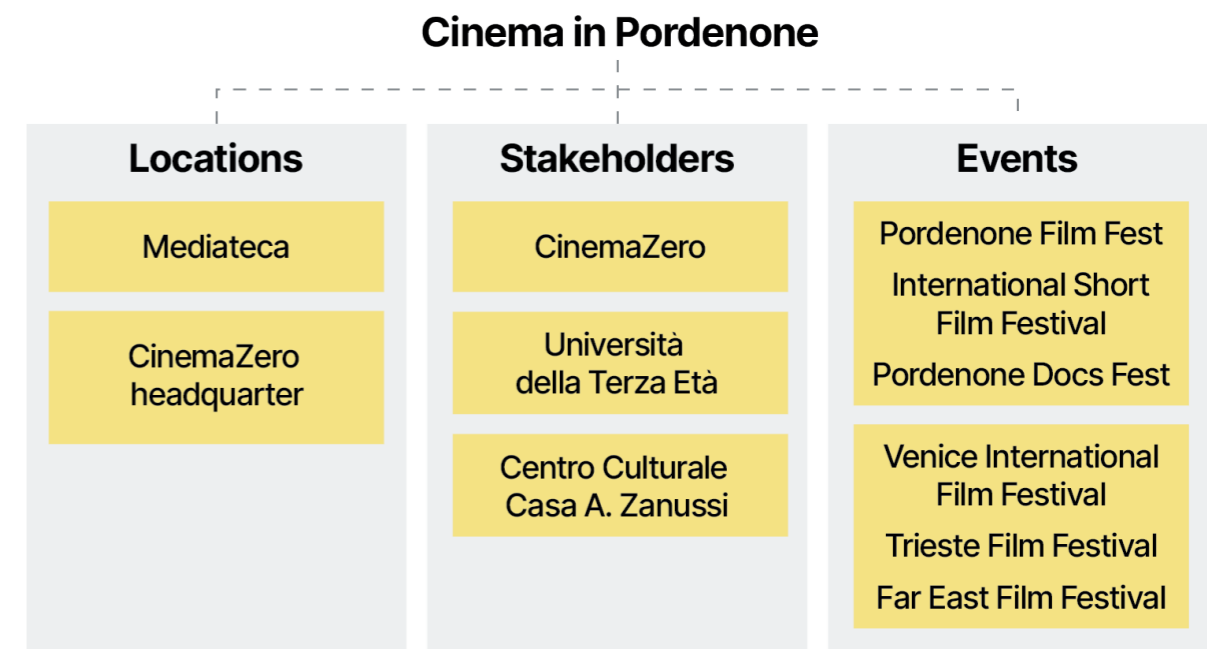


Figure 6.16 The cinema ecosystem in Pordenone. Source: the author

6.3.2. Second iteration

In November 2022, a second iteration with the association Tempo Scambio was organized to validate the service. The meeting lasted 45 minutes and was centred on discussing the project's general feasibility.

A desktop walkthrough (Stickdorn et al. n.d.) was used to review the offerings, allowing for prototyping the service journey and testing it. The tool was developed using a series of post-its on a board, highlighting the connection among offerings and the steps that needed to be discussed.

The feedbacks were overall positive, as the service offering is considered to be in line with the community's needs and able to have an out-of-the-box approach for the context of Pordenone. Between the two iterations, a new opportunity for using digital devices has risen; therefore, the offering of befriending phone service has been redesigned to offer also the viewing of movies using tablets.

It was decided to keep both means of fruition for movies as they each have different limitations. DVDs lower the budget needed for the intervention, as they will be loaned from the media library of CinemaZero free of charge. Additionally, it is a more inclusive method of viewing movies for people who are not acquainted with using online platforms, being it an analogical technology, and it allows the possibility to activate subtitles, helping seniors with hearing impairment.

Oppositely, using tablets would require a streaming subscription, which would increase the service's cost. Without the DVD alternative, the fee for accessing the service would have excluded people with a lower economic status. Additionally, from the fieldwork it was reported the limitations seniors have in using said tablets, including difficulties in recognizing the seniors' fingertips and the digital divide of elderlies. Therefore, the association provided the devices, which were bought for another intervention with the funding provided by the region.

Lastly, the association was enthusiastic about collaborations with cultural events through the exhibition committee. The exhibition was deemed to be an opportunity for Tempo Scambio to showcase both the contribution of seniors and of the association, helping the citizens know their offering and advertising the need for new associates.

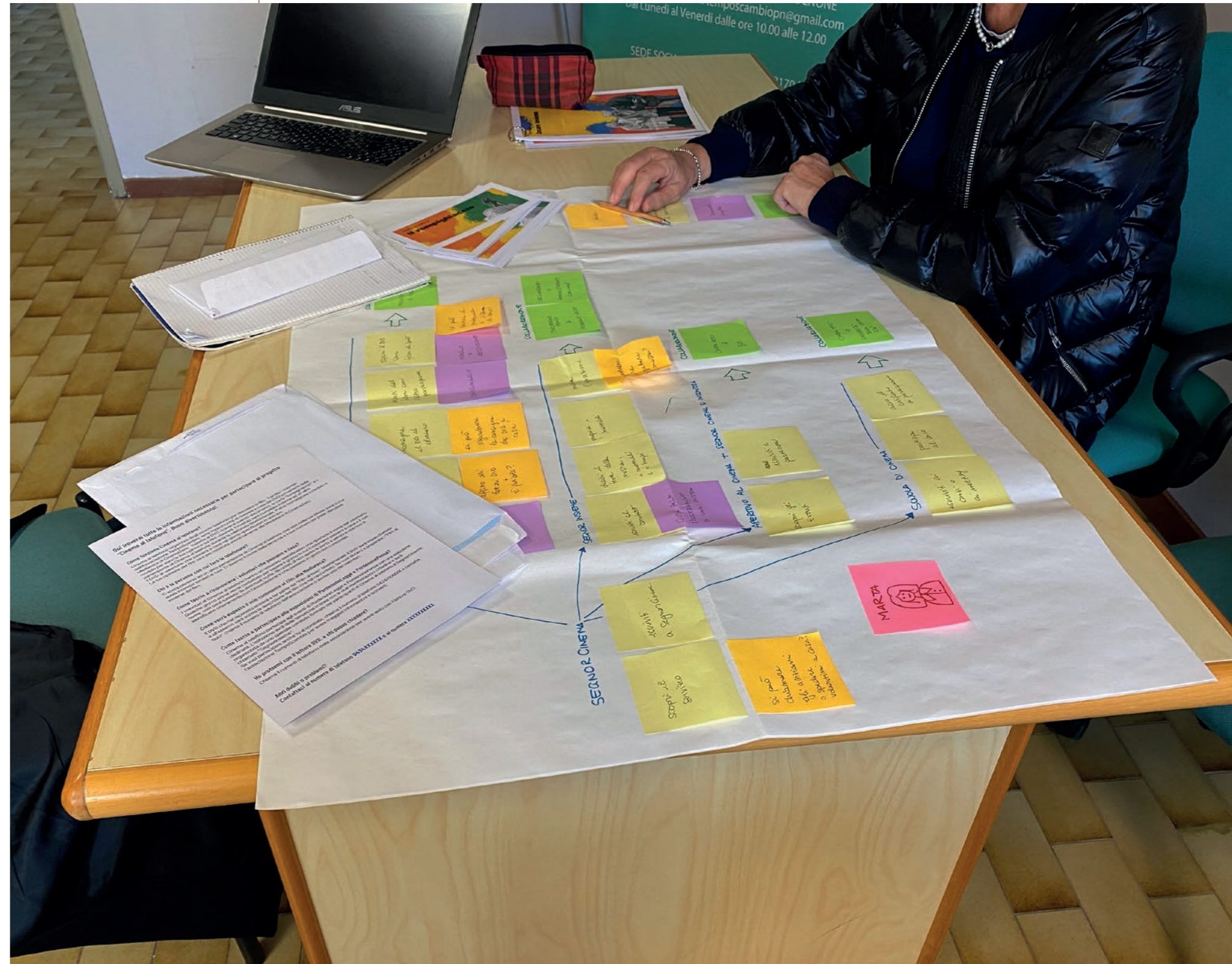


Figure 6.17 Iteration with the representative of the association. Source: the author



7. The project: SegnorCinema

7.1. Introduction

SegnorCinema is a service that helps seniors improve social cognition and connectedness by focusing on the empowerment of the individual and by showcasing forms of contribution to the citizens of Pordenone. Additionally, the intervention promotes the socialization of the seniors in both individual and group approaches, aiming to promote inclusivity among seniors with different needs.

The service is delivered through micro and meso interventions, which boost user empowerment and offer socialization opportunities. The structure of the service was developed to promote the gradual reintroduction of homebound seniors to community socialisation and contribution, aiming to shift the attributional style of seniors and the self-perception of their role in society. The service offerings include home-based and public interventions, stated in a befriending telephone service, group meetups, an exhibition design committee, and educational labs.



7.2. Offering

The offering was designed keeping in mind the intervention parameters listed in chapter 6.2.3. The solid theoretical background and the comprehensive insights from the fieldwork and the partnership with the association allowed the development of a service structure that could balance the need for tailored solutions for loneliness and the need for the economic and social sustainability of the service itself.

The offering is divided into four main pillars:

Cinema al telefono - Befriending telephone system

The befriending system allows seniors to peer socialization using movies and movie reviews to create the first forms of interaction between each other. Activities centred on cinema are aimed at presenting a shared goal to the participant, encouraging them to collaborate and removing the perceived vulnerability that would come from a pure socialization intervention.

Seniors will be able to enjoy movies through two alternative channels: using DVDs or tablets. DVDs are the most accessible option for people with lower economic means and lower digital literacy. They allow a physical entity to the service, as the output of Cinema al telefono would be displaying the DVDs reviewed in the media library. Although a widely available and familiar technology for the time being, DVDs risk making the service obsolete in the long run. To solve this pain-point, tablets were introduced as a mean to view movies.

Seniors more acquainted with technology can ask to receive one of the tablets owned by the association. These tablets will come with a fee of service, used to cover the subscription for the streaming services installed on the tablet.

Once the seniors get assigned a movie to review and viewing it, the seniors in couple can discuss the film on the phone and prepare the review. To facilitate the process, they will be given a series of icebreaking cards and a review model at the start of each review circle.

Group meetups and Aperitivo al Cinema

Create socialization opportunities in a public group context focused on the viewing of new movies and participation in cultural activities. Group meetups include organizing visits to local cultural events and participating in local film festivals, such as the Far East or Venice film festival. These events will be predominantly the ones held on the municipal and provincial territory, which are chosen to maintain a theme thread to the topic chosen by the committee.

Taking advantage of the existing Cinema card issued by CinemaZero, a package of discounted tickets for public viewing of movies, Aperitivo al Cinema organizes group viewing of a new movie with aperitivos in a café close to the CinemaZero.

SignorInsieme

The collaborative committee comprises seniors, volunteers and, eventually, an association representative. This committee designs and organizes the exhibition of the artifacts created in collaboration with the befriending group. Through a design manual, seniors are guided throughout the whole process, from the analyses of the event brief to the design of the set. Each event usually prepares the event brief to give a general layout of the topic to all its participants. For the first launch of the service, collaborations will be set with Pordenonelegge and PordenonePensa – as two of the biggest events in Pordenone and the ones more appreciated by the citizens.

Furthermore, the committee must also prepare the artefacts for exhibition following a budget provided by the association. This budget will depend on the possibility of accessing regional funds, which are more consistent and allow a wider variety of interventions. The establishment of SignorInsieme aims to promote a full participation of the seniors, making them the designers and developers of this offering.

Scuola di cinema

Educational labs to further the cinema knowledge and learn how to write reviews. The courses will be organized in collaboration with CinemaZero and Università della Terza Età, who will provide the teachers and the information material. The courses are held in either one of the public spaces offered by the municipality, such as the Casa delle attività, or in the building of the Università della Terza Età. The location will be chosen according to the number of participants and the capillarity of the offering in the territory. This offering will be for a fee to cover the costs of using the venue and the teacher. Additionally, there are different educational events dedicated to cinema organized by CinemaZero and Cineteca Friuli, in which seniors can participate.

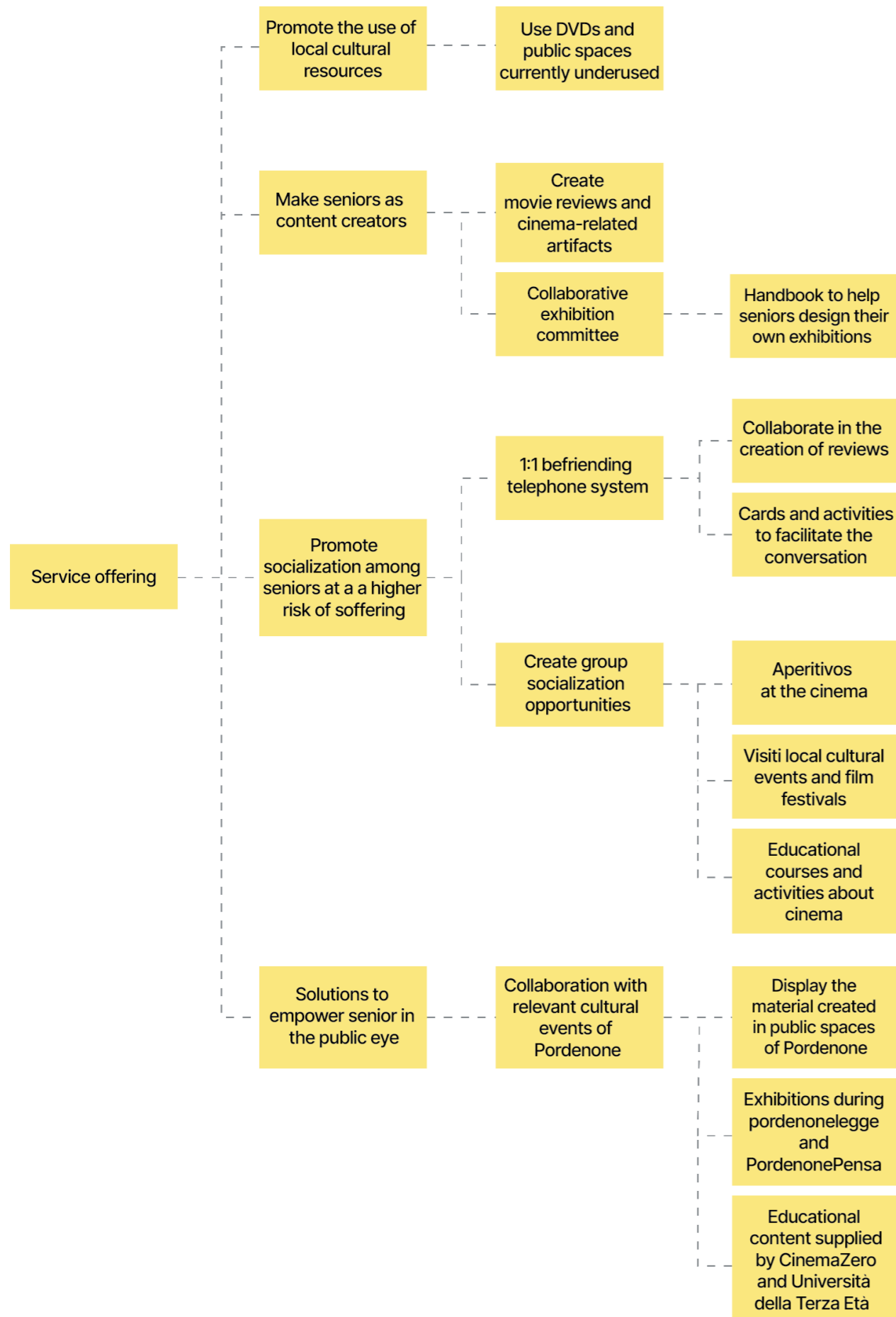


Figure 7.1 Offering map. Source: the author

7.3. Objectives of SegnorCinema

SegnorCinema was developed following the intervention parameters listed in chapter 6.2.3 "Parameters of intervention". As explained, SegnorCinema's offering is structured to bridge meso and micro-interventions by proposing socialization opportunities and targeting social cognition and empowerment.

The goals for the project are to:

- Support the connection of the seniors with the surrounding community,
- Improve social cognition and attributional style of the participants by focusing on the individual and community perception and personal empowerment,
- Optimize the resources available on the municipal territory.

The development of the service offering led the decision to partition the goals into five objectives:

1. Propose different levels of socialization opportunities,
2. Showcase activities done by seniors to highlight their contribution in front of the community,
3. Increase the participation of the seniors in the service delivery,
4. Create novel partnerships among different stakeholders,
5. Use of existing mediums and locations on the territory.

The objectives were used to develop a matrix that confronted said parameters with the service offering, tracking how the offering was tackling the objective in each crossing. The matrix highlighted how some of the objectives are common across the service offering (objective 1,4,5), while objectives 2 and 3 are more focused on the senior role – in which the educational activities are more passive in terms of participation.

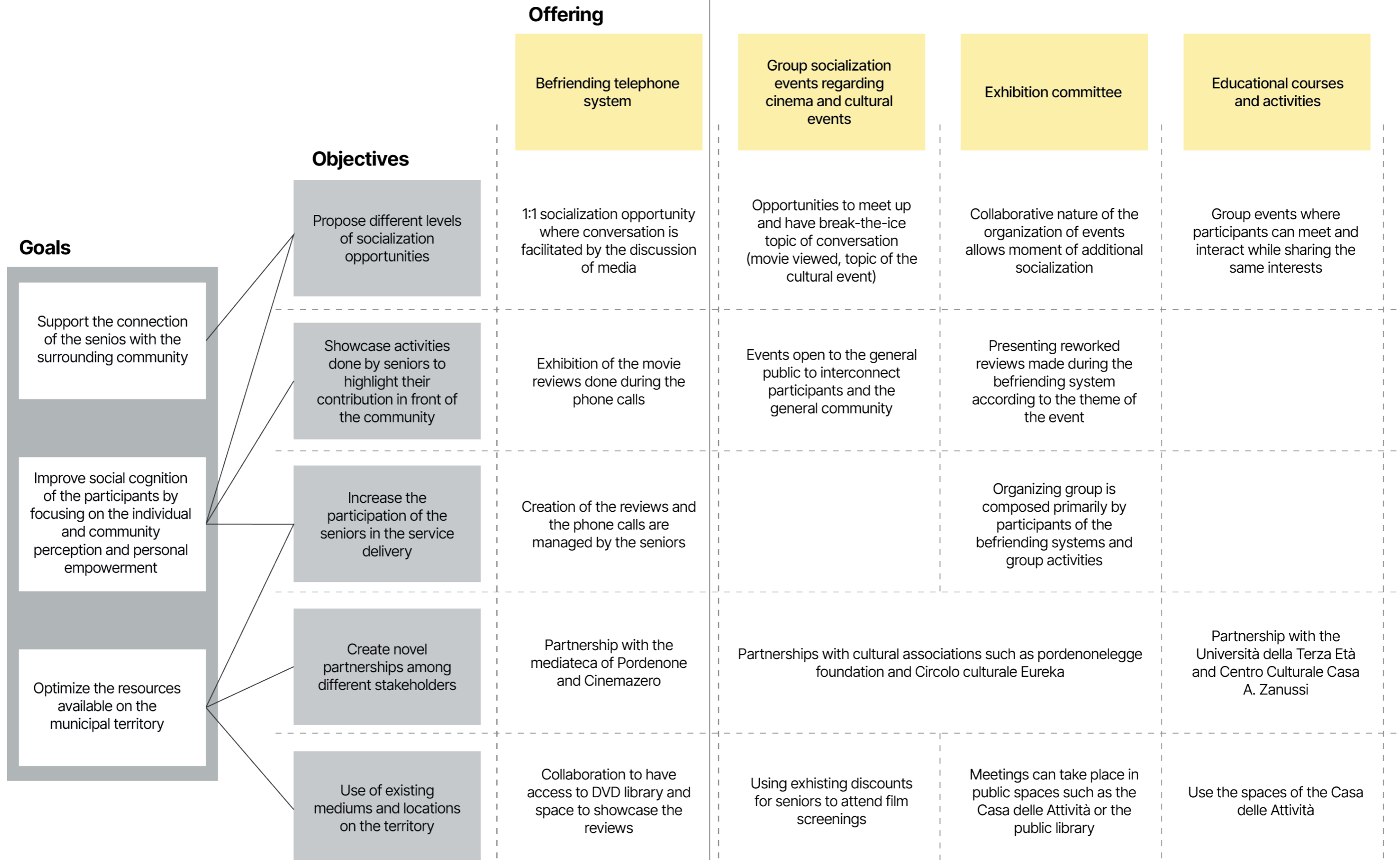


Figure 7.2 Matrix reporting how the offerings target each design objective. Source: the author

7.4. How it works

7.4.1. Cinema al telefono - Befriending telephone system

Cinema al telefono is the befriending telephone service of SegnorCinema. Traditionally, such services promote the socialization between a user and one or more staff members to provide supplementary social support through affirmation and emotion-focused relationships (Mead et al. 2010). However, in SegnorCinema, this method of loneliness intervention has been re-designed to provide an individual, home-centered offering for loneliness able to be self-sustainable without a large number of volunteers involved. Therefore, Cinema al telefono is coordinated by the volunteers of Tempo Scambio, while the rest of the offering is self-managed by its users.

Participants are paired according to their location, mean of viewing the movie and interests for six review circles, each of which lasts two weeks. At the start of the first week, both seniors receive the information about the movie they have to review. For DVDs users, the participant will have the DVD one week each, which will be delivered and collected at the seniors' home by volunteers. Meanwhile, tablet users will have two weeks to see the movie. During the two weeks, the couple can choose when to call each other to discuss it, considering they have a fixed deadline to submit the review.

All the participants will be handed a kit composed of:

- **an introductory document,**

The document contains a description of Cinema al telefono, frequently asked questions regarding the activity, including how to identify a volunteer, and contacts to ask for more information. The document is differentiated according to the mean of viewing used (DVD or tablet).

- **the ice-breaking cards,**

The twelve cards are designed to help seniors kickstart the conversation about movies using beginner-friendly questions.

- **the review model,**

The review model guides the seniors in preparing a movie review. The participants are asked to report the genre, a description, their favourite scene and if they would suggest the movie.

- if present, the DVD taken from the media library of CinemaZero (Mediateca di Pordenone).

At the end of the second week, the review model and, eventually, the DVD are collected at the senior's house. The reviews are then displayed in the media library of Pordenone. Finally, the documents are used to prepare the "Film al Buio" (in English - Blind Movies): the DVD are wrapped in kraft paper, on the outside, only the description of the movie is reported – introducing an element of surprise and forcing the audience to choose the movie without knowing the title or director.



Figure 7.3 The review kit provided to the participants of Cinema al Telefono. Source: the author



Figure 7.4 Introductory document about Cinema al Telefono. Source: the author



Figure 7.5 Review model of Cinema al Telefono. Source: the author

7.4.2. Group meetups and Aperitivo al Cinema

Tempo Scambio will organize group events to offer occasions of conviviality among the participant of the service and bring the outer community in contact with SegnorCinema. The events are focused on cultural events organized in Pordenone and cinema-related festivals. The people interested in participating can call the association, write them a message, or ask for information at the municipal office of Tempo Scambio. The association collects eventual fees for participation and books venues and events.

Another group opportunity is Aperitivo al Cinema, used predominantly to engage with new people that could be interested in the service. The meetup is organized at CinemaZero, the cinema of Pordenone, to view new movie releases. At the end of the viewing, to foster conversation, participants can go to a local bar to have an aperitivo, which has a discounted price for cinema ticket holders. Requests are collected by the association and shared with the other stakeholders.



Figure 7.6 Poster for Aperitivo al Cinema. Source: the author

7.4.3. SegnorInsieme – Exhibition committee

SegnorInsieme is the organization committee of SegnorCinema. The group is composed of seniors, associates and a representative of Tempo Scambio, who collaborate in the development of exhibitions for PordenonePensa and pordenonelegge. The group aims to utilise the resources created by Cinema al telefono to showcase the local contribution of seniors, highlighting their impact in the community and empowering the older adults to take a more central role in Pordenone social context. As the events have different audiences, locations and varying themes throughout the years, it was decided to work on teaching the committee how to design an exhibition instead of proposing a made-up solution.

A handbook was designed to teach the committee a proto-design process, as it does not aspire to offer a proper theoretical base about design. The pragmatic and step-by-step approach allows the seniors to navigate in the design of the exhibition with ease, fostering creativity and feasibility of intervention.

The handbook is divided into four sections:

1. Analyse the brief of the event and define the theme,
2. Create a schedule and set deadlines,
3. Design the way the theme will be presented,
4. Prepare the artworks.

Included in the sections, seniors can find information about how to find keywords and metaphors starting from a brief, how to interconnect the theme to cinema, and a guide to list the characteristics and limitations required for the set-up of the exhibition (such as outdoor resistance, budget limits, lighting, space dedicated to the exhibition).

Along the handbook, four service design methods are taught: mind maps, draw a toast, brainstorming and 6-8-5.

Mind maps are well-known design tools used to map mental processes regarding a certain topic (Service Design Tools 2022); in this context, they have been explained to explore the topic of cinema for the exhibition. The following tools are explained to help seniors design the exhibition itself. Draw a Toast is a warm-up activity that helps participants to train to think visually (Gray 2015). The game asks the audience to draw how they would prepare a toast, encouraging them to share what they drew. The exercise introduces brainstorming (Stickdorn et al. 2018), an infamous design tool used to generate ideas. Finally, the 6-8-5 tool, also known as Crazy eight (Gray 2011) consists in drawing eight different ideas in five minutes, forcing seniors to work in an explorative mindset.

Examples of possible ways to display the reviews are also provided to the senior as a starting point for the design process. Ideas proposed include "Guess the movie!" - making the audience match review and cover of the film, and using seniors' voice recordings to narrate the movies' description.

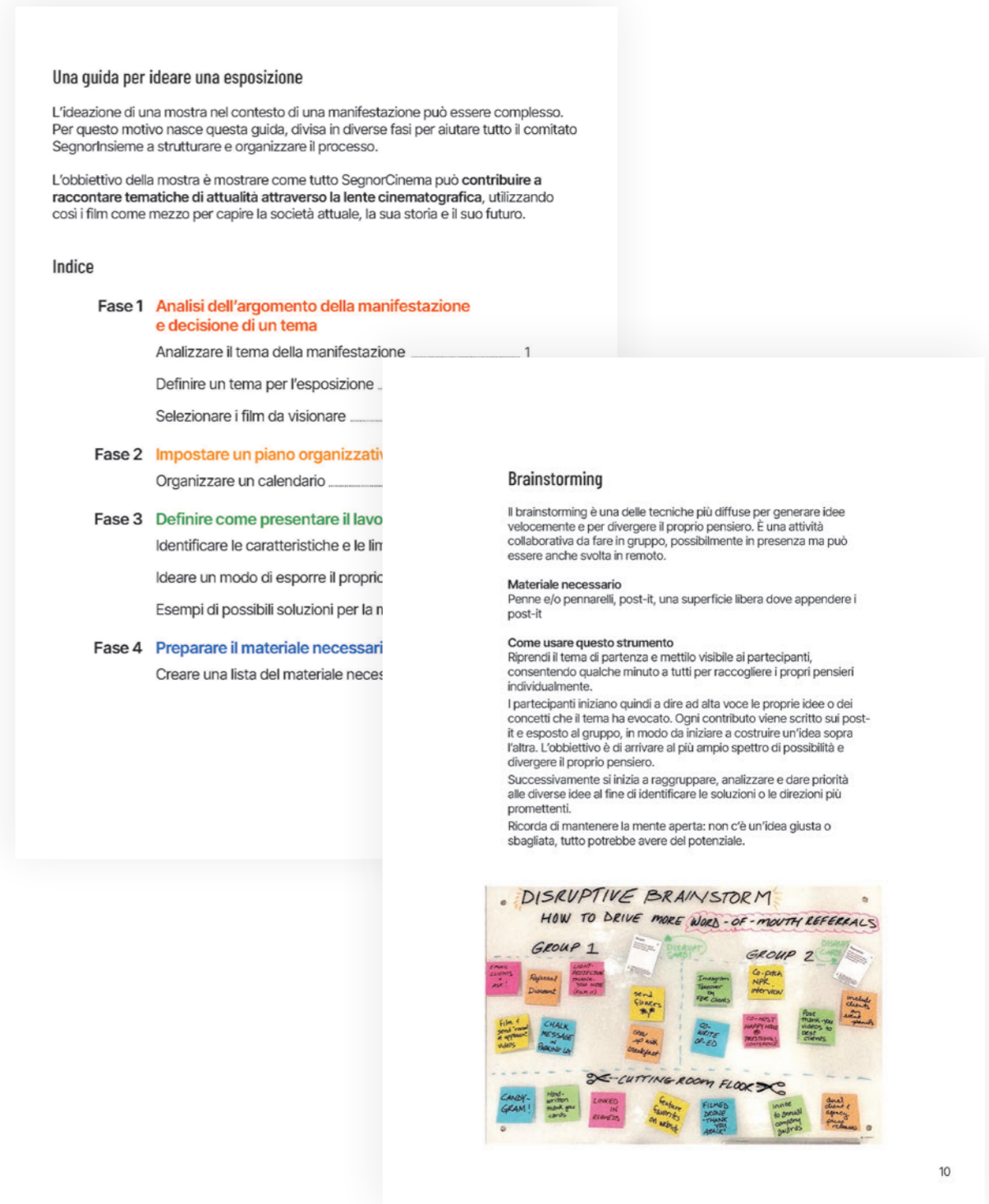


Figure 7.7 The SegnorInsieme handbook. Source: the author

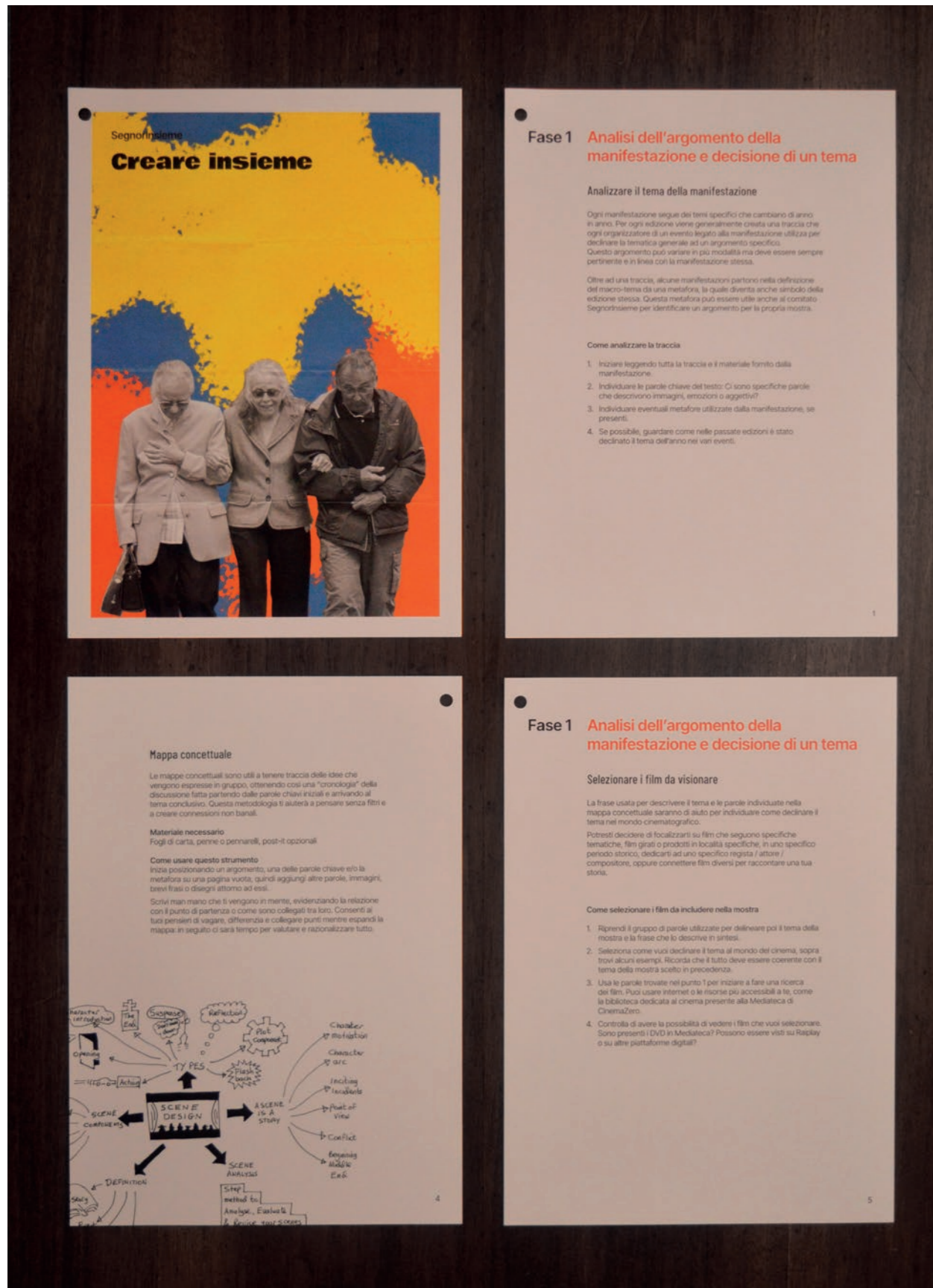


Figure 7.8 Some pages from the handbook showed at the second iteration with the association. Source: the author

7.4.4. Scuola di cinema - Educational labs and events

The Scuola del Cinema is a series of educational courses and events aimed at deepening cinema knowledge and creating a new group of cinephiles. The collaboration between Tempo Scambio, CinemaZero, the Università della Terza Età and the Casa Culturale A. Zanussi allows the establishment of specific courses dedicated to cinema history, composition, photography, and musical composition, among others. The teaching material will be offered by CinemaZero, which already provides this content for schools and teachers.

A course about review writing will be offered to teach seniors how to analyse a movie and what to look for when writing a review. These courses will be held in public spaces of Pordenone currently underused by the citizenship, such as the Casa delle Attività and the common spaces of the co-housing projects.

This section of the offering will have a fee to pay, aiming to cover the costs for the materials provided and the teachers. During the project's second iteration, Tempo Scambio suggested it would be possible to also offer a free course about cinema by involving the retired president of the CinemaZero foundation.



Figure 7.8 Educational events at CinemaZero. Source: <https://www.pordenonetoday.it/attualita/camera-commercio-cinemazero-eccellenze-territorio.html>

	Pre-service				Service								Post-Service									
	Phase	Discover the service	Enroll to the project	1:1 befriending service				Exhibition committee		Activity labs and educational meeting			1:1 befriending service	Group meetups		Exhibition committee		Activity labs and educational meeting				
	Detail			Pairing	Receive the media	Consume the media	Exchange media	Confronting opinions	Collecting the reviews	Set up of the committee	Organizing and set up the material	Enrollment	Course attendance	Event attendance	Display the review	Discover the events	Group coordination	Meetup	Exhibition set-up	Exhibition dismantling	Course ending	
User activities	User 1 ----- low digital literacy	Get to know about the service	Contact the association to participate	Get paired and discover the movie to review	Receive the movie and the review guide	See the movie and use the guide to prepare thoughts and opinions for the confront	Give back the DVD to the volunteer	Discussion about the movie and chat at the phone to prepare the review of the movie	Give back the review and DVD	Sign up to participate to the committee	Decide the theme of the exhibition to prepare, the materials needed, the set-up and the deadlines	Enroll to courses to learn how to write a review or courses about cinema (photography, composition, history of cinema etc.)	Send request to attend events regarding cinema	Attend the course	Attend the event	Prepare the review to display	Get to know about the group events	Apply to join the group meetups	Go to the group meetups to participate to the organized activity	Collect the materials, prepare the artifacts and set up the exhibition	Help dismantling the exhibition	Receive attendance certificate
	User 2 ----- high digital literacy			Receive the tablet and discover the movie to review	Receive the review guide				Give back the review													
Touchpoints	Tools	- Flyers and Posters - Word of mouth - Phone calls to the people subscribed to the Cinema card - Facebook page of the association + the municipality	- Phone Calls - Email - Facebook page of the association	- Phone calls - Tablet	- DVD - Tablet - Review guide + ice-break cards	- DVD - Tablet - Review guide + ice-break cards	- DVD - Tablet - Review guide + ice-break cards - Volunteer	- DVD - Tablet - Review guide + ice-break cards - Phone call	- DVD - Review	- Phone Calls - Email - Facebook page of the association	- Group coordinator - Event coordinators - Toolkit	- Phone Calls - Email - Facebook page of the association	Teacher Educational material	Presenter Event organizers	Material needed to pack Review card DVD	- Flyers and Posters - Facebook page of the association - Word of mouth	- Phone Calls - Email - Facebook page of the association	Group coordinator	- Artifacts for the exhibition - Group coordinator - Event coordinator	- Artifacts for the exhibition - Group coordinator	- Certificate - Teacher - Course organizers	
	Locations	- Cinema - Locations highly frequented by seniors (supermarkets, cafes, small grocery stores, doctors' office)	- Municipal office of the association	Media library						- Municipal office of the association		- Municipal office of the association	Location of the course	Event location	Mediateca of Pordenone Casa delle Attività	- Cinema	- Municipal office of the association	Meeting location	Exhibition location	Exhibition location		
Front-end	Volunteers	Distribution of flyers Give information about the service	Collect the requests of enrollment	- Communicate the pairings and the movie to review - Distribute DVD players and tablets to the ones that need it	Deliver the media and/or the review guide at the senior's house	- Collect the DVD from the first senior's house - Deliver the material needed to the second senior		- Collect the DVD from the senior's house - Support the seniors in using the tablet	Collect the requests	Support the participants in the set up			- Collect the requests	Support the preparation of the packaged DVDs	- Tell the seniors of the befriending group about the events - Distribute the flyers and posters	Collect the requests and eventual fees	Help coordinating the group, distributing the tickets and to gather the group together	Help setting up the exhibition	Help dismantling the exhibition			
	Association Tempo Scambio			- Collect eventual fees of service						Connect the team with the event organisers					Publish the group event to the Facebook page			Post about the exhibition on social media		Post about it on social media		
Backstage Actions		Update the Facebook page	Manage the requests	Pair the participants according to the location they live, age group, interests	Print the review guides		Prepare the pack with printed material and DVD		Organize the requests and set up a place/date to meet	Contact the event organisers and the municipality to give info about location				Provide the material needed to pack the DVDs	Set up the date to meet, the place, eventual means of transportation and tickets needed	Book eventual tickets and transports	Post about the experience on Facebook					
		Obtain permits for the posting of the posters in public	Create a list of the participants	Select the movie to review	Prepare the pack with printed material and DVD										Print the ADV material							
		Send a copy about the service to the municipality to post it in their Facebook page	Manage requests for DVD players	Provide tablets and/or DVD players	Coordinate support in using the tablet																	
Support process		Contact suitable places for posting the printed ADV (ex. supermarkets, cafes, small grocery stores)		Collect the DVDs				Give back the DVD to the mediateca		Receive brief of the event			Send the number of requests to the Università della Terza età, Centro Culturale Casa Zanussi or to CinemaZero					Contact CinemaZero and other stakeholders to organise the event				
Other stakeholders	Mediateca of Pordenone			Reserve and provide the DVDs to review										Showcase the DVDs with the reviews								
	CinemaZero													Provide the tickets to the events	Support the provision of educational material	Organize and coordinate the events						
	Municipal administration	Post about the service in the Facebook page								Give list of characteristics and authorization about the location given												
	Café														Prepare the aperitivos for the cinema screenings							
	PordenoneLegge foundation and Circolo Culturale Eureka (PordenonePensa)									Provide the brief with the theme of the events Give information about locations and spaces available								Coordinate for the set up of the exhibition				
	Università della Terza Età and Centro culturale Casa A. Zanussi												Prepare the enrollment of the attendees	Provide the teachers and the location							Provide the certificates	
	Streaming services			Offering the streaming of media (tv series and movies)																		

7.4.5. Service blueprint

The following service blueprint illustrates the interaction of the actors throughout the various steps of the customer journey, highlighting the backstage and supporting interventions to ensure the proper delivery of the service. As the service lacks digital touchpoints, it was considered relevant to track both physical touchpoints and locations where the service will be held.

Line of Interaction
Line of Visibility

Table 7.1 Service blueprint. Source: the author

User Journey map



Figure 7.10 User journey map - the seniors' point of view. Source: the author

Touchpoint map

As SegnorCinema is a service that focuses predominantly on the participation of the senior in the service delivery, the touchpoints are used mainly to communicate among stakeholders and to aid seniors in performing the activities proposed. Therefore, the list of touchpoints includes the volunteers, communication platforms such as phones and social media, and printed material needed for advertisement, preparing the reviews and the educational material.

Locations have been reported separately from the list cited above to highlight the resources needed for service delivery. These locations include publicly owned spaces available in the municipality and private sites currently open to the citizens, such as the media library of CinemaZero.



Figure 7.11 Touchpoint diagram. Source: the author

7.5. Actors and their interactions

One of the objectives of SegnorCinema is to increase the connection among stakeholders of the local territory. This aim was brought to light by creating different forms of intervention than connected stakeholders that had never collaborated beforehand.

In the stakeholder map, it is visible the complexity of the indirect stakeholders of the project. As the service offering predominantly encourages seniors to become both users and service providers of the intervention, the reduced need of actors involved directly in the service delivery is visible. Meanwhile, SegnorCinema also connects different outer stakeholders in supporting specific micro offerings and touchpoints. Although the fluxes that connect the actor differ when confronting the project presented in this thesis and the current state-of-the-art, the typology of actors remains essentially unvaried. This remark stresses the importance of non-profit associations and third actors supporting the municipalities in offering welfare services.

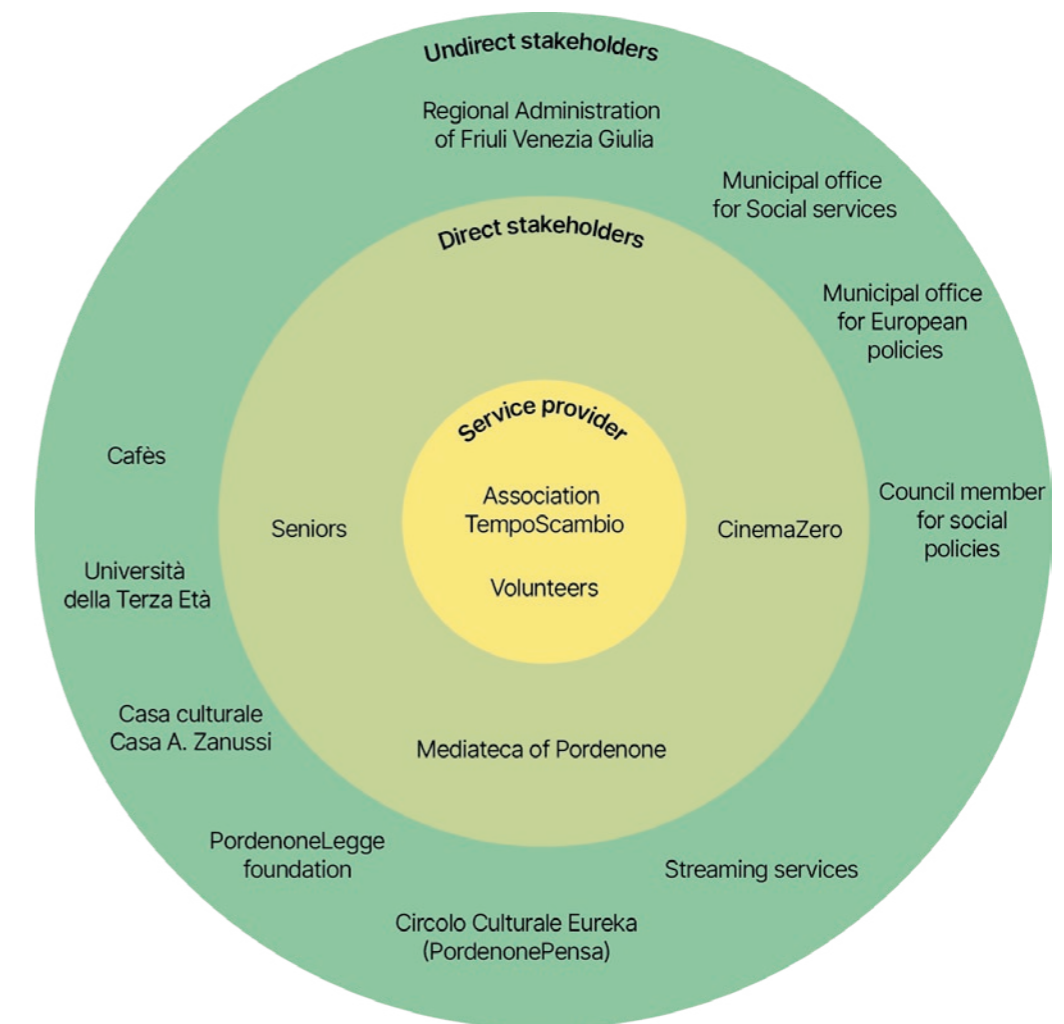


Figure 7.12 Stakeholder map of SegnorCinema. Source: the author

As introduced earlier, the collaboration of the actors allows the service to be economically sustainable, although having a non-conventional offering for public services that focus on targeting the citizens' specific needs rather than a comprehensive array of necessities.

The interaction among direct and indirect actors is highlighted in the ecosystem map, showing how the flows focus primarily on exchanging funding and information. As the service aims to be economically accessible to seniors, the economic flows mainly involve financial support from regional and municipal accounts. Other monetary fluxes are generated from the payment of fees for accessing courses and events.

Exchanges of information predominantly involve coordinating the various actors and projects, especially considering the arrows entering and exiting the exhibition committee. Highlighting such elements and points of interaction was the fundamental reason why the main touchpoints have been included in the ecosystem maps.

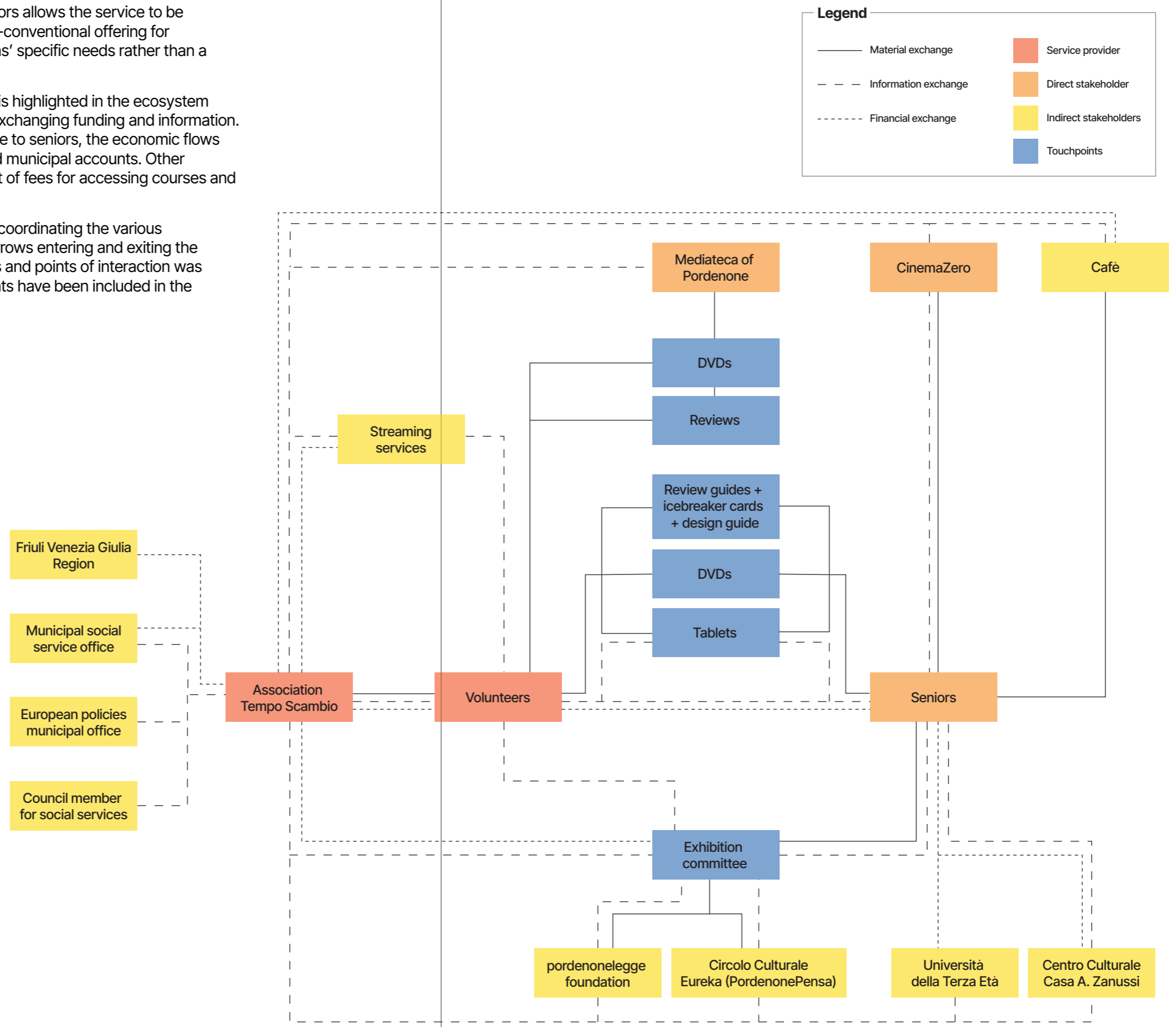


Figure 7.13 Ecosystem map. Source: the author

7.6. Brand identity and advertisement

Brand identity and the communication strategy were essential to consider when understanding how to improve seniors' engagement. In fact, as seen in the literature review, some elders misinterpret and overlook services that focus exclusively on sociality or are targeted for loneliness. For these people, engaging with such services would mean admitting they are lonely and old, making them feel frail and vulnerable in front of their relatives and friends (Kharicha et al. 2017). Therefore, in the communication strategy words as "loneliness" and "socialization" have been avoided. Consequently, the communication focuses on positive wording that stresses the impact seniors can have in the community, drawing attention to the concepts of personal contribution and how valuable the participants' opinions are.

The pain point previously explained was also a significant factor to consider when working on the name of the service. To merge the need to communicate the target audience and the necessity to avoid the ageism connotations correlated with ageing, it was decided to work on a word-play of the words "Senior" and the Italian "Signore", which means Mister. The result "Segnor" sounds as a mispronunciation of the word "Senior" and resembles the sounding of the local dialect of Pordenone. By combining it with the theme of the intervention, the name resulted in "segnorCinema". The names for the specific offerings were developed starting from a word cloud connected to cinema and its relationship with seniors.

Typography

Main Titles - Bowlby One Regular

segnorCinema

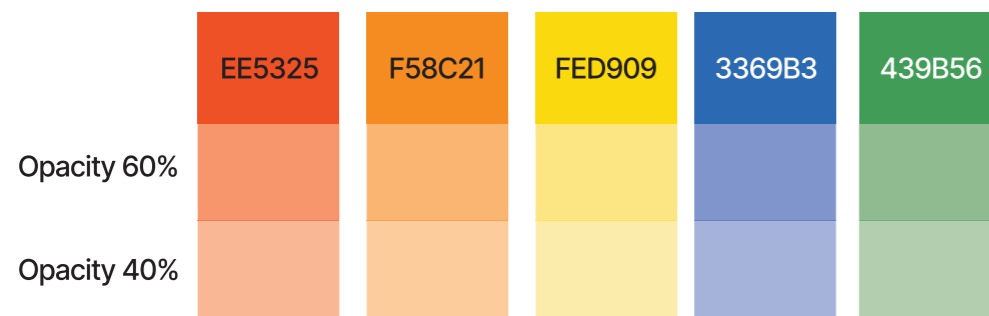
Secondary Titles - Barlow Condensed Medium

segnorCinema

Texts - Intel Tight Regular + Semibold

segnorCinema

Colours



In terms of colour palette and image treatment, the inspiration comes primarily from European movie posters designed during the 1970s. This style was able to be a compromise between a vintage and a modern visual identity. The warm colours and the old-fashioned picture treatment that should resemble old photographs want to recall a familiar atmosphere while maintaining characteristics that could work for a digital branding application. Lastly, the colours are studied to promote a strong contrast between letters and background and to be adaptable to the vision of people suffering from cataracts. This group sees colours with a yellow tint, which led to the decision to work on a warmer palette.



Figure 7.14 Moodboard for the brand identity. Source: mubi.com, pinterest.com

Advertisement



Figure 7.15 Mockup of the advertisement poster for SegnorCinema. Source: the author

segnorCinema



Aperitivo al cinema

Una serata in compagnia per scoprire
le nuove uscite cinematografiche



Per maggiori informazioni, rivolgersi agli uffici dell'associazione
Tempo Scambio - via San Quirino 5, Pordenone (PN)
o chiama il numero di telefono XXXXXXXXXXXX

segnorCinema



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ersi ag
o 5, Po
XXXX

segnorCinema



Scuola del cinema

scoprire tutto ciò che sta dietro la
camera da presa

Per maggiori informazioni, rivolgersi agli uffici dell'associazione
Tempo Scambio - via San Quirino 5, Pordenone (PN)
o chiama il numero di telefono XXXXXXXXXXXX

Figure 7.16 Mockup of the advertisement posters for the offerings. Source: the author



Figure 7.17 Flyers of the project. Source: the author



8. Conclusions

8.1. General outcome

The thesis focused on understanding how public administration can be supported in developing programs targeting sociality and loneliness in seniors, particularly considering the new opportunities that have arisen with the pandemic.

The pandemic has furthered the incidence of loneliness risk factors while countries like the UK established an entire ministry dedicated to loneliness (Department for Digital, Culture, Media & Sport - UK 2021). These factors made evident that the need for new solutions for loneliness would be an arising need for citizenship. Although interventions for loneliness have been the object of study for decades, the literature review pointed out how the extensive research insights from academia do not find actualization in real-life solutions (Graham 2019). The research and subsequent project focused on bridging the gap between the two by structuring a thorough analysis of the phenomenon from a theoretical and practical perspective. Desk research gave the author a deeper understanding of the complexity of loneliness and the factors that needed to be considered in the consecutive phases.

In contrast, the deep dive into the case studies gave an overview of the possible design directions. Looking back at the research process, it was evident how the interviews with the representatives of five Italian case studies constituted a turning point for the investigation. As all the cases interviewed are offered by public administration and associations, the discussion with the coordinators ensured a systemic view of the interconnection between stakeholders and to understand the role of public administration in this scenario.

Municipalities and public entities predominantly are coordinators or financiers of the services, while the actors in charge of the service delivery for the Italian context are generally the local associations. Therefore, the author has shifted its focus towards the latter during the fieldwork phase, aimed at identifying intervention opportunities in Pordenone, Italy. The cultural probes given to Pordenonese seniors stressed the importance of working on the inclusivity of service offerings and on the deeper reasons behind seniors' limitations. I.e. one interviewee would not go outside because she feared falling, but she was autonomous in walking.

The overall research pointed in prioritizing the active participation of seniors in the intervention while promoting accessibility and inclusivity – an approach uncommon among the services proposed in Italy and in Pordenone.

The result is SegnorCinema, a service that helps seniors improve social cognition by focusing on the empowerment of the individual while promoting a community network. Displaying the contributions of older individuals aims to boost self-perception in the target group and propose a public service outcome for associations to promote their relevance locally.

Additionally, the service is structured to foster a network of associations and organizations that never collaborated by collaborating in the service offering. This systemic approach to delivering interventions was an essential longevity factor in the case studies analysed. Furthermore, optimizing existing resources promotes service sustainability and lowers the budget needed to deliver the intervention at a local level.

Throughout the process, the author collaborated with the association Tempo Scambio in Pordenone. The presence of this stakeholder allowed continuous feedback of the design direction and the feasibility of intervention, making the thesis' project conjugate a strong identity to the city's territory and the strong theoretical base obtained during the research.

8.2. Future opportunities

The thesis represented an opportunity to analyze critically how public administration and associations could be supported in designing interventions for loneliness. During the interviews, the need for a stronger theoretical background was felt by different interviewees, who asked to see the research done for this thesis as a prospect to improve their service offering. This necessity was particularly significant when considering the lack of time and resources these organizations have to work with, envisioning a possible collaboration between universities and associations to supply the latter with such forms of investigations. Additionally, the research stressed the need to focus on non-profit actors when designing services for welfare in Italy. Service design often overlooks these stakeholders, but their need for a different form of resources poses new challenges that are still not tackled. The collaboration with the association Tempo Scambio showed that it is possible to make the two realities co-exist and that the designer's role in this context is as valuable as in other fields.

Lastly, the investigation has also highlighted how service design approaches are used and can be used in developing programs targeting loneliness in seniors. The use of a participatory methodology and the application of dedicated design methods, such as focus groups and stakeholder maps, have strongly impacted the efficacy of the services developed and the depth of the insights gathered. A relational design methodology (Cipolla and Manzini 2009) could help further investigate new projects for the territory and support non-designers in finding unconventional solutions that fit the local needs.

Finally, focusing on SegnorCinema, there are different opportunities for improvement that could be tackled in the future. The engagement of a local tv host to discuss about the service is a method of advertisement proven to be effective in targeting seniors; in this case the involvement of pordenonelegge and PordenonePensa could be even more beneficial when presenting the service. Additionally, associations like Antea FVG could support SegnorCinema in organizing mobility support for homebound seniors, helping them engage in services outside their home. After the project's second iteration in November 2022, it is expected to plan for a pilot in the future, as both the association and the municipality have shown interest in developing the service for the municipality.

9. Bibliography

9.1. Bibliography

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