UNIVERSITY OF PADOVA

Department of General Psychology

Bachelor's Degree Course in Techniques and Methods in Psychological Science

Final dissertation

"*Feeling of loneliness in the elderly, possible buffering effect of the cohousing model* "

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Abstract

The present study investigated loneliness among adults aged 60-75 in Veneto, and explored their attitudes toward cohousing, which has been increasingly considered as a potential solution to social isolation the elderly in other countries. The research aimed at understanding the profile of lonely individuals and assess the appeal of cohousing as an alternative living arrangement. The study was conducted specifically on the Veneto population, because it presents alarming data on an aging population, loneliness, and suicide risk, which are central to the present analysis.

An online survey was administered to 487 participants (353 females, 133 males and 1 non specified) with mean age of 66.32 years old (SD= 4.20), exploring sociodemographic characteristics, utilizing the De Jong Gierveld Loneliness Scale (JGLS) and ad-hoc questions regarding cohousing. The quali-quantitative analysis focused on the relationships between sociodemographic data, perceived loneliness, health status, and interest in cohousing.

Results indicated that lonely individuals' characteristics aligned with established risk factors from the literature, including lower socioeconomic status, poor self-rated health, and functional decline. While interest in cohousing was considerable (49.5% interested, 40.5% unsure), the study found no statistically significant difference ($p=0.076$) in this desire between lonely (46.2%) and non-lonely (51.7%) groups.

As expected, qualitative data showed that the attitude toward cohousing is complex. While participants expressed a desire for community, this was moderated by significant concerns about maintaining their autonomy, privacy, and managing potential interpersonal conflicts.

The findings suggest that cohousing is not viewed simply as a solution for loneliness but is weighed against deeply held values of independence. For cohousing to be a viable option for the Veneto population, future initiatives must address these concerns through education and thoughtful community design that balance social connection with personal freedom.

"Loneliness is a pervasive, depressing, debilitating condition that can affect all of one's life" (Killeen, 1998)"

Introduction

The global population is aging at an unprecedented rate, with the number of individuals over 60 projected to reach 2.1 billion by 2050 (UN, 2022). In Italy, this trend is particularly pronounced, with adults over 65 already making up a significant portion of the population and expected to represent over a third of it in the coming decades (ISTAT, 2025). This demographic shift brings with it complex social challenges, particularly the heightened risk of loneliness and social isolation among older adults. Loneliness, which can stem from factors like retirement, the loss of a spouse or friends, and functional decline, is a well-established predictor of negative health outcomes, including frailty, cognitive decline, and increased mortality (Gerino, et all., 2017; Holt-Lunstad et al., 2015; Jarach et al., 2021). This study focused on the Veneto population because it presents alarming data. The north-east and north-west Italian regions have the highest suicide rates among the elderly in Italy (Cocchio et al., 2024; Crestani et al., 2019; Innamorati et al., 2014) and a high prevalence of loneliness and social isolation (Santini et al., 2025).

In this context, alternative living arrangements that can promote social connection have gained attention. The cohousing model, which originated in Denmark in the 1960s, is one such alternative (Carrere et al., 2020; Markle et al., 2025; Schetsche et al., 2020; Warner et al., 2020). These communities are defined by privately owned homes built around shared common spaces designed to foster interaction and mutual support among residents (Bigonnesse et al., 2023; Ruiu, 2014).

CHAPTER 1: Loneliness, features and risk factors with particular attention for the elderly

1.1 Definitions of Loneliness

Loneliness is a universal human experience (Copel, 1988), yet it is unique for every individual (Austin, 1989). It can be seen as a negative, embarrassing condition, painful and even dreadful (Killeen, 1998).

The concept of loneliness was initially introduced by Sigmund Freud in 1939, who described it as a condition capable of profoundly altering an individual's inner structure. Years later, Sullivan elaborated on Freud’s description of loneliness and proposed that humans are social animals with a need for contact. Loneliness is thus the result of this unfulfilled need (Sullivan, 2013).

The term has been defined by Copel as “an emotional state in which the individual is aware of the feeling of being apart from others, along with the experience of a vague need for individuals” (Copel, 1988).

In a literature review conducted by Bekhet and colleagues (2008), the authors highlighted how loneliness has been defined in many ways, by many different authors: sometimes as an unwelcome feeling of lack of companionship and a wish for interaction different from that being experienced. Others also noticed that loneliness is the feeling of being alone in spite of longing for others. On the other hand, loneliness has also been defined as the experience of isolation, disorientation, or "lostness" within a dimensional domain of meaning. In contemporary literature, loneliness is defined as the unpleasant experience that occurs when a person's network of social relationships is lacking either qualitatively or quantitatively.

It is also described as an "emptiness" or "hollow feeling" (Austin, 1989). Moreover, Killeen (1998) used to call Loneliness "the difficult-to-define concept", as it is unique for every individual.

As we can see, there is still no consensus on the definition of loneliness. Thought different definitions of loneliness have been proposed to understand its nature Bekhet (2008) pointed out that all definitions involve three assumptions:

1. Loneliness results from perceived deficiencies in one's social world;
2. Loneliness is a subjective state, as distinguished from the objective state of social isolation;
3. The experience of loneliness is unpleasant and distressing.

1.1.1 Characteristics and types of loneliness

Three major types of loneliness have been identified in the literature: existential, pathological, and psychosocial. Existential loneliness is a universal human characteristic, innate in all individuals and not related to loss or lack of intimate relationships. Pathological loneliness is thought to be related to dysfunctional cognitions and affective states, usually experienced by severely disturbed and psychotic individuals, mainly schizophrenic patients. Psychosocial loneliness is often a product of situational change or separation. It is global, generalized, and uncomfortable. Anybody and everybody can be lonely at any time. However, the elderly and adolescents are especially prone to loneliness (Bekhet, et al. 2008).

To distinguish loneliness from other similar and related concepts (e.g., solitude, aloneness, etc.), it is essential to identify its defining characteristics.

Rokach (1988) gives an exhausting description of the four major elements of the experience of loneliness: self-alienation, interpersonal isolation, distressed reactions, and agony. None of these elements in itself is specific to loneliness; however, the four elements combine to create the experience of loneliness.

1.1.2 Social Isolation

Loneliness is intimately linked to social isolation. It is thus important to define and include its concept in this study. Especially after the Covid-19 pandemic, the mental and physical consequences of them have received particular attention from the scientific community. Social isolation reflects a condition that may contain elements of loneliness or aloneness, depending on whether choice is involved. In other words, social isolation with choice is aloneness, while social isolation without choice is loneliness (Killeen, 1998).

Moreover, van Tilburg & de Jong Gierveld (2023) described it as the absence of any meaningful contact with other people, or maintaining only infrequent or superficial contact with them. With this definition, they highlight both the quantitative (i.e., number of ties) and qualitative (i.e., depth of ties) aspects. Unlike loneliness (which is subjective, emotional and perceptual), this has an important consequence: social isolation is measurable.

1.2 Risk factors for Loneliness, negative effects and impact on health

1.2.1 Risk factors for Loneliness

Many factors have been recognized to increase the risk for loneliness. For convenience, they can be divided as follows:

Demographic and life-stage factors

- Age: loneliness often takes a U-shaped curve, peaking in late adolescence (~19 years old). Loneliness drops during midlife and rises again in older age. (Shovestul, et al, 2020)
- Gender: being female has been recognized as a risk factor for loneliness. Recent research assumes that this is due to an increased value on interpersonal relationships (Nicolaisen, Thorsen, 2023).
- Marital status and living situation: being unmarried, widowed, divorced, or living alone strongly increases risk (Innamorati et al., 2014; Pollak et al., 2025)

Health and functional impairments

- Physical health: chronic illness, poor self-rated health, limited functional status, particularly in IADLs (Instrumental Activities of Daily Living) and cognitive impairment can increase the risk for loneliness. Also, sensory impairments such as hearing or vision loss, all heighten the risk. (Holt-Lunstad, et al, 2015) (Holt-Lunstad, and coll., 2010)
- Mental health: depression and anxiety can be viewed as both causes and consequences of Loneliness since they can amplify it effects across ages. (Susanty et al., 2025; Buecker et al., 2024; Solmi, and al., 2020; Shovestul et al., 2020)

Socioeconomic & Environmental Influences

- Low income or SES: individuals in lower-income communities face higher loneliness risk (Niedzwiedz, et al., 2016; Algren, and coll., 2020; Wang, et al. 2024; Tough, et al., 2021).
- Unemployment: A systematic review conducted on 37 studies observed a positive association between unemployment and increased loneliness. The magnitude of this relationship increases with the severity of loneliness and appears to peak at age 30-34 and 50-59. It was also revealed a

40% increase in the likelihood of reporting loneliness when unemployed. (Morrish and Medina-Lara, 2021)

- Rural or car-dependent areas: living in rural areas, or poor public transports reduces access to social activities, increasing loneliness. (Lamanna, and coll. 2020; Long, et al. 2024; Williams, et al., 2024)

Social & Psychological Contributors

- Social isolation: Limited social network or low-quality social relationships, as well as limited activity heighten loneliness (T.G. van Tilburg, J. de Jong Gierveld, 2023).
- Personality traits: Shyness, low self-esteem, neuroticism, and introversion predispose individuals toward loneliness. (Abdellaoui, et al., 2019)
- Life transitions: Major life events (e.g., loss of partner, moving out, suspension of employment) may trigger loneliness spikes (Innamorati et al., 2014; Kim & Moen, 2002; Yang et al., 2023).

Identity & Cultural Context

- Minority status and social marginalization: Immigrants, ethnic minorities, LGBTQ+ individuals and those facing discrimination are more likely to suffer loneliness. (Mann et al., 2021; Mereish and Poteat, 2015)
- Youth-related factors: Young people also experience loneliness, often due to social comparison and digital disconnection (Office for National Statistics, 2018).
- Elderly-specific factors: among older adults, loneliness is frequently linked to multiple factors, such as loss of spouse or retirement, which may lead to a reduced sense of purpose and fewer daily interactions (Courtin and Knapp, 2017; Victor and Yang, 2011).

The elderly specific factors are the main focus of this study, and they will be presented in more details in the next sections.

1.2.2 Negative Effects of Loneliness and Impact on Health

Social isolation and loneliness are not only detrimental to emotional well-being but also have substantial implications for both mental and physical health. They both have been identified as significant predictors of premature mortality.

In fact, these psychosocial conditions are increasingly recognized as critical public health concerns due to their broad and far-reaching consequences. A meta-analysis by Holt-Lunstad et al. (2015) — based on data collected from more than 3.4 million individuals — found that loneliness was associated with a 26% increased risk of early death, social isolation with a 29% increase, and living alone with a 32% increase in mortality risk. These findings suggest that both subjective (loneliness) and objective (isolation) social deficits are independently associated with elevated mortality, comparable in effect size to established risk factors such as obesity and smoking (Holt-Lunstad et al., 2015).

These connections are further supported by more recent research. For example, an Italian study by Jarach et al. (2021) found that loneliness is a significant risk factor for the progression of frailty in older adults. Frailty is a state of increased vulnerability to poor health outcomes, including disability, hospitalization, and premature death.

More recent research further indicates that social isolation may be a stronger predictor of mortality than loneliness, especially among older adults (Holt-Lunstad, 2021). The authors claim it may be due in part to how these constructs are measured. While loneliness is often assessed as a binary variable (lonely vs. not lonely), social isolation is usually evaluated using a broader set of indicators, including marital or living status, frequency of contact with family and friends, and participation in community or social groups.

Loneliness and social isolation have also been linked to a higher incidence of many chronic health problems, including cardiovascular disease (e.g., heart attack and stroke), type 2 diabetes, elevated blood pressure, and chronic inflammation (Holt-Lunstad, 2021; Lim et al., 2020).

The physiological mechanism underlying these outcomes involves chronic activation of the sympathetic nervous system (SNS) and the hypothalamic-pituitary-adrenal (HPA) axis, both of which are involved in processes of prolonged stress responses. With time, this enduring activation leads to heightened levels of stress hormones and inflammatory markers, increasing the risk of chronic illness (Cacioppo, et al., 2015; Scatà, et al., 2023).

Loneliness is also strongly associated with adverse mental health outcomes. Research has demonstrated consistent links between loneliness and increased risk for depression, anxiety, suicidality, substance use disorders, and psychotic symptoms (Lim et al., 2020; Shoib, et al., 2023). Furthermore, loneliness can aggravate existing psychiatric conditions: neurobiological studies suggest that prolonged loneliness may lead to maladaptive changes in brain function, reinforcing a cycle of emotional distress and physiological dysregulation (Cacioppo and Cacioppo, 2014; Finley and Schaefer, 2022).

Later in life, loneliness is a well-established predictor of cognitive decline. It has been associated with increased risk of mild cognitive impairment (MCI), dementia, and Alzheimer's disease (Lim et al., 2020; Holt-Lunstad, 2021). These effects appear to be mediated by direct neurobiological mechanisms and indirect influences such as reduced cognitive engagement and social stimulation.

Social isolation and loneliness have also some strong implications on the health care system. Due to increased hospital admission, longer inpatient stays and a greater reliance on long-term or institutional care, the costs and resources to allocate are high. For example, in the U.S. it is estimated, that social isolation among older adults contributes to an annual spending excess in Medicare of over $6.7 billion (Holt-Lunstad, 2021).

1.3 Loneliness in the elderly

The literature suggests that loneliness in the elderly is more related to loss than to isolation, as old age is characterized by multiple losses that occur together or in quick succession. Many factors contribute to loneliness in old age: loss of a spouse and close friends, lack of belonging and employment, as well as decline in income and physical dysfunction (Bekhet, et al. 2008).

Furthermore, when individuals retire, they often experience an alteration in their daily structure, which may lead to a diminished sense of purpose and belonging. The psychological distress created by life transitions can be worsen if there is no replacement of the usual activities with new ones that can be meaningful for the individual (Greš, et al., 2025).

Additionally, when older adults experience ageism (i.e. age-related discrimination) their status within the community may decline. This loss of recognition and self-esteem can lead to disengagement form the community and increased in social withdrawal (Shiovitz-Ezra, 2018).

Moreover, functional decline leads individuals to decrease their social participation and to a rising of their feelings of disconnection. Issues such as mobility limitations and suspension of driving are often causes of functional decline. A longitudinal study by Perissinotto, et al. (2012) of U.S. adults older than 60 years old found that loneliness predicted both functional decline and premature death. According to their research, lonely individuals are nearly 1.6 times more likely to lose the ability to perform daily activities. The relationship between loneliness and ADLs (activity of daily living) is in fact bidirectional. A longitudinal study of Chinese adults aged 50 and older demonstrated that loneliness significantly increased the risk of ADL disability. Conversely, ADL limitations also predicted increases in loneliness two years later (Jiang, and coll., 2024).

Finally, gender differences tend to emerge more clearly in later life. Research consistently reports that older women experience higher levels of loneliness compared to older men. In a 15-year longitudinal study of adults aged 40 to 80 in Norway, Nicolaisen and Thorsen (2024) found that after accounting for factors like marital status, health, and social support, women had significantly higher loneliness scores than men.

CHAPTER 2: The Cohousing model

2.1 History of Cohousing, definition and characteristics

Cohousing, also referred to as co-residence communities, consists of privately owned or rented homes. These residences are arranged around a core of shared services, such as kitchens, dining rooms, gardens, libraries, and cafés, all designed to foster interaction and collective participation among residents (Bigonnesse et al., 2023; Ruiu, 2014).

The concept of cohousing originated in Denmark during the 1960s as an alternative housing approach that prioritized social connection, cooperation, and shared daily responsibilities. From its Nordic origins, the model expanded to other Northern European countries and subsequently to North America. It has also been adopted, to a lesser extent, in Australia, New Zealand, and Japan (Ruiu, 2014).

Typically, a contract is signed among all participants, regardless of their status as owners or tenants. This document outlines expectations for responsibilities, roles, and the expected financial contribution from each member per month or week. It also includes non-financial commitments, such as meal preparation, gardening, maintenance of common areas, and the organization of leisure activities. A minimum number of shared meals and leisure activities is often established by mutual agreement, and shared activities are organized weekly to increase social interactions among members (Bigonnesse et al., 2023). All these organizational details may vary depending on the community's population at a given time or due to specific individual needs.

A cohousing community often takes a long time to be fully developed because it requires the formation of a cohesive group, shared goals, and a suitable physical site (Brenton, 2008; Ruiu 2015; Tummers, 2015). The key elements are interaction and participation in community life (Griffith et all., 2022; Ruiu, 2014).

2.2 Cohousing for the Elderly and Potential Buffering Effects on Loneliness

An individual's living conditions are considered part of the social determinants of health (Gibson et al., 2011). Depending on the specific context and the individual's characteristics, a particular housing situation can serve as either a risk factor or a protective one against social isolation and loneliness (Kirkegaard et al., 2025; National Academies of Sciences, 2020).

The world’s population is ageing fast. The United Nations published a World Population Prospect (2022) containing some interesting data: in 2020, 1 billion people in the world were aged 60 years or over. That figure will rise to 1.4 billion by 2030, representing one in six people globally. By 2050, the number of people aged 60 years and over will have doubled to reach 2.1 billion. In Italy, the population over 65 has increased by 1% in just the last five years. As of January 1, 2023, there were 14,177,000 individuals over 65, constituting 24.1% (almost a quarter) of the total population, and historical data confirm this growing trend (World Health Organization, 2022). An ISTAT press release (2025) also reveal some interesting informations about the specific Italian demographic: by 2050, the share of older adults aged 65+ will rise to 34.6% (from 24.3%), while the share of individuals aged 15-64 will drop to 54.3% (from 63.5%). There is also a prevision of change in daily composition: one in five families will consist of a couple with children (currently three in 10), while 41.1% of families will be made up of single people (currently 36.8%).

Focusing on the Veneto population, it presents alarming data. The north-east and north-west Italian regions have the highest suicide rates among the elderly in Italy (Cocchio et al., 2024; Crestani et al., 2019; Innamorati et al., 2014) and a high prevalence of loneliness and social isolation (Santini et al., 2025).

The elderly are particularly impacted by social factors such as loneliness and social isolation, which can be well-established predictors of cognitive decline, increased risk of mild cognitive impairment (MCI), dementia, and Alzheimer's disease (Holt-Lunstad, 2021; Lim et al., 2020). Loneliness is a significant risk factor for the progression of frailty in older adults (Jarach et al., 2021). Additionally, loneliness can influence mental health and in general the quality of life (Gerino, et all., 2017), increasing the risk for depression and anxiety (Bilotta et al., 2010; Luchetti et al., 2020).

In this context, the cohousing model should be considered a strong alternative to other facilities, such as nursing homes, assisted living facilities, and traditional retirement communities, which are associated with higher level of depressive symptoms and lower sense of belonging (McLaren et al., 2013).

Moreover, nursing homes are associated with loneliness, feeling of marginalization and cognitive decline (Scocco et al., 2006). The cohousing model may in contrast be positively associated with an improved state of health through psychosocial mechanisms that influence health and disease (Carrere et al., 2020; Markle et al., 2025; Schetsche et al., 2020; Warner et al., 2020). Cohousing is positively correlated with various factors that protect well-being, such as social support, a sense of community, and a feeling of security. This is corroborated by many studies that report a positive correlation between social support and health. However, cohousing also comes with its challenges. A few examples of benefits and challenges are listed below.

A 2012 pilot study in Canada by Puplampu and colleagues identified both financial and social benefits for the community. The social benefits included a higher sense of belonging, a better acceptance of the aging process, increased social interaction, and mutual support, all of which contribute to improved mental health and quality of life. Conversely, the challenges reported included interpersonal communication and the need for compromise on personal preferences.

A very interesting 2013 study by Glass and Vander Plaats explored the phenomenon of aging within an elder cohousing community in the U.S.. The quantitative data from the second phase of this research supported the existence of several benefits: residents of that community experienced mutual support, an increased acceptance of aging, feelings of safety and less worry, and a lessening of social isolation.

Qualitative research conducted by Weeks and colleagues in 2019 reported some interesting findings about the barriers faced when establishing a cohousing community for the elderly in Canada. Financial implications emerged as a key barrier, as well as the difficulty of finding a suitable location for the community to be built. The legal implications were also a major concern for the participants in that research.

Another qualitative study conducted in Belgium by Van Gasse and Wyninckx (2024) highlighted the importance of informal social support among co-residents in intergenerational living projects. This type of living arrangement can provide practical and emotional support, contributing to better health outcomes and higher well-being in general.

A 2020 micro-sociological, in-depth study conducted by Bianchi provides a more precise view of the Italian cohousing context, as the research was carried out on two cohousing settlements: Numero Zero in Turin and Ecosol in Fidenza. All the study's respondents discussed the need for trust within the community and the importance of maintaining a balance between privacy and social life. The study also found a certain degree of social and cultural homogeneity among the residents, typically linked to shared values like sustainability and mutual help. Moreover, the research outcomes were consistent with previous literature findings on the development of a strong sense of belonging, mutual support, and trust.

In summary, cohousing is emerging as a significant housing solution in Europe to address the social and economic challenges of an aging population. The provided research suggests that cohousing communities offer some benefits for the well-being of the elderly, acting as a buffer against loneliness and social isolation. However, the challenges in the establishment of a healthy community are also evident.

CHAPTER 3: The Study

3.1 Introduction and hypothesis

The purpose of the research was to gather information on the preferences of adults between the ages of 60 and 75 living in Veneto, regarding the "cohousing" model and in relation to their perceived state of loneliness.

The correlation between loneliness and health, and the benefit that might be perceived by living in cohousing, make it worth exploring further the attitude of the elderly who are especially exposed to loneliness and social isolation, and thus they would highly benefit from living in community.

Moreover, we acknowledge that loneliness is a multifaceted phenomenon that might be influenced by many many different factors (i.e., resources of the individuals, gender, costs of the services, etc.), and that any of this factor may in turn influence the willingness and interest of individuals to live in a cohousing situation. The primary interests of the research are:

- to create a profile of the sample and confront its characteristics with the findings exposed in the literature, and to see whether this population confirms the factors associated with loneliness in previous research;
- To examine whether a person's perceived health status and their ability to perform Activities of Daily Living (ADLs) are linked to a participant’s loneliness level, and if these factors influence their attitude toward participating in a cohousing project;
- To identify which facilities participants would find most difficult to share in a cohousing environment, as well as which ones they would most like to have available;
- A qualitative analysis of an open-ended question will be conducted to identify the most common motivations behind low attitudes toward cohousing.

3.2 Methods

In this next section are presented the methods employed in the research.

3.2.1 Participants

A total of 510 individuals took part in the study between July 6th and July 20th 2025, of which 487 met the inclusion criteria. Participants were recruited through the snowball sampling method, starting from the recruiter’s personal contacts. The participants were provided with the link to access the online questionnaire (created with Google Survey) and were asked to share it with other acquaintances (friends, colleagues, family members).

The inclusion criteria were:

- Being born between 1950 and 1965.
- Being residents in Veneto.
- Being of Italian nationality.

The research was conducted in accordance with the ethical principles of the Declaration of Helsinki and was approved by the Ethics Committee for Psychological Research, Area 17, University of Padua (protocol no. 105-b). The first page of the questionnaire provided information about the study and the consensus form. No incentives were given for participating in the research.

3.2.2 Measures

An initial collection of anonymous sociodemographic data (e.g., age, gender, SES level, etc.) was carried out to assess the characteristics of the reached population.

The loneliness component of the study was evaluated through the 11 items Italian validated version of the De Jong Gierveld Loneliness Scale (De Jong Gierveld & Van Tilburg, 2006)(Zammuner, V., 2008.) The Italian full version of the scale can be found in the appendix.

The scale was rated on a 5-point Likert scale, which included the following possible answers: “Never”, “Rarely”, “Sometimes”, “Often”, “Always”.

The questions were further divided into two categories for the scoring:

- Positive items (scored as follows: Never=4pt, Rarely=3pt, Sometimes=2pt, Often=1pt, Always=0pt);
- Negative items (scored as follow, Never=0pt, Rarely=1pt, Sometimes=2pt, Often=3pt, Always=4pt).

The complete list of the original items is reported in the appendix.

The total score per participant could range from 0 to 44. Moreover, a classification of severity was made as follow:

- $0 \leq$ score ≤ 10: *Not Lonely*;
- $11 \leq$ score ≤ 33: *Moderate Loneliness*;
- $34 \leq$ score ≤ 40: *Severe Loneliness*;
- $41 \leq$ score ≤ 44: *Very Severe Loneliness*.

A set of seven ad hoc questions was developed to assess participants’ knowledge of the cohousing model, their preferences regarding this type of housing solution, and their potential level of *participation*. Two questions were included to investigate preferences for facilities to find in a cohousing and potential dislikes related to shared spaces. One of the seven questions was open-ended, designed to explore reasons why a participant might choose not to engage in a cohousing project.

The questions were presented in dichotomous (yes/no), Trichotomous (yes/no/maybe) or Likert-scale formats. The full set of original items, along with their translations, is provided in the Appendix, some examples are reported here :

- Le piacerebbe vivere in una situazione come quella presentata sopra?
- Quali degli spazi casalinghi avrebbe più difficoltà a condividere?
- Quanto sarebbe disposto a partecipare alla vita collettiva, nel caso in cui volesse abitare in una soluzione di cohousing?

3.3 Statistical Analyses

The data analysis was conducted in a multi-stage process. Initially, the raw data were collected through the online questionnaire. The responses were then exported to Microsoft Excel for a preliminary cleaning and preparation phase to ensure data integrity and consistency. The first analysis was then conducted to have a clear image of the sociodemographic characteristics and raw numbers of respondents per category in our sample.

Statistically irrelevant categories (i.e., with less than 5 individuals) were grouped in a category called "Altro/Other". The complete ungrouped data can be found in Table 1.

The final dataset was subsequently imported into Jamovi (The Jamovi project, 2025) which was used to perform the calculation of frequencies and percentages, the descriptive and correlation analysis, and the plots. Specifically, Pearson's chi-square test was utilized to determine the association between the choice of a co-living structure (dependent variable) and several independent variables, including relationship status, age, gender, and previous co-living experiences. Furthermore, a one-way ANOVA was employed to compare the mean scores of perceived social loneliness across different types of co-living structures.

Logistic binary regression and ordinal regression were utilized to determine association between the dependent variables mentioned above with respectively dichotomized loneliness and co-housing trends multivariate analysis. The significance level for all statistical tests was set at $p<0.05$

Moreover, Matlab (The MathWorks Inc., 2025) was employed to calculate the frequencies of the words used to describe preference about living spaces and dislikes about shared spaces.

The qualitative open-ended question was analysed using MaxQda (VERBI Software, 2024) for data analysis., to recognize the most common words and clusters of words, to have a more precise idea of the most shared motivation for not choosing a cohousing solution of living.

3.4 Results

3.4.1 Quantitative data analysis

As mentioned before, a total of 510 individuals participated in the study, but only 487 were considered for the analysis because of the inclusion criteria. The sample was predominantly female (72.48%), while male participants numbered 133 (27.31%). One participant did not specify their gender (0.21%). The mean age for female participants was 66.05 years old (SD=4.27), and the mean age for male participants was 67.05 years old (SD=3.96).

The integrity of the demographic characteristics of the respondents are reported in Table 1.

Table 1. Participants' Sociodemographic Data

Factor respondents	N	%
Gender		
Female	353	72.48%
Male	133	27.31%
Other/non specified	1	0.21%
Marital Status		
Single, never married	51	10.47%
Divorced	80	16.43%
Married	324	66.53%
Widow.er	32	6.57%
District		
Padova	329	67.56%
Belluno	12	2.46%
Rovigo	2	0.41%
Treviso	30	6.16%
Venezia	47	9.65%
Verona	35	7.19%
Vicenza	32	6.57%
SES level		
High (>50000/year)	62	12.73%
Average (>28000, <50000/year)	286	58.73%
Low (< 28000/year)	139	28.54%
Living situation		
Owner	456	93.63%
Renting	24	4.93%
Cohabitation with partner (owner)	4	0.82%
Social building	1	0.21%
Loan for use	1	0.21%
Family composition		
Living alone	110	22.59%
Living with parents, single	7	1.44%
One-parent (with children, no partner)	26	5.34%
Living with a partner, no children	200	41.07%
Living with a partner and children	144	29.57%
Working Status		
Actually Unemployed	4	0.82%
Never been employed	6	1.23%
Housekeeper	4	0.82%

Employed (<20 hours/week)	38	7.80%
Employed (>19 hours/week)	86	17.66%
Retired	318	65.30%
Professor	5	1.03%
Freelancer	18	3.70%
Other	8	1.64%
Education		
Primary school (5 years)	8	1.64%
Secondary school, 1st grade (5+3 years)	51	10.47%
Secondary school, 2nd grade (5+3+5 years)	179	36.76%
Bachelor's degree	51	10.47%
Master's degree	160	32.85%
PhD, other level of specialization	38	7.80%
Perceived Health status		
Not at all good	4	0.82%
Not so good	30	6.16%
Average	132	27.10%
Good	272	55.85%
Very good	49	10.06%

Table1, Note 1: the "other" category in the working status section was created to group all the answers that we couldn't group in other way (e.g. "Artigiano", "Autonomo", "Commerciante", "dipendente ente locale", etc.).

The loneliness scale results showed that 292 participants (204 females, 88 males) perceived themselves as "Not Lonely," while 193 participants (148 females, 44 males, 1 other) were found in the "Moderate Loneliness" category. Only 2 participants (1 female, 1 male) were categorized as "Severe Loneliness." No one in our sample fell into the "Very Severe Loneliness" category (Fig. 1).

To obtain more consistent statistical results, a decision was made to group the categories into "Not Lonely" (N=292) and "Lonely" (N=195), combining the moderate and severe loneliness categories.

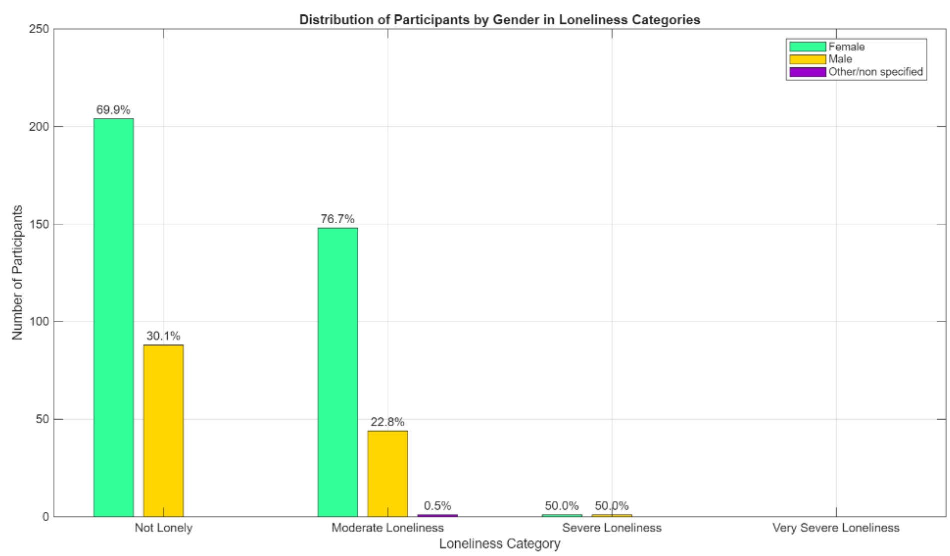

Figure 1: distribution of participants in Loneliness categories

To further explore the factor associated with loneliness, logistic binary regression and ordinal regression was conducted, with loneliness (No = 0; Yes = 1) as the dependent variable. Independent variables included age, gender, marital status, socioeconomic status (SES), housing situation, family composition, employment status, educational attainment, self-rated health, functional limitations (ADLs), and cohousing interest and attitudes.

Only the statistically significant results will be highlighted in this paragraph, their results can be consulted in Table 2; the complete analysis and its results can be found in the Appendix.

Marital status was found to be significantly associated with loneliness in this sample (p=0.010). Married people were less likely to report loneliness (59.0%) compared to the Not Lonely group (71.6%). Conversely, single or never-married individuals (14.9% vs. 7.5%) and divorced/separated ones (20.0% vs. 14.0%) were more likely to experience loneliness. Widowhood was evenly distributed between the Lonely and Not Lonely groups (~6%).

Socioeconomic status was also found to be significantly related to loneliness (p=0.013) in this sample. Participants with a low income made up 35.9% of the total in the lonely group (23.6% in the not lonely group), while people within the average-income group were more prevalent among the not lonely group (62.7% vs. 52.8%). The high-income group did not differ substantially between the groups. The housing situation also showed a significant association (p=0.004). Participants living in rented solutions, even if they characterized a small proportion of individuals overall (N=24), were highly represented among the lonely group (8.7% vs. 2.4%). The majority of the participants were homeowners, with many of them being among the not lonely group (96.6% vs. 89.2%).

Moreover, the family composition did not differ notably between groups (p=0.196), but some patterns emerged from the analysis: a higher percentage of lonely individuals lived alone (25.1% vs. 20.9%) or with parents (2.6% vs. 0.7%).

Self-rated health also had a strong negative association with loneliness (p<0.001). Lonely individuals were more likely to report poorer health: "Not very good" (10.8% vs. 3.1%), "Fair" (35.9% vs. 21.2%). Conversely, better health ratings were more common among the non-lonely: "Good" (63.0% vs. 45.1%), "Very good" (12.7% vs. 6.2%).

Table 2. Statistically relevant results - Pearson's chi-square test
Cross Table – Demographic characteristics x Loneliness

	No (N=292)	Si (N=195)	Total (N=487)	P-value
Stato civile				0.010[1]
Celibe/nubile, mai sposata/o	22.0 (7.5%)	29.0 (14.9%)	51.0 (10.5%)	
Divorziata/o - separata/o	41.0 (14.0%)	39.0 (20.0%)	80.0 (16.4%)	
Sposata/o	209.0 (71.6%)	115.0 (59.0%)	324.0 (66.5%)	
Vedova/o	20.0 (6.8%)	12.0 (6.2%)	32.0 (6.6%)	
Livello SES				0.013[1]
Basso (< 28k/anno)	69.0 (23.6%)	70.0 (35.9%)	139.0 (28.5%)	
Medio (> 28k < 50k/a.)	183.0 (62.7%)	103.0 (52.8%)	286.0 (58.7%)	
Alto (>50k anno)	40.0 (13.7%)	22.0 (11.3%)	62.0 (12.7%)	
Situazione abitativa				0.004[1]
Proprietà	282.0 (96.6%)	174.0 (89.2%)	456.0 (93.6%)	
Affitto	7.0 (2.4%)	17.0 (8.7%)	24.0 (4.9%)	

Table 2. Statistically relevant results - Pearson's chi-square test

Cross Table – Demographic characteristics x Loneliness

	No (N=292)	**Si (N=195)**	**Total (N=487)**	**P-value**
Altro	3.0 (1.0%)	4.0 (2.1%)	7.0 (1.4%)	
Stato di salute percepito				< 0.001[1]
Per nulla buono	0.0 (0.0%)	4.0 (2.1%)	4.0 (0.8%)	
Non molto buono	9.0 (3.1%)	21.0 (10.8%)	30.0 (6.2%)	
Medio	62.0 (21.2%)	70.0 (35.9%)	132.0 (27.1%)	
Buono	184.0 (63.0%)	88.0 (45.1%)	272.0 (55.9%)	
Molto buono	37.0 (12.7%)	12.0 (6.2%)	49.0 (10.1%)	
ADLs_1				0.009[1]
Con difficoltà	24.0 (8.2%)	31.0 (15.9%)	55.0 (11.3%)	
Senza difficoltà	268.0 (91.8%)	164.0 (84.1%)	432.0 (88.7%)	
ADLs_2				0.021[1]
Con difficoltà	9.0 (3.1%)	15.0 (7.7%)	24.0 (4.9%)	
Senza difficoltà	283.0 (96.9%)	180.0 (92.3%)	463.0 (95.1%)	

Cross Table - cohousing 3 – would you like to live in a cohousing solution? - Pearson's chi-square test

	No (N=49)	**Non lo so (N=197)**	**Si (N=241)**	**Total (N=487)**	**p value**
Genere					< 0.001[1]
Altro/Non specificato	0.0 (0.0%)	0.0 (0.0%)	1.0 (0.4%)	1.0 (0.2%)	
Femmina	20.0 (40.8%)	143.0 (72.6%)	190.0 (78.8%)	353.0 (72.5%)	
Maschio	29.0 (59.2%)	54.0 (27.4%)	50.0 (20.7%)	133.0 (27.3%)	
Conoscenza del cohousing					< 0.001[1]
No	17.0 (34.7%)	56.0 (28.4%)	30.0 (12.4%)	103.0 (21.1%)	
Si	32.0 (65.3%)	141.0 (71.6%)	211.0 (87.6%)	384.0 (78.9%)	

Cross Table – Participation in cohousing - Pearson's chi-square test

	Per niente (N=37)	**Un po' (N=87)**	**Mediamente (N=174)**	**Molto (N=104)**	**Moltissimo (N=85)**	**Total (N=487)**	**p value**
Genere							0.046[1]
Altro/Non specificato	0.0 (0.0%)	1.0 (1.1%)	0.0 (0.0%)	0.0 (0.0%)	0.0 (0.0%)	1.0 (0.2%)	
Femmina	19.0 (51.4%)	59.0 (67.8%)	131.0 (75.3%)	78.0 (75.0%)	66.0 (77.6%)	353.0 (72.5%)	
Maschio	18.0 (48.6%)	27.0 (31.0%)	43.0 (24.7%)	26.0 (25.0%)	19.0 (22.4%)	133.0 (27.3%)	
Conoscenza del cohousing							< 0.001[1]
No	17.0 (45.9%)	21.0 (24.1%)	32.0 (18.4%)	13.0 (12.5%)	20.0 (23.5%)	103.0 (21.1%)	
Si	20.0 (54.1%)	66.0 (75.9%)	142.0 (81.6%)	91.0 (87.5%)	65.0 (76.5%)	384.0 (78.9%)	

1. Pearson's Chi-squared test

A cross-table was also created to study the relationship of each ADL (Activity of Daily Living) with this sample's loneliness scores (Table 2):

- ADL1 (being able to use stairs independently) was found to have a statistically significant association (p=.009). In fact, 15.9% of lonely participants reported difficulties, compared to only 8.2% of non-lonely individuals.
- ADL2 (being able to dress and undress independently) also reached statistical significance (p=0.021). Difficulties were present in 7.7% of lonely respondents versus 3.1% of the non-lonely.
- ADL3 (being able to sit in a chair and stand independently) did not reveal a particular statistical significance (p=0.109).

Moreover, a cross-table was also made to study the relationship between the loneliness scores of this sample and the ad hoc questions created to evaluate knowledge and attitude toward cohousing, which did not reveal particular significance.

Logistic binary regression and ordinal regression for loneliness and cohousing interest

The objective of this analysis is to understand which demographic and personal factors are associated with the probability of experiencing loneliness in this sample.

The statistically significant predictors in this model were: being married (p=0.003, OR=0,198) is associated with a significant reduction in the probability of experiencing loneliness, living with partner (p=0,01, OR=3,728) and children (p=0,021, OR=3,541) is associated with a significant probability of not experiencing loneliness. Living alone is associated with a significant probability of experiencing loneliness.

Interest and experience with cohousing

A large majority of the participants in this study had heard of cohousing before (78.9%), while only a small fraction had previous experience living in this kind of structure (5.3%).

Nearly half of the participants stated that they would like to live in a cohousing arrangement (49.5), while 40.5% were unsure.

The study found no statistically significant difference (p=0.076) in the desire to live in cohousing between the lonely and non-lonely groups (46.2% of the lonely group vs 51.7% of the non-lonely group expressed interest).

Model's coefficients – Loneliness							
						95% Intervallo di Fiducia	
Predittore	**Stima**	**SE**	**Z**	**p**	**Odds-Ratio**	**Inferiore**	**Superiore**
Sposata/o – Celibe/nubile, mai sposata/o	-1.6200	0.5440	-2.9779	0.003	0.198	0.0681	0.575
Abitando sola/o – Abitando con partner e figli	-1.2643	0.5465	-2.3134	0.021	0.282	0.0968	0.824
Model's coefficients - cohousing 6: participation							
Situazione_abitativa: Altro – Proprietà	1.72322	0.7657	2.2504	0.024	5.603	1.2885	27.370
Abitando con un partner, senza figli – Abitando con partner e figli	0.51314	0.2126	2.4134	0.016	1.671	1.1022	2.538
Abitando sola/o – Abitando con partner e figli	0.99988	0.4483	2.2306	0.026	2.718	1.1274	6.564
Senza difficoltà – Con difficoltà	-0.76854	0.3230	-2.3795	0.017	0.464	0.2457	0.874

Factors Related to a desire to live in cohousing:

- Gender ($p<0.001$): there is a highly significant relationship between gender and the desire to live in cohousing. A much higher percentage of women (78.8%) were interested compared to men (20.7%) among those who answered "Yes".
- Prior Knowledge ($p<0.001$): those who had previously heard of cohousing were significantly more likely to be interested in it. Among those who said "Yes" to wanting to live in cohousing, 87.6% had heard of it before.

Factors related to the possible engagement in a cohousing solution:

- Gender: ($p=0.046$): there is a statistically significant relationship between gender and willingness to participate. Women show a higher inclination to participate compared to men, especially at higher levels of interest. For instance, in the "Moltissimo" (Very much) interest group, 77.6% are women and 22.4% are men.
- Prior knowledge ($p<0.001$): individuals who have heard of cohousing before are significantly more likely to express interest in participating.

Finally, a logistical regression identify which factors are significant predictors of the level of engagement in participation:

- Housing situation: a p-value of 0.024 is found for the category "other" (which groups all situations that are not a property and neither a rented solution), showing that the participants in this category are more likely to participate in a cohousing project.

- Family composition: individuals who are living with a partner, without children are more likely to participate (p=0.016), as well as individuals living alone (p=0.026).
- ADL1: this predictor show an inverse relationship (p=0.017), meaning that participants having no difficulty in ADL1, are significantly less willing to participate in cohousing.

Analysis of the distribution of preferences and dislikes

Analysis of the frequency distribution of the most desired facilities to find within a possible cohousing-like structure (fig.1), showed that almost half of this sample (N=242), would choose to have green spaces (e.g., garden and or vegetable garden). This was by far the most selected option, representing the 27.1% of the overall frequency.

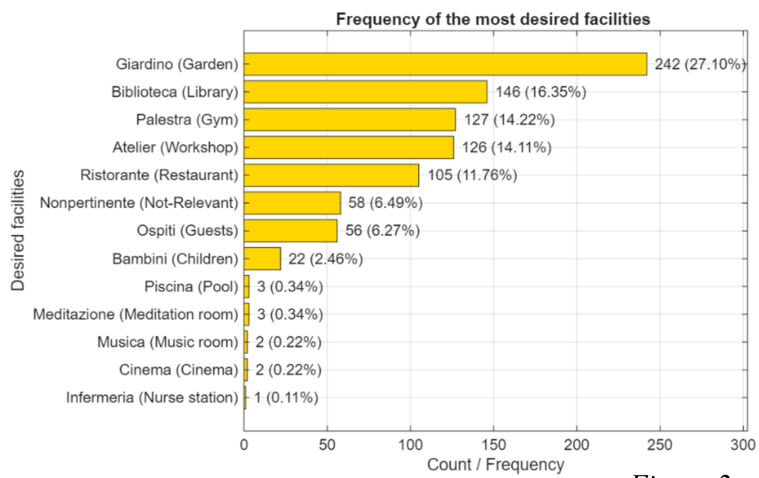

Figure 2

The library was the second most frequently selected facility (16.35% overall), followed by the gym and workshop (14.22 and 14,11 respectively) and a self-managed restaurant/cafeteria (11.76%). Less interest was expressed in spaces such as guest house and facilities dedicated to children (6.27% and 2.46% respectively). A small proportion of participants mentioned facilities such as a pool or a meditation room (n = 3 each), a music room or cinema (n = 2 each), and a nurse station (n = 1).

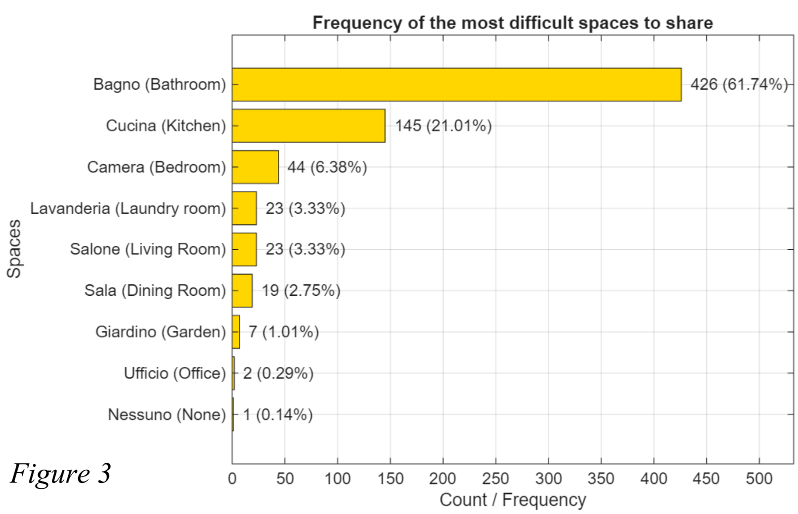

Figure 3

When asked about the most difficult domestic spaces to share (fig.2), the bathroom was by far the most frequently indicated, with 426 participants (61.74%) selecting it as one of their two options. The kitchen was the second most frequently mentioned space (145 participants; 21.01%).

Although bedrooms were not originally included as a shared space in the description of the cohousing model (which explicitly emphasized private dwellings combined with shared facilities such as kitchens, living rooms, gardens, and libraries), 44 participants (6.38%) nonetheless indicated the bedroom as a problematic space to share.

Other spaces were mentioned less frequently, including the laundry room and living room (N=23 each, 3.33%), and the dining room 19 times (2.75%).

In this sample, very few participants considered the garden (N:7) and the office (N:2) as difficult spaces to share.

3.4.2 Qualitative data analysis

The first step was to analyse the text to find patterns of words and similar themes throughout the responses. Then, a code system was implemented to group the most frequent patterns and topics into main categories. Some categories were merged because of content similarity and are identified with a plus symbol (+) in the graph (Fig.3). A full explanation of these variables will be provided below. Some answers were coded once, while others were coded two or three times, depending on the specific content.

Figure 3 represents the count and frequency of the most common motivations for not choosing to live in a cohousing community, which were previously grouped. The translation of the question asked to the participants is reported above the figure.

The main concern for this sample was other guests and the management of relationships. One hundred twenty-seven participants (22.8%) reported a negative view about sharing spaces with others or expressed doubts about managing relationships. The second most mentioned theme was "Spaces (+)" a merged category that included mentions of both private (e.g., bathroom, bedroom) and shared spaces (e.g., kitchen, garden). This subject was mentioned 50 times in total (9%).

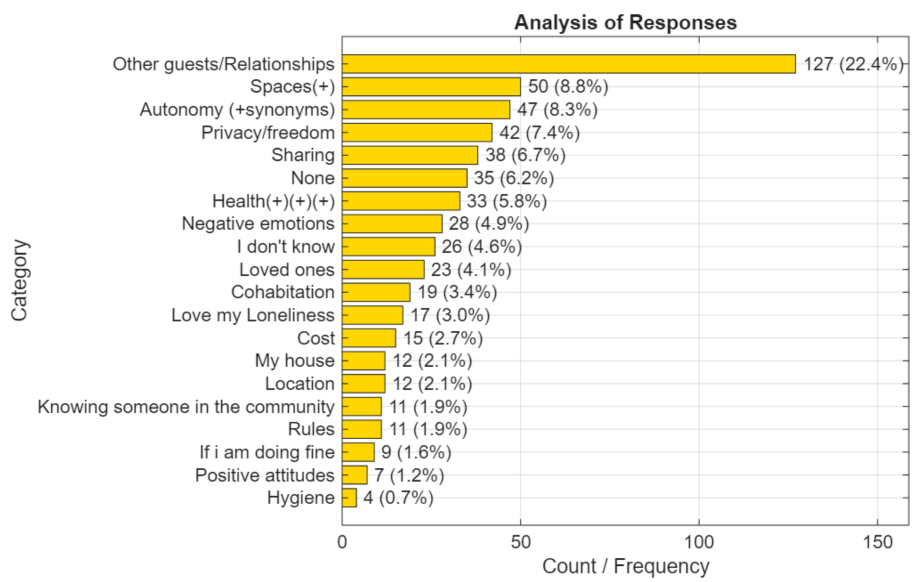

Figure 4: Frequency of the subjects founded through the analysis of the open-ended question: "What personal issue or preference might lead you to not choose this type of solution, or to have doubts about it?"

The word "autonomy" and its synonyms ("autonomia," "indipendenza," "autonoma/o," "autosufficienza") were used 47 times, and "privacy" and "freedom" were mentioned together 42 times.

Some subcategories of "other guests/relationships" were created to highlight different nuances of the problem. Answers containing the word "sharing" (e.g., "condividere," "condiviso") were used negatively by 6.8% (n=38) of respondents to explain why they would not choose cohousing. Another subcategory, "negative emotions," grouped all responses (n=28) that contained words like "fear" or word clusters with a high negative charge, such as "lack of something" or "disregard for others." The word "cohabitation" was also used negatively 19 times.

A portion of participants (N=35, 6.3%) found no reasons not to choose a cohousing solution, while 26 (4.7%) respondents either did not know the reasons or were unsure if there were any.

Health also appeared to be a common theme in this sample (N=33, 5.9%). This category contained three subcategories: one with responses expressing the desire not to choose cohousing while healthy (N=9, “If I am doing fine”), another with concerns about personal health conditions during the permanence, and a final one naming the desire to find some form of medical care within the community.

Less frequent themes included concerns for loved ones not living in the community, the separation from them, or the disapproval of family or partners for these kinds of projects. Additionally, 3.1% of respondents reported a positive view of their loneliness and a need to keep their life as it is. Other concerns included costs (2.7%), the community's location (2.2%), following rules (2%), and not knowing someone in the community (2% each). Finally, 2.2% of respondents stated they would prefer to stay in their own house.

3.5 Discussion

This study investigated loneliness among the elderly in Veneto and explored their attitudes toward the cohousing model to determine if and how his housing solution could be implemented in the area, given its potential benefits for the general health status of the elderly.

The results provide a twofold understanding. First, they confirm that the profile of a lonely individual in this sample aligns with well-established risk factors from the literature. Second, they offer a nuanced insight into attitudes toward cohousing, suggesting that its appeal is based on more complex and multifaceted factors than being a simple remedy for loneliness.

The characteristics of lonely individuals in this sample are highly consistent with the risk factors highlighted in the literature. The significant association between loneliness and socioeconomic status (p=0.013), which found a higher share of low-income participants in the lonely group (35.9% vs. 23.6% not lonely), corroborates previous findings that economic conditions can be a factor for vulnerability (Algren, et al., 2020; Niedzwiedz, et al., 2016; Tough, et al., 2021; Wang, et al. 2024). Similarly, the significant association with the housing situation (p=0.004) showed that participants in rented accommodations were more likely to feel lonely than owners. This finding underscores the role of stable housing in fostering social integration and a sense of belonging (Ornelas, et al. 2014).

A strong link between self-rated health and loneliness ($p<0.001$), as well as a strong association between ADLs and loneliness (ADL1, $p=0.009$; ADL2, $p=0.021$), reinforce the idea that loneliness and health have a bidirectional relationship. Limited functional status in ADLs can increase the risk of loneliness (Holt-Lunstad, et al, 2015; Holt-Lunstad, et al., 2010), just as loneliness can be a cause of functional decline, frailty, and an increased risk for mental health conditions (Bilotta et al., 2010; Jarach et al., 2021; Lim et al., 2020; Luchetti et al., 2020; Perissinotto, et al. 2012; Shoib, et al., 2023). The fact that ADL3 (sitting and standing from a chair independently) was not found to have a significant association, unlike ADL1 (using the stairs independently) and ADL2 (dressing and undressing independently), provides some insight. ADL1 and ADL2 represent a significant functional impairment, with ADL2 being strongly linked with intimacy. We could hypothesize that individuals with these types of limitations have a higher probability of being "confined" at home, which creates the perfect conditions for social isolation and loneliness. This is corroborated by some qualitative data, where a number of participants shared their concerns about living in cohousing with functional limitations (e.g., “Problemi di salute”, “Malattia invalidante”, etc.)

A significant inverse relationship between being fully independent in ADL1 and the willingness to participate in cohousing ($p=0.017$) was found. This suggests that individuals with no functional limitations in this area are significantly less eager to participate in cohousing compared to those who report difficulties. This finding is consistent with the responses to the open-ended question, where nine participants indicated they would not wish to join a cohousing community as long as they felt they were "doing fine" on their own (i.e. “Se sto bene di salute”, “Il cohousing sarebbe per me una possibile scelta qualora perdessi la mia autonomia”). This finding is a key consideration for future initiatives, as it suggests a part of the population perceive cohousing not as a proactive means to enhance autonomy and slow health decline, but rather as a reactive solution for when independence begins to diminish.

It should be taken into consideration a potential need to implement the presence of professionals in the community, such as nurses, doctors, physiotherapists etc., to provide individuals with functional limitations access to this kind of housing. In this optic, it might be important to keep a good balance between the level of assistance and the autonomy of the resident, for example organising weekly or daily visits of professionals to the community, depending on the needs of the residents.

While cohousing demonstrated to be be a housing solution that improves health conditions through psychosocial mechanisms such as social support and feelings of security in many other countries (Glass and Vander Plaats, 2013; Puplampu et al., 2012; Van Gasse and Wyninckx, 2024), in this sample the level of loneliness was not significantly associated with the willingness to be part of a community ($p=0.076$).

Nearly half of the participants stated that they would like to live in a cohousing arrangement (49.5%), while 40.5% were unsure. This finding challenges the assumption that cohousing might be appealing mainly to individuals already suffering from isolation and loneliness. A key finding from the qualitative analysis is that many participants are concerned about preserving their autonomy and privacy, along with expressing concern about sharing personal spaces or space in general. Additionally, they express apprehension about potential interpersonal issues that could arise in a community setting. These findings align with those from Bianchi (2020), who conducted an in-depth study in two existing communities in Italy and reported similar concerns from residents. Taken together, these findings suggest that while individuals may feel lonely, their desire for cohousing benefits is outweighed by their concerns about privacy, autonomy, and social dynamics. In light of this, it's crucial to consider the need for professional figures such as social workers, social educators, or psychologists. They could serve as mediators during conflicts or assist residents in establishing rules for the community that help them preserve their sense of autonomy, freedom and privacy.

What emerged from this sample is that gender has a significant association with the desire to live in cohousing ($p<0.001$). Women were more likely to answer “yes” than men, which suggests women might tend to place an "increased value on interpersonal relationships" (Nicolaisen, Thorsen, 2023) and may therefore be more drawn to a living arrangement explicitly designed around community interaction and participation. Having prior knowledge of this housing model also had a significant relationship with the desire to live in a cohousing ($p<0.001$). This highlights how awareness and education about the subject and its benefits are critical barriers to a wider adoption of the model. This is of extreme importance for the future, as we could imagine beginning a cohousing project through a period of informative meetings to share its advantages and disadvantages, allowing the population to become accustomed to the concept before developing a project tailored to their specific needs. Furthermore, the analysis revealed that prior knowledge of the model ($p<0.001$) and gender ($p=0.046$) were significant factors associated also with the level of engagement. Individuals who had previously heard of cohousing were significantly more likely to express interest in participating, underscoring the importance of public awareness. Additionally, women showed a higher inclination to participate compared to men, especially at higher levels of interest, a finding consistent with their tendency to place a higher value on interpersonal relationships (Nicolaisen and Thorsen, 2023).

The logistic regression analysis provides a more detailed understanding of the potential profile for a cohousing resident, revealing that individuals most likely to express a high level of engagement are those experiencing transitional moments (i.e. retirement, having an “empty nest “ because of children departure) or living less conventional circumstances in life (i.e. living in a social building, loan for use, etc). These findings, particularly among those living alone (p=0.026), living with a partner but without children (p=0.016), or in less stable housing situations (p=0.024), align with existing literature suggesting that life-transitory moments can be a trigger for loneliness, and consequently for decline in well-being and health (Kim & Moen, 2002; Yang et al., 2023).

3.6 Limitations

This exploratory study holds its limitations, which are primarily related to its methodology and sample. While exploratory studies are usually implemented primarily through qualitative methods (i.e. focus groups, interview, etc.) to gather insights directly from the population, this study employed a survey-based approach to gather mainly quantitative data instead of qualitative ones. Consequently, the research might lack a deeper understanding of which dimension are most important for the participants. This strategy was chosen to efficiently reach a large audience, to standardize initial findings, and provide a quick and broad picture of the sample before conducting deeper research through interviews or focus groups. The approach was revealed to be surprisingly efficient, as the reached individuals were more than 500 in total, far exceeding the initial expectation. Similarly, the volume of qualitative data collected also surpassed our projections.

Another limitation is that the studied population is slightly younger than the preferred target. This was a strategic choice made to reach individuals who were comfortable enough with technology to complete an online survey, a profile more easily found in this age range. The effectiveness of this choice was confirmed by the high response rate. Furthermore, the results might not be fully representative of the expectations and attitudes toward cohousing, nor of perceived health status and level of loneliness.

While this choice offers a valuable perspective on the close future or for a future generation, it must be considered that participants' opinion and attitudes might be subject to change, making this a key limitation of the research.

Following these considerations, future studies should focus on exclusively qualitative research. For instance, tailored interviews or focus groups could be conducted with this age group and with professionals (i.e., nurses, social workers, and psychologists) who can offer insight into the problems identified in this study and the broader literature. Another valuable approach would be to organize focus groups for people with prior cohousing experience to address concerns and highlight potential issues that have not emerged from existing research. Lastly, comparative studies with other Italian regions would allow for a valuable comparison of the collected data.

4. General conclusions

This research offered two primary contributions to the understanding of loneliness and alternative housing models for the elderly in Veneto. Primarily, the findings corroborated the prevalence of established loneliness predictors within the studied population, such as socioeconomic vulnerability and functional decline, underscoring the persistent link between an individual's life circumstances and their experience of social well-being. Furthermore, the investigation revealed that the appeal of cohousing is not a simple antidote to social isolation. Instead, interest in this model is shaped by a complex interplay between the desire for community and deeply held concerns for the challenges of communal living. While a significant portion of the sample expressed interest in cohousing, the qualitative analysis revealed that the desire for community is counterbalanced by significant concerns. The most prominent of these were the challenges of managing interpersonal relationships and the necessity of sharing spaces. Additionally, the concepts of autonomy, independence, and privacy were frequently cited as primary reasons for hesitating to choose a cohousing lifestyle.

These findings point to a crucial perception gap: this population likely views cohousing as a reactive solution to be considered only when independence diminishes, rather than a proactive strategy to preserve well-being and social connection over the long term. This is highlighted by the finding that individuals with no functional limitations were significantly less interested in participating, suggesting they would only consider it out of future necessity.

Therefore, for cohousing to become a viable and widely accepted model, future efforts must focus on two key areas. The first is education about the model. Given that prior knowledge of the concept was significantly linked to a higher willingness to participate, targeted informational campaigns are essential.

Such initiatives should not only explain the benefits but also directly address the common fears regarding loss of privacy and autonomy, demonstrating how cohousing can be structured to protect these values.

The second area involves the practical design of these communities. To address the population's valid concerns, the integration of professional support is critical. The presence of mediators, such as social workers or psychologists, could help establish community guidelines and facilitate conflict resolution, thereby easing anxieties about interpersonal dynamics. Furthermore, organizing visits from healthcare professionals could address health-related concerns, making the model more inclusive for individuals with varying levels of functional ability.

In summary, while cohousing is not a panacea for loneliness, it represents a valuable alternative to traditional living arrangements for an aging population. Its successful implementation, however, depends on shifting public perception through education and thoughtfully designing communities that intentionally balance social engagement with personal freedom, supported by a professional framework.

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Appendix

Cohousing section questions

Italian version proposed to the participants:

Aveva già sentito parlare di questo tipo di cohousing prima d'ora?

Aveva mai vissuto nel passato in una situazione di cohousing come quella descritta sopra o simile?

Le piacerebbe vivere in una situazione come quella presentata sopra?

Quali delle seguenti strutture vorrebbe trovare all'interno degli spazi condivisi?

Quali degli spazi casalinghi avrebbe più difficoltà a condividere?

Quanto sarebbe disposto a partecipare alla vita collettiva, nel caso in cui volesse abitare in una soluzione di cohousing?

Quale problematica o preferenza personale potrebbe portarla a NON scegliere questo tipo di soluzione, o ad essere dubitativo? (unica domanda aperta)

English translation:

Have you ever heard of this type of cohousing before?

Have you ever lived in the past in a cohousing situation like the one described above or a similar one?

Would you like to live in a situation like the one presented above?

Which of the following facilities would you like to find within the shared spaces?

Which household spaces would you find most difficult to share?

How willing would you be to participate in community life, in the case that you wished to live in a cohousing solution?

What personal issue or preference might lead you to NOT choose this type of solution, or to have doubts about it? (only open-ended question)

List of Items from DeJong Grieveld Loneliness scale, divided by category of scoring and respective assignation of the points:

Positive items (scored as follow, Never=4pt, Rarely=3pt, Sometimes=2pt, Often=1pt, Always=0pt);

- There are plenty of people I can rely on when I have problems.
- There are enough people I feel close to.
- There are many people I can trust completely.
- There is always someone I can talk to about my day-to-day problems.
- I can call on my friends whenever I need them.

Negative items (scored as follow, Never=0pt, Rarely=1pt, Sometimes=2pt, Often=3pt, Always=4pt).

- I experience a general sense of emptiness.
- I miss having people around me.
- I often feel rejected
- I miss the pleasure of the company of others.
- I find my circle of friends and acquaintances too limited.
- I miss having a really close friend

Tables

Cross Table – Demographic characteristics x Loneliness

	No (N=292)	Si (N=195)	Total (N=487)	P-value
Genere				0.115[1]
Altro/Non specificato	0.0 (0.0%)	1.0 (0.5%)	1.0 (0.2%)	
Femmina	204.0 (69.9%)	149.0 (76.4%)	353.0 (72.5%)	
Maschio	88.0 (30.1%)	45.0 (23.1%)	133.0 (27.3%)	
Age				0.422[2]
Mean (SD)	66.2 (4.2)	66.5 (4.2)	66.3 (4.2)	

	No (N=292)	Si (N=195)	Total (N=487)	P-value
Range	60.0 - 75.0	60.0 - 75.0	60.0 - 75.0	
Provincia				0.779[1]
Belluno	7.0 (2.4%)	5.0 (2.6%)	12.0 (2.5%)	
Padova	195.0 (66.8%)	134.0 (68.7%)	329.0 (67.6%)	
Rovigo	2.0 (0.7%)	0.0 (0.0%)	2.0 (0.4%)	
Treviso	21.0 (7.2%)	9.0 (4.6%)	30.0 (6.2%)	
Venezia	28.0 (9.6%)	19.0 (9.7%)	47.0 (9.7%)	
Verona	19.0 (6.5%)	16.0 (8.2%)	35.0 (7.2%)	
Vicenza	20.0 (6.8%)	12.0 (6.2%)	32.0 (6.6%)	
Stato_civile				0.010[1]
Celibe/nubile, mai sposata/o	22.0 (7.5%)	29.0 (14.9%)	51.0 (10.5%)	
Divorziata/o - separata/o	41.0 (14.0%)	39.0 (20.0%)	80.0 (16.4%)	
Sposata/o	209.0 (71.6%)	115.0 (59.0%)	324.0 (66.5%)	
Vedova/o	20.0 (6.8%)	12.0 (6.2%)	32.0 (6.6%)	
Livello_SES				0.013[1]
Basso (< 28k/anno)	69.0 (23.6%)	70.0 (35.9%)	139.0 (28.5%)	
Medio (> 28k < 50k/a.)	183.0 (62.7%)	103.0 (52.8%)	286.0 (58.7%)	
Alto (>50k anno)	40.0 (13.7%)	22.0 (11.3%)	62.0 (12.7%)	
situazione_abitativa				0.004[1]
Proprietà	282.0 (96.6%)	174.0 (89.2%)	456.0 (93.6%)	
Affitto	7.0 (2.4%)	17.0 (8.7%)	24.0 (4.9%)	
Altro	3.0 (1.0%)	4.0 (2.1%)	7.0 (1.4%)	
Composizione_familiare				0.196[1]
Abitando con partner e figli	95.0 (32.5%)	49.0 (25.1%)	144.0 (29.6%)	
Abitando con un partner, senza figli	119.0 (40.8%)	81.0 (41.5%)	200.0 (41.1%)	
Abitando sola/o	61.0 (20.9%)	49.0 (25.1%)	110.0 (22.6%)	
Celibe/nubile, abitando con i genitori	2.0 (0.7%)	5.0 (2.6%)	7.0 (1.4%)	
Famiglia monogenitore (con figli, senza partner)	15.0 (5.1%)	11.0 (5.6%)	26.0 (5.3%)	
Stato_lavorativo				0.235[1]
In pensione	192.0 (65.8%)	126.0 (64.6%)	318.0 (65.3%)	
Impiegata/o , >19h/wk)	57.0 (19.5%)	29.0 (14.9%)	86.0 (17.7%)	
Impiegata/o (<20h/wk)	18.0 (6.2%)	20.0 (10.3%)	38.0 (7.8%)	
Libero/a professionista	10.0 (3.4%)	8.0 (4.1%)	18.0 (3.7%)	
Mai stata/o impiegata/o	5.0 (1.7%)	1.0 (0.5%)	6.0 (1.2%)	
Altro	10.0 (3.4%)	11.0 (5.6%)	21.0 (4.3%)	
Educazione				0.497[1]
Dottorato e altri livelli di specializzazione	26.0 (8.9%)	12.0 (6.2%)	38.0 (7.8%)	
Laurea magistrale	95.0 (32.5%)	65.0 (33.3%)	160.0 (32.9%)	
Laurea triennale	33.0 (11.3%)	18.0 (9.2%)	51.0 (10.5%)	
Sc. primaria (5 a)	3.0 (1.0%)	5.0 (2.6%)	8.0 (1.6%)	
Sc. secondaria (5+3 a)	27.0 (9.2%)	24.0 (12.3%)	51.0 (10.5%)	
Scuola secondaria (5+3+5 a)	108.0 (37.0%)	71.0 (36.4%)	179.0 (36.8%)	
stato_di_salute_percepito				< 0.001[1]
Per nulla buono	0.0 (0.0%)	4.0 (2.1%)	4.0 (0.8%)	
Non molto buono	9.0 (3.1%)	21.0 (10.8%)	30.0 (6.2%)	
Medio	62.0 (21.2%)	70.0 (35.9%)	132.0 (27.1%)	
Buono	184.0 (63.0%)	88.0 (45.1%)	272.0 (55.9%)	
Molto buono	37.0 (12.7%)	12.0 (6.2%)	49.0 (10.1%)	

1. Pearson's Chi-squared test
2. Linear Model ANOVA

	No (N=292)	Si (N=195)	Total (N=487)	p value
ADLs_1				0.009[1]
Con difficoltà	24.0 (8.2%)	31.0 (15.9%)	55.0 (11.3%)	
Senza difficoltà	268.0 (91.8%)	164.0 (84.1%)	432.0 (88.7%)	
ADLs_2				0.021[1]
Con difficoltà	9.0 (3.1%)	15.0 (7.7%)	24.0 (4.9%)	
Senza difficoltà	283.0 (96.9%)	180.0 (92.3%)	463.0 (95.1%)	
ADLs_3				0.109[1]
Con difficoltà	5.0 (1.7%)	8.0 (4.1%)	13.0 (2.7%)	
Senza difficoltà	287.0 (98.3%)	187.0 (95.9%)	474.0 (97.3%)	

1. Pearson's Chi-squared test

	No (N=292)	Si (N=195)	Total (N=487)	p value
cohousing 1- Prior knowledge				0.192[1]
No	56.0 (19.2%)	47.0 (24.1%)	103.0 (21.1%)	
Si	236.0 (80.8%)	148.0 (75.9%)	384.0 (78.9%)	
cohousing 2 – already lived				0.321[1]
No	274.0 (93.8%)	187.0 (95.9%)	461.0 (94.7%)	
Si	18.0 (6.2%)	8.0 (4.1%)	26.0 (5.3%)	
cohousing 3- like to live				0.076[1]
No	34.0 (11.6%)	15.0 (7.7%)	49.0 (10.1%)	
Non lo so	107.0 (36.6%)	90.0 (46.2%)	197.0 (40.5%)	
Si	151.0 (51.7%)	90.0 (46.2%)	241.0 (49.5%)	
cohousing 6- Partecipation				
Per niente	22.0 (7.5%)	15.0 (7.7%)	37.0 (7.6%)	
Un po'	45.0 (15.4%)	42.0 (21.5%)	87.0 (17.9%)	
Mediamente	107.0 (36.6%)	67.0 (34.4%)	174.0 (35.7%)	
Molto	66.0 (22.6%)	38.0 (19.5%)	104.0 (21.4%)	
Moltissimo	52.0 (17.8%)	33.0 (16.9%)	85.0 (17.5%)	

1. Pearson's Chi-squared test

Regressione Logistica Binomiale

Coefficienti del Modello - Solitudine

						95% Intervallo di Fiducia	
Predittore	**Stima**	**SE**	**Z**	**p**	**Odds-Ratio**	**Inferiore**	**Superiore**
Intercettare	30.5112	1620.1614	0.0188	0.985	1.78e+13	0.0000	Inf
Age	0.0179	0.0306	0.5864	0.558	1.018	0.9589	1.081
Genere:							
Femmina – Altro/Non specificato	-15.0693	1455.3982	-0.0104	0.992	2.85e-7	0.0000	Inf
Maschio – Altro/Non specificato	-15.3782	1455.3982	-0.0106	0.992	2.10e-7	0.0000	Inf
Stato_civile:							
Divorziata/o - separata/o – Celibe/nubile, mai sposata/o	-0.0283	0.4080	-0.0694	0.945	0.972	0.4369	2.163

Coefficienti del Modello - Solitudine

Predittore	Stima	SE	Z	p	Odds-Ratio	95% Intervallo di Fiducia	
						Inferiore	Superiore
Sposata/o – Celibe/nubile, mai sposata/o	-1.6200	0.5440	-2.9779	0.003	0.198	0.0681	0.575
Vedova/o – Celibe/nubile, mai sposata/o	-0.5109	0.5334	-0.9579	0.338	0.600	0.2109	1.707
Livello_SES:							
Medio (> 28k < 50k/a.) – Basso (< 28k/anno)	-0.1966	0.2523	-0.7795	0.436	0.821	0.5011	1.347
Alto (>50k anno) – Basso (< 28k/anno)	0.1839	0.4018	0.4577	0.647	1.202	0.5468	2.642
situazione_abitativa:							
Affitto – Proprietà	0.8648	0.5188	1.6670	0.096	2.375	0.8590	6.564
Altro – Proprietà	-0.3767	0.9036	-0.4169	0.677	0.686	0.1168	4.032
Composizione_familiare:							
Abitando con un partner, senza figli – Abitando con partner e figli	0.0516	0.2571	0.2008	0.841	1.053	0.6362	1.743
Abitando sola/o – Abitando con partner e figli	-1.2643	0.5465	-2.3134	0.021	0.282	0.0968	0.824
Celibe/nubile, abitando con i genitori – Abitando con partner e figli	-0.8779	1.0598	-0.8284	0.407	0.416	0.0521	3.318
Famiglia monogenitore (con figli, senza partner) – Abitando con partner e figli	-1.1917	0.6704	-1.7776	0.075	0.304	0.0816	1.130
Stato_lavorativo:							
Impiegata/o , >19h/wk) – In pensione	-0.2674	0.3291	-0.8125	0.416	0.765	0.4015	1.459
Impiegata/o (<20h/wk) – In pensione	0.5000	0.4105	1.2180	0.223	1.649	0.7374	3.686
Libero/a professionista – In pensione	0.5737	0.5475	1.0479	0.295	1.775	0.6069	5.191
Mai stata/o impiegata/o – In pensione	-0.6803	1.1263	-0.6041	0.546	0.506	0.0557	4.605
Altro – In pensione	0.4705	0.5164	0.9111	0.362	1.601	0.5818	4.404
Educazione:							
Laurea magistrale – Dottorato e altri livelli di specializzazione	0.4394	0.4202	1.0457	0.296	1.552	0.6810	3.536
Laurea triennale – Dottorato e altri livelli di specializzazione	0.1718	0.5145	0.3339	0.738	1.187	0.4332	3.255
Sc. primaria (5 a) – Dottorato e altri livelli di specializzazione	0.9142	0.9327	0.9802	0.327	2.495	0.4010	15.522
Sc. secondaria (5+3 a) – Dottorato e altri livelli di specializzazione	0.6246	0.5139	1.2154	0.224	1.868	0.6821	5.113
Scuola secondaria (5+3+5 a) – Dottorato e	0.2501	0.4386	0.5701	0.569	1.284	0.5436	3.033

Coefficienti del Modello - Solitudine

						95% Intervallo di Fiducia	
Predittore	**Stima**	**SE**	**Z**	**p**	**Odds-Ratio**	**Inferiore**	**Superiore**
altri livelli di specializzazione							
stato_di_salute_percepito:							
Non molto buono – Per nulla buono	-15.0964	711.8532	-0.0212	0.983	2.78e-7	0.0000	Inf
Medio – Per nulla buono	-15.5976	711.8531	-0.0219	0.983	1.68e-7	0.0000	Inf
Buono – Per nulla buono	-16.4893	711.8531	-0.0232	0.982	6.90e-8	0.0000	Inf
Molto buono – Per nulla buono	-16.7252	711.8532	-0.0235	0.981	5.45e-8	0.0000	Inf
ADLs_1:							
Senza difficoltà – Con difficoltà	-0.2840	0.3732	-0.7611	0.447	0.753	0.3622	1.564
ADLs_2:							
Senza difficoltà – Con difficoltà	-0.0221	0.5887	-0.0375	0.970	0.978	0.3085	3.101
ADLs_3:							
Senza difficoltà – Con difficoltà	0.6136	0.8403	0.7302	0.465	1.847	0.3558	9.589

Note. Le stime rappresentano le probabilità logaritmiche di "… = {level 1}" rispetto a "Solitudine = {level 2}"

Cross Table - cohousing 3 – would you like to live in a cohousing solution?

	No (N=49)	Non lo so (N=197)	Si (N=241)	Total (N=487)	p value
Provincia					0.959[1]
Belluno	1.0 (2.0%)	5.0 (2.5%)	6.0 (2.5%)	12.0 (2.5%)	
Padova	32.0 (65.3%)	133.0 (67.5%)	164.0 (68.0%)	329.0 (67.6%)	
Rovigo	1.0 (2.0%)	0.0 (0.0%)	1.0 (0.4%)	2.0 (0.4%)	
Treviso	3.0 (6.1%)	12.0 (6.1%)	15.0 (6.2%)	30.0 (6.2%)	
Venezia	4.0 (8.2%)	20.0 (10.2%)	23.0 (9.5%)	47.0 (9.7%)	
Verona	5.0 (10.2%)	14.0 (7.1%)	16.0 (6.6%)	35.0 (7.2%)	
Vicenza	3.0 (6.1%)	13.0 (6.6%)	16.0 (6.6%)	32.0 (6.6%)	
Genere					< 0.001[1]
Altro/Non specificato	0.0 (0.0%)	0.0 (0.0%)	1.0 (0.4%)	1.0 (0.2%)	
Femmina	20.0 (40.8%)	143.0 (72.6%)	190.0 (78.8%)	353.0 (72.5%)	
Maschio	29.0 (59.2%)	54.0 (27.4%)	50.0 (20.7%)	133.0 (27.3%)	
Stato_civile					0.291[1]
Celibe/nubile, mai sposata/o	3.0 (6.1%)	24.0 (12.2%)	24.0 (10.0%)	51.0 (10.5%)	
Divorziata/o - separata/o	12.0 (24.5%)	29.0 (14.7%)	39.0 (16.2%)	80.0 (16.4%)	
Sposata/o	32.0 (65.3%)	135.0 (68.5%)	157.0 (65.1%)	324.0 (66.5%)	
Vedova/o	2.0 (4.1%)	9.0 (4.6%)	21.0 (8.7%)	32.0 (6.6%)	
Livello_SES					0.113[1]
Basso (< 28k/anno)	11.0 (22.4%)	48.0 (24.4%)	80.0 (33.2%)	139.0 (28.5%)	
Medio (> 28k < 50k/a.)	28.0 (57.1%)	123.0 (62.4%)	135.0 (56.0%)	286.0 (58.7%)	
Alto (>50k anno)	10.0 (20.4%)	26.0 (13.2%)	26.0 (10.8%)	62.0 (12.7%)	
situazione_abitativa					0.644[1]
Proprietà	47.0 (95.9%)	187.0 (94.9%)	222.0 (92.1%)	456.0 (93.6%)	
Affitto	2.0 (4.1%)	8.0 (4.1%)	14.0 (5.8%)	24.0 (4.9%)	
Altro	0.0 (0.0%)	2.0 (1.0%)	5.0 (2.1%)	7.0 (1.4%)	

	No (N=49)	Non lo so (N=197)	Si (N=241)	Total (N=487)	p value
Composizione_familiare					0.260[1]
Abitando con partner e figli	18.0 (36.7%)	62.0 (31.5%)	64.0 (26.6%)	144.0 (29.6%)	
Abitando con un partner, senza figli	17.0 (34.7%)	81.0 (41.1%)	102.0 (42.3%)	200.0 (41.1%)	
Abitando sola/o	14.0 (28.6%)	42.0 (21.3%)	54.0 (22.4%)	110.0 (22.6%)	
Celibe/nubile, abitando con i genitori	0.0 (0.0%)	1.0 (0.5%)	6.0 (2.5%)	7.0 (1.4%)	
Famiglia monogenitore (con figli, senza partner)	0.0 (0.0%)	11.0 (5.6%)	15.0 (6.2%)	26.0 (5.3%)	
Stato_lavorativo					0.333[1]
In pensione	32.0 (65.3%)	136.0 (69.0%)	150.0 (62.2%)	318.0 (65.3%)	
Impiegata/o , >19h/wk)	11.0 (22.4%)	31.0 (15.7%)	44.0 (18.3%)	86.0 (17.7%)	
Impiegata/o (<20h/wk)	3.0 (6.1%)	10.0 (5.1%)	25.0 (10.4%)	38.0 (7.8%)	
Libero/a professionista	3.0 (6.1%)	6.0 (3.0%)	9.0 (3.7%)	18.0 (3.7%)	
Mai stata/o impiegata/o	0.0 (0.0%)	4.0 (2.0%)	2.0 (0.8%)	6.0 (1.2%)	
Altro	0.0 (0.0%)	10.0 (5.1%)	11.0 (4.6%)	21.0 (4.3%)	
Educazione					0.202[1]
Dottorato e altri livelli di specializzazione	8.0 (16.3%)	16.0 (8.1%)	14.0 (5.8%)	38.0 (7.8%)	
Laurea magistrale	21.0 (42.9%)	64.0 (32.5%)	75.0 (31.1%)	160.0 (32.9%)	
Laurea triennale	4.0 (8.2%)	17.0 (8.6%)	30.0 (12.4%)	51.0 (10.5%)	
Sc. primaria (5 a)	1.0 (2.0%)	3.0 (1.5%)	4.0 (1.7%)	8.0 (1.6%)	
Sc. secondaria (5+3 a)	3.0 (6.1%)	19.0 (9.6%)	29.0 (12.0%)	51.0 (10.5%)	
Scuola secondaria (5+3+5 a)	12.0 (24.5%)	78.0 (39.6%)	89.0 (36.9%)	179.0 (36.8%)	
stato_di_salute_percepito					0.485[1]
Per nulla buono	0.0 (0.0%)	4.0 (2.0%)	0.0 (0.0%)	4.0 (0.8%)	
Non molto buono	2.0 (4.1%)	11.0 (5.6%)	17.0 (7.1%)	30.0 (6.2%)	
Medio	13.0 (26.5%)	57.0 (28.9%)	62.0 (25.7%)	132.0 (27.1%)	
Buono	29.0 (59.2%)	105.0 (53.3%)	138.0 (57.3%)	272.0 (55.9%)	
Molto buono	5.0 (10.2%)	20.0 (10.2%)	24.0 (10.0%)	49.0 (10.1%)	
ADLs_1					0.358[1]
Con difficoltà	4.0 (8.2%)	27.0 (13.7%)	24.0 (10.0%)	55.0 (11.3%)	
Senza difficoltà	45.0 (91.8%)	170.0 (86.3%)	217.0 (90.0%)	432.0 (88.7%)	
ADLs_2					0.749[1]
Con difficoltà	3.0 (6.1%)	8.0 (4.1%)	13.0 (5.4%)	24.0 (4.9%)	
Senza difficoltà	46.0 (93.9%)	189.0 (95.9%)	228.0 (94.6%)	463.0 (95.1%)	
ADLs_3					0.472[1]
Con difficoltà	0.0 (0.0%)	6.0 (3.0%)	7.0 (2.9%)	13.0 (2.7%)	
Senza difficoltà	49.0 (100.0%)	191.0 (97.0%)	234.0 (97.1%)	474.0 (97.3%)	
cohousing 1-Aveva già sentito parlare...					< 0.001[1]
No	17.0 (34.7%)	56.0 (28.4%)	30.0 (12.4%)	103.0 (21.1%)	
Si	32.0 (65.3%)	141.0 (71.6%)	211.0 (87.6%)	384.0 (78.9%)	
cohousing 2 - gia vissuto					0.348[1]
No	46.0 (93.9%)	190.0 (96.4%)	225.0 (93.4%)	461.0 (94.7%)	
Si	3.0 (6.1%)	7.0 (3.6%)	16.0 (6.6%)	26.0 (5.3%)	

1. Pearson's Chi-squared test

Cross Table – Participation in cohousing

	Per niente (N=37)	Un po' (N=87)	Mediamente (N=174)	Molto (N=104)	Moltissimo (N=85)	Total (N=487)	p value
Provincia							0.952[1]
Belluno	1.0 (2.7%)	1.0 (1.1%)	6.0 (3.4%)	1.0 (1.0%)	3.0 (3.5%)	12.0 (2.5%)	
Padova	25.0 (67.6%)	62.0 (71.3%)	114.0 (65.5%)	73.0 (70.2%)	55.0 (64.7%)	329.0 (67.6%)	
Rovigo	0.0 (0.0%)	0.0 (0.0%)	1.0 (0.6%)	0.0 (0.0%)	1.0 (1.2%)	2.0 (0.4%)	

	Per niente (N=37)	Un po' (N=87)	Mediamente (N=174)	Molto (N=104)	Moltissimo (N=85)	Total (N=487)	p value
Treviso	3.0 (8.1%)	3.0 (3.4%)	9.0 (5.2%)	7.0 (6.7%)	8.0 (9.4%)	30.0 (6.2%)	
Venezia	2.0 (5.4%)	7.0 (8.0%)	22.0 (12.6%)	8.0 (7.7%)	8.0 (9.4%)	47.0 (9.7%)	
Verona	4.0 (10.8%)	7.0 (8.0%)	10.0 (5.7%)	9.0 (8.7%)	5.0 (5.9%)	35.0 (7.2%)	
Vicenza	2.0 (5.4%)	7.0 (8.0%)	12.0 (6.9%)	6.0 (5.8%)	5.0 (5.9%)	32.0 (6.6%)	
Genere							0.046[1]
Altro/Non specificato	0.0 (0.0%)	1.0 (1.1%)	0.0 (0.0%)	0.0 (0.0%)	0.0 (0.0%)	1.0 (0.2%)	
Femmina	19.0 (51.4%)	59.0 (67.8%)	131.0 (75.3%)	78.0 (75.0%)	66.0 (77.6%)	353.0 (72.5%)	
Maschio	18.0 (48.6%)	27.0 (31.0%)	43.0 (24.7%)	26.0 (25.0%)	19.0 (22.4%)	133.0 (27.3%)	
Livello_SES							0.634[1]
Basso (< 28k/anno)	13.0 (35.1%)	22.0 (25.3%)	49.0 (28.2%)	26.0 (25.0%)	29.0 (34.1%)	139.0 (28.5%)	
Medio (> 28k < 50k/a.)	21.0 (56.8%)	56.0 (64.4%)	98.0 (56.3%)	63.0 (60.6%)	48.0 (56.5%)	286.0 (58.7%)	
Alto (>50k anno)	3.0 (8.1%)	9.0 (10.3%)	27.0 (15.5%)	15.0 (14.4%)	8.0 (9.4%)	62.0 (12.7%)	
situazione_abitativa							0.492[1]
Proprietà	34.0 (91.9%)	81.0 (93.1%)	166.0 (95.4%)	98.0 (94.2%)	77.0 (90.6%)	456.0 (93.6%)	
Affitto	3.0 (8.1%)	6.0 (6.9%)	6.0 (3.4%)	4.0 (3.8%)	5.0 (5.9%)	24.0 (4.9%)	
Altro	0.0 (0.0%)	0.0 (0.0%)	2.0 (1.1%)	2.0 (1.9%)	3.0 (3.5%)	7.0 (1.4%)	
Composizione_familiare							0.462[1]
Abitando con partner e figli	13.0 (35.1%)	31.0 (35.6%)	48.0 (27.6%)	33.0 (31.7%)	19.0 (22.4%)	144.0 (29.6%)	
Abitando con un partner, senza figli	12.0 (32.4%)	32.0 (36.8%)	76.0 (43.7%)	40.0 (38.5%)	40.0 (47.1%)	200.0 (41.1%)	
Abitando sola/o	12.0 (32.4%)	14.0 (16.1%)	41.0 (23.6%)	22.0 (21.2%)	21.0 (24.7%)	110.0 (22.6%)	
Celibe/nubile, abitando con i genitori	0.0 (0.0%)	2.0 (2.3%)	2.0 (1.1%)	2.0 (1.9%)	1.0 (1.2%)	7.0 (1.4%)	
Famiglia monogenitore (con figli, senza partner)	0.0 (0.0%)	8.0 (9.2%)	7.0 (4.0%)	7.0 (6.7%)	4.0 (4.7%)	26.0 (5.3%)	
Stato_lavorativo							0.942[1]
In pensione	24.0 (64.9%)	59.0 (67.8%)	114.0 (65.5%)	64.0 (61.5%)	57.0 (67.1%)	318.0 (65.3%)	
Impiegata/o , >19h/wk)	7.0 (18.9%)	12.0 (13.8%)	35.0 (20.1%)	21.0 (20.2%)	11.0 (12.9%)	86.0 (17.7%)	
Impiegata/o (<20h/wk)	2.0 (5.4%)	9.0 (10.3%)	9.0 (5.2%)	10.0 (9.6%)	8.0 (9.4%)	38.0 (7.8%)	
Libero/a professionista	3.0 (8.1%)	2.0 (2.3%)	6.0 (3.4%)	4.0 (3.8%)	3.0 (3.5%)	18.0 (3.7%)	
Mai stata/o impiegata/o	0.0 (0.0%)	2.0 (2.3%)	2.0 (1.1%)	1.0 (1.0%)	1.0 (1.2%)	6.0 (1.2%)	
Altro	1.0 (2.7%)	3.0 (3.4%)	8.0 (4.6%)	4.0 (3.8%)	5.0 (5.9%)	21.0 (4.3%)	
Educazione							0.262[1]
Dottorato e altri livelli di specializzazione	4.0 (10.8%)	7.0 (8.0%)	15.0 (8.6%)	6.0 (5.8%)	6.0 (7.1%)	38.0 (7.8%)	
Laurea magistrale	14.0 (37.8%)	33.0 (37.9%)	58.0 (33.3%)	29.0 (27.9%)	26.0 (30.6%)	160.0 (32.9%)	
Laurea triennale	3.0 (8.1%)	9.0 (10.3%)	16.0 (9.2%)	15.0 (14.4%)	8.0 (9.4%)	51.0 (10.5%)	

	Per niente (N=37)	Un po' (N=87)	Mediamente (N=174)	Molto (N=104)	Moltissimo (N=85)	Total (N=487)	p value
Sc. primaria (5 a)	3.0 (8.1%)	1.0 (1.1%)	1.0 (0.6%)	2.0 (1.9%)	1.0 (1.2%)	8.0 (1.6%)	
Sc. secondaria (5+3 a)	6.0 (16.2%)	6.0 (6.9%)	15.0 (8.6%)	13.0 (12.5%)	11.0 (12.9%)	51.0 (10.5%)	
Scuola secondaria (5+3+5 a)	7.0 (18.9%)	31.0 (35.6%)	69.0 (39.7%)	39.0 (37.5%)	33.0 (38.8%)	179.0 (36.8%)	
stato_di_salute_percepito							0.249[1]
Per nulla buono	0.0 (0.0%)	1.0 (1.1%)	2.0 (1.1%)	0.0 (0.0%)	1.0 (1.2%)	4.0 (0.8%)	
Non molto buono	2.0 (5.4%)	4.0 (4.6%)	14.0 (8.0%)	6.0 (5.8%)	4.0 (4.7%)	30.0 (6.2%)	
Medio	9.0 (24.3%)	35.0 (40.2%)	50.0 (28.7%)	23.0 (22.1%)	15.0 (17.6%)	132.0 (27.1%)	
Buono	22.0 (59.5%)	40.0 (46.0%)	93.0 (53.4%)	60.0 (57.7%)	57.0 (67.1%)	272.0 (55.9%)	
Molto buono	4.0 (10.8%)	7.0 (8.0%)	15.0 (8.6%)	15.0 (14.4%)	8.0 (9.4%)	49.0 (10.1%)	
ADLs_1							0.431[1]
Con difficoltà	3.0 (8.1%)	6.0 (6.9%)	20.0 (11.5%)	16.0 (15.4%)	10.0 (11.8%)	55.0 (11.3%)	
Senza difficoltà	34.0 (91.9%)	81.0 (93.1%)	154.0 (88.5%)	88.0 (84.6%)	75.0 (88.2%)	432.0 (88.7%)	
ADLs_2							0.180[1]
Con difficoltà	2.0 (5.4%)	2.0 (2.3%)	11.0 (6.3%)	8.0 (7.7%)	1.0 (1.2%)	24.0 (4.9%)	
Senza difficoltà	35.0 (94.6%)	85.0 (97.7%)	163.0 (93.7%)	96.0 (92.3%)	84.0 (98.8%)	463.0 (95.1%)	
ADLs_3							0.823[1]
Con difficoltà	0.0 (0.0%)	2.0 (2.3%)	6.0 (3.4%)	3.0 (2.9%)	2.0 (2.4%)	13.0 (2.7%)	
Senza difficoltà	37.0 (100.0%)	85.0 (97.7%)	168.0 (96.6%)	101.0 (97.1%)	83.0 (97.6%)	474.0 (97.3%)	
cohousing 1-Aveva già sentito parlare...							< 0.001[1]
No	17.0 (45.9%)	21.0 (24.1%)	32.0 (18.4%)	13.0 (12.5%)	20.0 (23.5%)	103.0 (21.1%)	
Si	20.0 (54.1%)	66.0 (75.9%)	142.0 (81.6%)	91.0 (87.5%)	65.0 (76.5%)	384.0 (78.9%)	
cohousing 2 - gia vissuto							0.317[1]
No	35.0 (94.6%)	81.0 (93.1%)	161.0 (92.5%)	101.0 (97.1%)	83.0 (97.6%)	461.0 (94.7%)	
Si	2.0 (5.4%)	6.0 (6.9%)	13.0 (7.5%)	3.0 (2.9%)	2.0 (2.4%)	26.0 (5.3%)	
Solitudine							0.522[1]
No	22.0 (59.5%)	45.0 (51.7%)	107.0 (61.5%)	66.0 (63.5%)	52.0 (61.2%)	292.0 (60.0%)	
Si	15.0 (40.5%)	42.0 (48.3%)	67.0 (38.5%)	38.0 (36.5%)	33.0 (38.8%)	195.0 (40.0%)	

1. Pearson's Chi-squared test

Regressione logistica ordinale

2. Coefficienti del Modello - cohousing 6-partecipare

Predittore	Stima	SE	Z	p	Odds-Ratio	95% Intervallo di Fiducia	
						Inferiore	Superiore
Provincia:							
Padova – Belluno	-0.78370	0.5959	-1.3152	0.188	0.457	0.1397	1.469
Rovigo – Belluno	0.95350	1.6055	0.5939	0.553	2.595	0.1147	88.379
Treviso – Belluno	-0.25019	0.6813	-0.3672	0.713	0.779	0.2028	2.968
Venezia – Belluno	-0.66048	0.6503	-1.0156	0.310	0.517	0.1428	1.851
Verona – Belluno	-0.90422	0.6609	-1.3681	0.171	0.405	0.1094	1.478
Vicenza – Belluno	-0.78378	0.6735	-1.1637	0.245	0.457	0.1205	1.711
Age	-0.02990	0.0258	-1.1578	0.247	0.971	0.9226	1.021
Genere:							
Femmina – Altro/Non specificato	2.65334	1.8674	1.4208	0.155	14.201	0.2921	698.982
Maschio – Altro/Non specificato	2.16075	1.8766	1.1514	0.250	8.678	0.1756	432.838
Stato_civile:							
Divorziata/o - separata/o – Celibe/nubile, mai sposata/o	-0.08539	0.3441	-0.2482	0.804	0.918	0.4668	1.802
Sposata/o – Celibe/nubile, mai sposata/o	0.80591	0.4555	1.7693	0.077	2.239	0.9141	5.475
Vedova/o – Celibe/nubile, mai sposata/o	0.68253	0.4365	1.5635	0.118	1.979	0.8407	4.667
Livello_SES:							
Medio (> 28k < 50k/a.) – Basso (< 28k/anno)	-0.02194	0.2181	-0.1006	0.920	0.978	0.6378	1.500
Alto (>50k anno) – Basso (< 28k/anno)	0.25781	0.3363	0.7667	0.443	1.294	0.6698	2.506
situazione_abitativa:							
Affitto – Proprietà	-0.16008	0.4348	-0.3682	0.713	0.852	0.3636	2.010
Altro – Proprietà	1.72322	0.7657	2.2504	0.024	5.603	1.2885	27.370
Composizione_familiare:							

2. Coefficienti del Modello - cohousing 6-partecipare

						95% Intervallo di Fiducia	
Predittore	**Stima**	**SE**	**Z**	**p**	**Odds-Ratio**	**Inferiore**	**Superiore**
Abitando con un partner, senza figli – Abitando con partner e figli	0.51314	0.2126	2.4134	0.016	1.671	1.1022	2.538
Abitando sola/o – Abitando con partner e figli	0.99988	0.4483	2.2306	0.026	2.718	1.1274	6.564
Celibe/nubile, abitando con i genitori – Abitando con partner e figli	1.55659	0.8201	1.8981	0.058	4.743	0.9443	24.319
Famiglia monogenitore (con figli, senza partner) – Abitando con partner e figli	0.78655	0.5492	1.4321	0.152	2.196	0.7488	6.476
Stato_lavorativo:							
Impiegata/o , >19h/wk) – In pensione	0.03321	0.2636	0.1260	0.900	1.034	0.6165	1.734
Impiegata/o (<20h/wk) – In pensione	0.12338	0.3498	0.3527	0.724	1.131	0.5697	2.252
Libero/a professionista – In pensione	-0.03352	0.4890	-0.0685	0.945	0.967	0.3704	2.533
Mai stata/o impiegata/o – In pensione	-0.37824	0.7768	-0.4869	0.626	0.685	0.1474	3.198
Altro – In pensione	0.18201	0.4283	0.4250	0.671	1.200	0.5184	2.797
Educazione:							
Laurea magistrale – Dottorato e altri livelli di specializzazione	0.04391	0.3473	0.1264	0.899	1.045	0.5285	2.066
Laurea triennale – Dottorato e altri livelli di specializzazione	0.47759	0.4203	1.1364	0.256	1.612	0.7073	3.682
Sc. primaria (5 a) – Dottorato e altri livelli di specializzazione	-1.00944	0.8875	-1.1374	0.255	0.364	0.0635	2.117
Sc. secondaria (5+3 a) – Dottorato e altri livelli di specializzazione	0.40105	0.4388	0.9139	0.361	1.493	0.6319	3.538
Scuola secondaria (5+3+5 a) – Dottorato e altri livelli di specializzazione	0.47883	0.3598	1.3309	0.183	1.614	0.7975	3.275
stato_di_salute_percepito:							
Non molto buono – Per nulla buono	-0.09273	1.1194	-0.0828	0.934	0.911	0.0958	8.154
Medio – Per nulla buono	0.14114	1.1048	0.1278	0.898	1.152	0.1267	10.237
Buono – Per nulla buono	0.76257	1.1120	0.6858	0.493	2.144	0.2333	19.347

2. Coefficienti del Modello - cohousing 6-partecipare

Predittore	Stima	SE	Z	p	Odds-Ratio	95% Intervallo di Fiducia	
						Inferiore	Superiore
Molto buono – Per nulla buono	0.81908	1.1398	0.7186	0.472	2.268	0.2347	21.610
ADLs_1:							
Senza difficoltà – Con difficoltà	-0.76854	0.3230	-2.3795	0.017	0.464	0.2457	0.874
ADLs_2:							
Senza difficoltà – Con difficoltà	0.32449	0.4731	0.6859	0.493	1.383	0.5490	3.538
ADLs_3:							
Senza difficoltà – Con difficoltà	-0.36587	0.6343	-0.5768	0.564	0.694	0.1971	2.414
scores	-0.00111	0.0128	-0.0868	0.931	0.999	0.9740	1.024