Ph.D. Programme: in Biomedicine

(Thesis with International Mention)

Social isolation and unwanted loneliness in non-institutionalised older adults. Approach from Primary Health Care.

Aislamiento social y soledad no deseada en adultos mayores no institucionalizados. Abordaje desde Atención Primaria de Salud.

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Warehouse: 12 de Mayo de 2022

TITULO: *Aislamiento social y soledad no deseada en adultos mayores no institucionalizados. Abordaje desde Atención Primaria de Salud*

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TÍTULO DE LA TESIS: Aislamiento social y soledad no deseada en adultos mayores no institucionalizados. Abordaje desde Atención Primaria de Salud.

DOCTORANDO/A: JOSE HERNÁNDEZ ASCANIO

INFORME RAZONADO DEL/DE LOS DIRECTOR/ES DE LA TESIS

(se hará mención a la evolución y desarrollo de la tesis, así como a trabajos y publicaciones derivados de la misma).

El desarrollo del proyecto investigador y docente llevado a cabo se ha caracterizado, en todo momento, por el interés y compromiso del doctorando.

En el desarrollo del proyecto investigador, el doctorando ha puesto en práctica numerosas habilidades investigadoras, pues la tesis contiene una metodología mixta que incluye un análisis cualitativo previo a la intervención, un análisis de la efectividad de la intervención, y un análisis cualitativo posterior a la misma, que analiza las dificultades para la implantación de la intervención examinada. Estos tres diseños aparecen recogidos como apartados diferentes en el documento finalmente presentado. Además, y aunque el trabajo de campo ha contado con numerosas dificultades, que han condicionado cambios en la propuesta finalmente examinada, el doctorando ha resuelto con gran responsabilidad los problemas sobrevenidos. Por último, quiero señalar la destacable claridad que el doctorando ha tenido para realizar los análisis cualitativos contenidos en esta tesis y la claridad con la que el doctorando expone los resultados y resume las conclusiones.

Respecto a su proyecto docente, el doctorando ha desarrollado, sin duda, las habilidades pedagógicas requeridas, derivadas de su trabajo como profesor a tiempo completo en el Departamento de Ciencias Sociales, Filosofía, Geografía y Traducción e Interpretación de la Universidad de Córdoba durante los 6] últimos años. Además, entre dicha docencia, se encuentra la tutorización de numerosos TFGs. Por otro lado, el doctorando ha realizado diferentes cursos que han aportado solidez a su trabajo investigador.

Como resultado del trabajo realizado durante el desarrollo de la tesis, el doctorando ha publicado dos artículos:

- Effectiveness of a multicomponent intervention to reduce social isolation and loneliness in community-dwelling elders: a randomized clinical trial. Study protocol. Hernández-Ascanio J, Pérula-de Torres LA, Roldán-Villalobos A, Pérula-de Torres JC, Rich-Ruiz M; Collaborative Group Asys Proyect. J Adv Nurs. 2020 Jan;76(1):337-346. DOI: 10.1111/jan.14230. ISSN: 0309-2402
- Condicionantes para el abordaje del aislamiento social y la soledad de adultos mayores no institucionalizados desde atención primaria de salud [Determinants for addressing social isolation and loneliness of non-institutionalized older adults from Primary Health Care]. Hernández-Ascanio J, Perula-de Torres LÁ, Rich-Ruiz M, Roldán-Villalobos AM, Perula-de Torres C, Ventura Puertos PE y Grupo colaborativo del estudio ASyS. Aten

Primaria. 2021 Dec 1;54(2):102218. Spanish. DOI: 10.1016/j.aprim.2021.102218. Epub ahead of print. ISSN: 0212-6567

La primera de las publicaciones se sitúa en un primer cuartil (Q1, 9/124, Categoría: NURSING) con un factor de impacto de 3,187; mientras que la segunda se sitúa en un cuarto cuartil (Q4, 130/167, Categoría: MEDICINE, GENERAL & INTERNAL), con un factor de impacto de 1,137.

Estos resultados demuestran el carácter innovador del tema de estudio (la atención a los problemas de aislamiento social y soledad en población mayor que vive en la comunidad), en el que, como comprueban los resultados de la tesis, todavía existe un importante campo para el desarrollo de futuras investigaciones.

Por todo ello, se autoriza la presentación de la tesis doctoral.

Córdoba, _11___ de __mayo___ de _2022__

Firma del director

RICH RUIZ MANUEL - 30537083Y

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Fdo.: Manuel Rich Ruiz

AGRADECIMIENTOS.

La finalización de un proceso tan exigente como es el que supone el desarrollo de un Programa de Doctorado y la elaboración de su correspondiente Tesis es un momento denso y extraño. Más allá de las subjetividades con las que cada doctorando/a pueda vivenciarlo, hay una tónica común: la necesidad de hacer balance, de "hacer examen" en términos ignacianos. En el núcleo de la dinámica del examen ignaciano está "hacer memoria agradecida de tanto bien recibido". Comparto esta necesidad y me gustaría poder acertar con las palabras.

En primer lugar, me siento profundamente agradecido por haber tenido la oportunidad de haberme acercado a esta temática, que llega de una forma relativamente tardía a mis intereses de investigación. Las "diosidencias" determinaron en cierta forma que fuese la temática de la tesis la que me escogiera a mí, cuando en la mayoría de las ocasiones suele ocurrir al contrario. Este inesperado encuentro ha traído nuevos retos y exigencias que me han obligado a "vivir desinstalado" y me ha hecho sentirme "expuesto y vulnerable". Ha sido un empezar de cero en múltiples planos, lo que ha supuesto aprendizajes y autoconocimientos entre los que destaca el hecho de poder afirmar que "*más allá que investigar sobre lo que queremos, deberíamos dedicar esfuerzo a investigar sobre lo que es necesario. Nuestras investigaciones no pueden estar de espaldas a las problemáticas de la realidad que nos rodea*".

En segundo lugar, quiero dar gracias por los compañeros de viaje en este proceso. La figura de los mentores / directores de tesis son siempre elementos clave en la formación de un doctorando y en el acompañamiento de cualquier investigador. En mi caso, he tenido la enorme suerte que esa responsabilidad ha sido asumida por una persona por la que siento un profundo afecto en lo personal y un sincero reconocimiento en lo académico. Este itinerario ha tenido también otras presencias, algunas antiguas, como las de compañeros de bancada en aquellos años iniciales de formación de pregrado y que ahora son compañeros de inquietudes y amigos. También las hay que han llegado de forma reciente y que se han ganado un lugar privilegiado por su calidad humana, por su empatía y por su generosa gratuidad, como esos encuentros que te regalan las etapas en una peregrinación a Santiago.

También hay otras personas, a las que les ha tocado el importante papel de “dejarse acompañar” por esta experiencia. Han sido absolutamente generosos compartiendo su vulnerabilidad y confiando en las bondades de este proyecto. Nos han ofrecido lo más importante de todo, su confianza incondicional. Posiblemente no se haya estado a la altura de sus expectativas y/o de sus necesidades: perdón por ello. Lo hemos intentado.

Y junto a ellos, también otro impresionante grupo humano que, desde su profesionalidad, su deseo de convertirse en el futuro en cuidadores o su manera altruista de comprender la vida, han colaborado activamente con este proyecto.

Gracias a todos ellos.

Por último, estoy profundamente agradecido por lo vivido en este mismo tiempo, que ha hecho de la experiencia un ejercicio de malabarismo. Cuando el rigorismo académico nos dice que investigar es una exigencia con formulación de vocación y que para ser dignos de ella debemos responder “en exclusividad”, lo intenso y lo importante de la vida se impone reclamando un lugar privilegiado. Conciliar no es “sacar huecos para la vida entre lo que nos deja el trabajo” sino que es vivir en plenitud los momentos que pasan usualmente desapercibidos y situarnos ante el trabajo – la ciencia como otra dimensión más que nos complementa. Afortunadamente, una bendición con bucles y ojos de mar me ha dado lecciones intensivas y particulares sobre ello.

INDEX OF FIGURES, TABLES, and TABLES.

ÍNDICE.

RESUMEN

Introducción:

Existen una serie de cambios demográficos que se están consolidando en las sociedades europeas en concreto y en las occidentales por extensión. Entre los cambios más importantes está el aumento en términos absolutos y relativos de las personas mayores de 65 años (Euroestat, 2021) así como el aumento de los hogares unipersonales únicamente compuestos por sujetos de este grupo edad (Euroestat, 2021). Asociados a estos cambios se ha identificado un aumento significativo del fenómeno del aislamiento social y de la soledad no deseada de tal forma que la vejez se convierte en un periodo de la vida con especial exposición a estos fenómenos (Castro, 2015; Dystra et al., 2005; Nicolaisen y Thorsen, 2014; Yanguas et al., 2019).

El aumento e intensificación de los fenómenos del aislamiento social y la soledad se han visto acompañados de un esfuerzo por diseñar e implementar estrategias de intervención en este ámbito, con el objetivo de reducir o mitigar los impactos en salud que estos fenómenos tienen en la vida de los adultos mayores (Bermeja y Ausín, 2017; Chipps et al., 2017; O'Rourke et al., 2018; Cotterell et al., 2018; Gardiner et al., 2018).

En este contexto, se hace preciso indagar en la formulación de intervenciones que sean eficaces y sostenibles por parte de los servicios de salud. El interés de la presente investigación es dar respuesta a esta necesidad.

Objetivos:

- Objetivo Principal (OP1):

Diseñar, en base a la evidencia científica, y evaluar la efectividad, en términos de reducción del aislamiento social y mejora de la CVRS, una intervención no farmacológica multicomponente, basada en la relación clínica, en personas mayores residentes en sus domicilios.

- Objetivos Secundarios:

a) OS1: Identificar los factores determinantes del aislamiento social y soledad en adultos mayores no institucionalizados.
b) OS2: Evaluar la compatibilidad y sostenibilidad de la intervención propuesta con la práctica clínica de los profesionales del Servicio de Atención Primaria de Salud.

Material y métodos:

Con relación al OS1:

Diseño mixto que incluyó:

- Diseño cualitativo con análisis Sistemático de Teoría Fundamentada (Glaser y Strauss, 1967) de datos recolectados mediante un diseño narrativo de tópicos (Mertens, 2005). Las categorías utilizadas fueron: 1) Marcos conceptuales, e importancia percibida sobre el aislamiento social y soledad en mayores no institucionalizados; 2) Dificultades reconocidas para su abordaje sanitario.
- 2) Aplicación de Panel de Expertos – DELPHI. Las dimensiones de consenso del Panel de Expertos – Delphi fueron: 1) Contenidos de prácticas de intervención; 2) Estructuración temporal; 3) Soporte de aplicación; 4) Rol profesional implicado.

Con relación al OP1:

- Ensayo clínico controlado, aleatorizado por cluster.

Con relación al OS2:

- Diseño de carácter mixto en el que se aplicado un análisis Sistemático de Teoría Fundamentada (Glasser y Strauss, 1967) a datos recolectados mediante un Diseño narrativo de tópicos (Mertens, 2005).

Resultados:

Con relación al OS1:

- Elementos condicionantes de la viabilidad de una intervención sistemática sobre aislamiento social y soledad en el ámbito de los servicios de salud comunitaria

relacionados: 1) marcos conceptuales de los profesionales; 2) elementos estructurales y de organización en la prestación de servicios de salud y cuidado; 3) roles de los diferentes perfiles profesionales; 4) elementos particulares de usuarios y profesionales.

- Diseño de una adaptación viable, sostenible y eficaz del programa de intervención Carelink para ser aplicada en los servicios de atención primaria.

Con relación al OP1:

- La comparación de las puntuaciones medias de apoyo confidencial en los instantes inicial y final del grupo experimental y control identifica diferencias significativas en el análisis por protocolo (p=0.008), y cercanas a la significación estadística (p=0,058) en el análisis por intención de tratar. La comparación de las puntuaciones medias de soledad emocional entre el instante final y a los dos meses también detecta mejoras significativas (p=0.012) en el grupo experimental. Respecto a las variables asociadas al apoyo social de los sujetos al final del período de seguimiento, fueron: contar con personas que le ayudan (OR=4.92; 95% CI=1.15-20.98) y la movilidad (OR=3.70; 95% CI=1.54-8.91).

Con relación al OS2:

- Los principales elementos condicionantes identificados tienen que ver con: a) ideas y motivaciones de los participantes previas a la intervención; b) Cuestiones relativas a la implementación de la intervención tales como nivel de capacitación de los agentes, selección de mayores participantes o el papel de otros actores facilitadores; c) Aspectos relacionados con la implementación de la intervención relacionadas con cuestiones logísticas (entornos de ejecución de la intervención) y relacionales entre agentes – intervenidos; d) el trabajo emocional que supone la intervención para el agente y e) propuestas de mejora.

Conclusiones:

Con relación al OS1:

- Los principales elementos condicionantes son de carácter intrínseco al sistema de organización en la prestación de servicios y al modelo de intervención asistencial que pueden ser solventados de forma relativamente sencilla mediante estrategias formativas y diseño de intervenciones que partan de recursos y practicas ya existentes en la práctica profesional habitual.

Con relación al OP1:

- Los resultados señalan la mejora del apoyo confidencial y la soledad emocional de los mayores que participaron en la intervención. Disponer de personas que le ayuden y un mayor grado de movilidad son factores que favorecen la reducción del aislamiento social.

Con relación al OS2:

- Los resultados señalan que la intervención sobre la situación de aislamiento social y soledad en mayores no institucionalizados es una necesidad de primer orden, pero cuyo abordaje desde los servicios públicos de salud resulta complejo por la propia naturaleza multidimensional y multicausal de la realidad sobre la que intervenir (psicológica, cultural, social, etc). Se identifican una serie de factores que demuestran tener incidencia en la efectividad de la intervención: selección del perfil de usuarios, adecuación formativa y competencial (tanto en aspectos técnicos como relacionales) por parte de los agentes de intervención, así como su capacidad de gestionar el trabajo emocional de la intervención, cuestiones logísticas y organizacionales tales como la localización de las intervenciones o la facilitación con otros actores, etc. Se refuerza así el perfil del profesional de enfermería como el más adecuado para llevar a cabo esta intervención en atención comunitaria, aunque se precisan de investigaciones que afiancen estas conclusiones.

SUMMARY

Introduction:

There are several demographic changes that are taking hold in European societies in particular and in Western societies by extension. Among the most important of these changes is the increase in absolute and relative terms of the number of people over 65 years of age (Euroestat, 2021) as well as the increase in single-person households composed solely of people in this age group (Euroestat, 2021). Associated with these changes, a significant increase in the phenomenon of social isolation and unwanted loneliness has been identified in such a way that old age becomes a period of life with special exposure to these phenomena (Castro, 2015; Dystra et al., 2005; Nicolaisen and Thorsen, 2014; Yanguas et al., 2019).

The increase and intensification of the phenomena of social isolation and loneliness have been accompanied by an effort to design and implement intervention strategies in this area, to reduce or mitigate the health impacts that these phenomena have on the lives of older adults (Bermeja and Ausín, 2017; Chipps et al., 2017; O'Rourke et al., 2018; Cotterell et al., 2018; Gardiner et al., 2018).

In this context, it is necessary to investigate the formulation of effective and sustainable interventions by health services. The interest of this research is to respond to this need.

Objectives:

- Primary Objective (OP1):

To design, based on scientific evidence, and evaluate the effectiveness, in terms of reducing social isolation and improving HRQOL, of a multi-component non-pharmacological intervention, based on the clinical relationship, in elderly people living at home.

- Secondary Objectives:
  c) OS1: To identify the determinants of social isolation and loneliness in non-institutionalised older adults.

d) OS2: To assess the compatibility and sustainability of the proposed intervention with the clinical practice of Primary Health Care professionals.

Material and methods:

Concerning OS1:

Mixed design that included:

- Qualitative design with Grounded Theory Systematic Analysis (Glaser and Strauss, 1967) of data collected through a topical narrative design (Mertens, 2005). The categories used were: 1) Conceptual frameworks and perceived importance of social isolation and loneliness in non-institutionalised older people; 2) Recognised difficulties in addressing them in health care; 3) The perceived importance of social isolation and loneliness in non-institutionalised older people in health care.
- 2) Application of the Expert Panel - DELPHI. The dimensions of consensus of the Expert Panel - Delphi were: 1) Contents of intervention practices; 2) Temporal structuring; 3) Implementation support; 4) Professional role involved.

Concerning OP1:

- Cluster randomised controlled clinical trial.

Concerning OS2:

- Mixed design in which a Grounded Theory of Systematic Analysis (Glasser and Strauss, 1967) was applied to data collected through a Narrative Topical Design (Mertens, 2005).

Results:

Concerning OS1:

- The following elements condition the feasibility of a systematic intervention on social isolation and loneliness in the field of community health services: 1) conceptual frameworks of professionals; 2) structural and organisational elements

in the provision of health and care services; 3) roles of the different professional profiles; 4) particular elements of users and professionals.

- Design of a feasible, sustainable, and effective adaptation of the Carelink intervention programme to be applied in primary care services.

Concerning OP1:

- Comparison of mean confidential support scores at baseline and end line between the experimental and control groups identifies significant differences in the per-protocol analysis (p=0.008), and close to statistical significance (p=0.058) in the intention-to-treat analysis. The comparison of the mean scores of emotional loneliness between the final moment and at two months also detects significant improvements (p=0.012) in the experimental group. The variables associated with the subjects' social support at the end of the follow-up period were: having helpers (OR=4.92; 95% CI=1.15-20.98) and mobility (OR=3.70; 95% CI=1.54-8.91).

Concerning OS2:

- The main conditioning elements identified have to do with: a) ideas and motivations of the participants before the intervention; b) issues related to the implementation of the intervention such as the level of training of the agents, selection of major participants or the role of other facilitating actors; c) aspects related to the implementation of the intervention related to logistical issues (intervention implementation environments) and relational issues between agents - intervened; d) the emotional work involved in the intervention for the agent and e) proposals for improvement.

Conclusions:

Concerning OS1:

- The main conditioning elements are intrinsic to the system of organisation in the provision of services and to the model of care intervention that can be solved relatively easily through training strategies and the design of interventions based on resources and practices that already exist in everyday professional practice.

Concerning OP1:

- The results point to improvements in confidential support and emotional loneliness among the elderly who participated in the intervention. Having helpers and a greater degree of mobility are factors that favor the reduction of social isolation.

Concerning OS2:

- The results indicate that intervention in the situation of social isolation and loneliness in non-institutionalised elderly people is a first order need, but whose approach from the public health services is complex due to the multidimensional and multicausal nature of the reality on which to intervene (psychological, cultural, social, etc.). A series of factors are identified that have been shown to have an impact on the effectiveness of the intervention: selection of the user profile, training and competence adequacy (both in technical and relational aspects) on the part of the intervention agents, as well as their capacity to manage the emotional work of the intervention, logistical and organisational issues such as the location of the interventions or the facilitation with other actors, etc. This reinforces the profile of the nursing professional as the most appropriate professional to carry out this intervention in community care, although further research is needed to consolidate these conclusions.

INTRODUCTION.

From the last third of the last century to the present, Europe and the rest of Western societies share the fact that their population is increasing in absolute and relative numbers the number of people aged 65 and over. In the EU as a whole, an increase of 2.4% was recorded for the year 2018, and the numbers of people aged 80 and over, in the context of Europe, are expected to double between 2016 and 2080 (Euroestat, 2019). In this context, Spain is also one of the countries with the highest rate of aging. Currently, people over the age of 65 make up 18.8% of the population, and it is predicted that by 2066 this will be more than 34%, meaning that there will be more than 14 million people over this age (INE, 2020).

Together with this increase in the absolute and relative volume of elderly people, some changes in the demographic structure, such as changes in the pattern of cohabitation, have also led to the emergence and intensification of new social phenomena in this age group. In this respect, we find highly significant data in the latest Continuous Household Survey (INE, 2019). For this year, the number of people living alone was 4,687,400 (this number had increased by 49,100 people in relation to the previous year). Of this population, more than 1,410,000 were women, with 47.5% widowed and 35.1% single. Official data indicate that 32.2% of people over the age of 65, around 1,960,900 individuals, live alone, i.e. they do not share their home with anyone (INE, 2019), which may be a predictor of the appearance of phenomena such as social isolation and loneliness (Santos-Olmos, 2016). In fact, and although the data are not uniform, there is a consensus among the scientific community that old age is a stage with a higher probability of experiencing loneliness and social isolation (Castro, 2015; Dystra et. al., 2005; Nicolaisen and Thorsen, 2014; Yanguas et al., 2019).

With regard to the consequences of these phenomena, social isolation and loneliness constitute a health problem with significant repercussions on a person's well-being and quality of life. There is abundant evidence that these phenomena produce negative health outcomes (Nicholson, 2012): worsening of the perception of well-being and quality of life (Kharicha et al., 2007; Nummela et al., 2011), significant changes in lifestyles (Alpass and Neville 2003), an increase in harmful habits, problems in

adherence, greater use of social and health care resources and services, increased institutionalisation processes in social and health care structures and even increases in the risk of mortality (Andrew et al., 2012; Andrew and Keefe, 2014; Hawton et al., 2011; Holt-Lunstad et al., 2010; Luo et al., 2012; Nicholson and Shellman, 2013; Nummela et al., 2011; Pantell et al., 2013; Patterson and Veenstra, 2010), although the influence of loneliness is greater than isolation in terms of mortality (Holwerda et al., 2012).

For this reason, addressing social isolation and loneliness has become a relevant issue for policymakers and service providers working with older adults, with numerous proposals emerging for interventions and activities aimed at mitigating social isolation and loneliness in this sector of the population (Bermeja and Ausín, 2017; Chipps et al., 2017; Cotterell et al., 2018; Gardiner et al., 2018; O'Rourke et al., 2018).

However, studies to date show biases and contradictory results, preventing useful conclusions from being drawn (Dickens et al., 2011; Frank et al., 2016; Gardiner et al., 2016 and 2018). Furthermore, much remains to be known about the effectiveness of these interventions and the factors contributing to their success (Cattan et al., 2005; Valtorta et al., 2016;) as well as about the feasibility and sustainability of existing approaches to early detection and intervention within community health services (Nicholson, 2012; Niemi and Johansson, 2013).

For all these reasons, it is still important to identify the conditioning factors that may affect the implementation of an intervention in this area by the public health services and to propose strategies to respond to this urgent need.

It is in this context that the present work arises, which is part of the development of the project "*Effectiveness of a non-pharmacological multicomponent intervention to reduce social isolation and loneliness in elderly people living at home (ASYS-V2 Study*)", funded by the Ministry of Health of the Andalusian Regional Government (Junta de Andalucía).

The interest of the present work was therefore to *design, based on scientific evidence, and evaluate the effectiveness, in terms of reducing social isolation and*

improving HRQOL, of a multi-component non-pharmacological intervention, based on the clinical relationship, in elderly people living at home.

Complementary to this main objective, two Secondary Objectives were identified: 1) To *identify the determinants of social isolation and loneliness in non-institutionalised older adults*; 2) To *assess the compatibility and sustainability of the proposed intervention with the clinical practice of Primary Health Care Service professionals*.

For its execution, three studies were concatenated with their respective designs that articulated the objectives indicated above in a specific way and will be presented in detail in the following chapters.

This work is organised around three thematic blocks and eight chapters. In the first block, which covers the first three chapters, a justification is given for the choice of the research topic, based on its dimensioning and contextualisation both from a theoretical and intervention point of view.

The second section includes a chapter devoted to explaining the research objectives and three other chapters in which the three consecutive studies on which this research is based are developed. Each of the chapters devoted to developing the different studies details the issues related to design, data collection, and analysis.

The first study, which is detailed in chapter five, is a qualitative study in which the preconditions for the application of a non-pharmacological intervention in the field of social isolation and unwanted loneliness in non-institutionalised elderly people are identified and analysed, and the formulation of such an intervention is carried out.

The second study is developed through a clinical experimental approach in which the efficacy of the intervention designed in the previous study is evaluated. In addition, this study allows us to identify the main determinants of social isolation and unwanted loneliness based on the behaviour of the sample, both from bivariate and multivariate analysis.

The third study develops an evaluative design with a qualitative approach and aims to identify and analyse the different factors that have conditioned the effectiveness of the intervention from the agents' point of view, as well as to propose improvements.

Finally, the work closes with a chapter that integrates the conclusions derived from the studies presented in previous chapters.

CHAPTER 1. JUSTIFICATION.

Unwanted loneliness and social isolation have long been considered one of the main "problems" of old age. In this sense, it is easy to see how loneliness, isolation an,d social abandonment are some of the stereotypes with which old age is most frequently associated. Within this field, it is possible to identify how three distinct but interrelated concepts are present: living alone, social isolation a,nd loneliness. These are terms that, both in the literature and in practice, often appear as indistinct, although their conceptual distinction is fundamental.

When approaching the study of the phenomenon of loneliness and social isolation, we encounter a first difficulty, which is that of conceptualisation, since in the bibliography we find, on the one hand, a certain tendency towards confusion between the two terms, and on the other, a certain asymmetry when approaching one or the other, with greater dedication to conceptualising loneliness than social isolation. This has resulted in the availability of many terms that allude to situations that are certainly similar, as well as the indeterminacy of phenomena that are radically different, although they are connected.

Although these concepts are often conceptualised as entities of loneliness, they can be seen as components of a continuum that integrates poles as different as full social integration and absolute social isolation as more distal poles.

This is why, first of all, we are going to make a series of terminological clarifications to distinguish between three terms that refer to different realities. We refer to the distinction between "living alone", being in a situation of "social isolation" and "loneliness".

In general terms, and taking into account that there is no unitary definition, social isolation and loneliness are generally considered to be the objective and subjective categories respectively of conditions of social support deficit (Victor et al., 2000).

About loneliness, it is useful to distinguish between emotional loneliness (defined as the loss of significant social relationships accompanied by feelings of emptiness and anxiety) and social loneliness (defined as the absence of the different types of social

networks that provide support and backing for the different interests and activities of the subjects), as proposed by Weiss in 1973 and which has become a classic reference.

Authors such as Di Tommaso and Spinner, (1997) further elaborate on this distinction, in such a way that emotional loneliness would be related to attachment problems, while social loneliness is linked to the social integration of the person.

On the other hand, Rubio (2004) suggests that another fundamental issue in the distinction between social isolation and loneliness has to do with the causal dimension, in such a way that he distinguishes between subjective loneliness (when the absence of relationships is determined by the imposition of circumstances external to the subject and involves a confrontation concerning the person's expectations) and opposes it to isolation without loneliness, reserving this definition for that situation in which the lack of relationships is determined by a voluntary choice of the individual or is in line with the individual's previous expectations.

Although it is possible to identify some conceptual overlap when using these terms, empirical research shows that the association between loneliness and social isolation is moderate (Golden et al., 2009).

Finally, it is also possible to clearly identify theoretical distinctions between the phenomena of social isolation and loneliness with respect to living alone, the latter concept being a descriptive element of household size (Victor et al., 2000). On the basis of the available data, it is not possible to state in an exhaustive way the possible relationship between the phenomena of social isolation / loneliness with respect to living alone. In relation to this it is possible to identify arguments both against an association between loneliness (Zebhauser et al., 2014) or social isolation (Larson, Zuzanek and Mannell, 1985) and living alone, and in favour, identifying a strong association between these phenomena: for example, high levels of loneliness/isolation among people living alone or that living alone is an important risk factor for loneliness (Sundström et al., 2009).

Theoretical and empirical elements avalable suggest that a more detailed analysis of the relationship between these phenomena could help to clarify them, especially in terms of enabling a better understanding of the relationship between these phenomena and issues related to the health and well-being dimension.

Classical studies in the field of social isolation and loneliness have been associated with quantitative approaches, which have typically categorised loneliness and social isolation in predetermined, binary and strict ways (Shankar et al., 2017). These approaches have been identified as restrictive in nature, as they have serious limitations in accurately capturing the complex and multidimensional nature of these phenomena. In response to this, qualitative studies have become increasingly common, with the aim of enriching and complementing previous studies by dimensioning these phenomena from an experiential point of view. Among the main contributions of this type of studies is the fact of highlighting the individual and complex nature of these phenomena, as well as making their multiple consequences and implications visible (Cloutier-Fisher et al., 2011).

1.1. DEFINITION/CONCEPTUALISATION OF SOCIAL ISOLATION AND UNWANTED LONELINESS.

The following is a more detailed analysis of the three concepts outlined above:

1.1.1. Living alone.

Living alone refers to the type of household in which an individual lives, but has often been used as a proxy for "Being alone". How older people's households are configured has undergone significant changes since the middle of the last century. A clear example of this is that in 1945, it was estimated that around 10% of older people (aged 65 and over) were living alone, whereas only three decades later (the 1960s) thin is figure had doubled. More recent estimates suggest that almost a third (31%) of older people in the 65-74 age group live alone, with almost double this figure (50%) among those aged 75 and over. (Andersson, 1998). If we take into account the gender perspective, we realise that the formation of this type of single-person household is more frequent among women across all age groups.

These figures are a clear indicator of a series of experiential phenomena that also significantly affect older people, such as the loss of spouses (either through death or institutionalisation in care facilities) or the emancipatory process of the components of the original domestic unit (there is a greater tendency for both parents and children to live independently and emancipated). Current projections for this phenomenon predict a trend towards an increase in the number of people living alone. However, this change does not necessarily imply that there will be an increase in the amount of time spent alone, i.e. living alone cannot be equated with "being alone".

Similarly, it is not possible to make a direct assimilation between the terms "living alone" and "being alone" or "loneliness" or "being socially isolated", although a greater link is identified between the first concept and loneliness than with respect to social isolation. In most cases, it is not possible to state categorically that a subject who lives alone is in a situation of social isolation, but it is true that they are more likely to experience the phenomenon of loneliness.

The relationship between these phenomena is profoundly complex, since, as empirical evidence shows, the availability of a large social network in an objective way irrefutably guarantees the possibility of establishing trusting relationships or low levels of loneliness (and vice versa).

1.1.2. Social isolation

Social isolation, like loneliness, is a concept that has been formulated on the basis of multiple conceptualisations and expressions. In the case of social isolation, this phenomenon has been conceptualised as an indicator of the levels of integration and communication of a subject with respect to the social structures of their environment such as their family, their social support network or their community (Victor et al., 2000), an objectification of the experience of being alone (Hawkley and Cacioppo, 2010), a deficit of significant social ties (Lubben and Gironda, 2003) or a deficient integration in social networks (Rook, 1984).

This phenomenon is often described in relation to the subjective concept of loneliness, so that some authors argue that loneliness is itself a subjective dimension of

social isolation (Victor, 1994). However, there are also authors who disagree with this interpretation and argue that although the concepts of social isolation and loneliness are often used in relation to each other, in reality it is not possible to demonstrate a causal relationship between the two phenomena, although some correlational dynamics can be identified (Victor, 1994).

Social isolation relates to the integration of individuals (and groups) into the wider social environment. At its most basic level, social isolation has been defined in relation to deficits in the number and intensity of links with social structures such as the family or with the community as a whole (Victor, 1994). However, the term "isolation" has a much broader use than described so far, which has as its main consequence a difficulty in its conceptual formulation in a more consensual, standardised and universalisable way.

A key element in understanding the level of social isolation experienced by a subject is in identifying and understanding the nature of the social network that affects that subject. Networks can be defined as "identified social relationships surrounding a person, their characteristics and the individual's perceptions of them" (Bowling, 1994). An analysis of social networks should take into account both elements of diverse nature such as size (number of people in the network), network density (the degree to which network members are interrelated) and the accessibility and reciprocity that derive from them.

If we pay more attention to the phenomenon of social isolation, we find a distinct repertoire of definitions.

On the one hand, we find that of Hall and Havens (1999), who state that social isolation is "a situation in which an individual lives without companionship or has no social supports or connections". As can be seen, this definition treats social isolation in terms of an "objective inability to have minimal interactions with others". Hall and Havens' (1999) definition of social isolation would have more to do with the objective quantification of a subject's interactions with others in his or her environment, whereas emotional isolation and emotional withdrawal (or loneliness) would be a subjective feeling characterised by dissatisfaction with a low number of social interactions.

Hawthorne (2006) defines social isolation as living without social companionship, support, and connection.

Carpenito-Moyet (2008), for their part, consider social isolation not only in the individual but also in group terms, in such a way that a subject or group of subjects, despite having the desire or need to maintain links with others, are unable to establish these contacts. For Carpenito-Moyet (2008) it is a situation in which, either individually or collectively, subjects experience the need or desire to maintain more intense contact in quantitative and qualitative terms with other subjects, but without this need or desire finally being fulfilled.

Nicholson (2009) defines it in terms of social belonging and the quality of social relations, defining social isolation as a situation in which a subject lacks a feeling of belonging and social bonding and, along with this, has a deficit of social interactions and these interactions are of poor quality. The parallel between "objective loneliness-social loneliness-social isolation" and "subjective loneliness-emotional loneliness-emotional isolation" is obvious and for many authors shapes the meaning of both terms.

In the same vein, Cattan et al., (2005) define loneliness or emotional isolation as "*the subjective feeling of lack or loss of companionship, while social isolation is considered to be the objective absence of contact and interaction between the older person and the social network*".

As we have seen from these definitions, it can be summarised that the phenomenon of social isolation implies both an absence or deficit of social interactions that are satisfactory for the subject and the use of low levels of community participation.

1.1.3. Loneliness

Loneliness is undoubtedly the term to which the greatest definitional (and theorising, as will be seen below) efforts have been devoted.

Loneliness has been conceptualised based on different constructs, among which the following stand out: "*the discrepancy between the quantity and quality of social relationships subjectively available to a subject and what he or she would like to have*"

(Walton et al., 1991); "*a perceived deprivation in contacts"* (Townsend, 1980); *"perceived social isolation"* (Hawkley and Cacioppo, 2010) or *"the lack of people with whom to share emotional and social experiences"* (Rook, 1984).

As can be seen, loneliness has been a concept that has been subject to multiple interpretations, among which a perception of it as the subjective counterpart of social isolation (as an objective element) or as opposition to social support appears very frequently. Along with this, we find that it has been used as a term of reference to measure other phenomena, among which quality of life or well-being stand out (Coleman, 1987).

As presented so far, it is not possible to identify a single, unambiguous and universal definition of this concept. Based on different studies, other different definitions of loneliness so far are: "*the deprivation of social contact*", (Townsend, 1980); "*the lack of people available or willing to share social networks and emotional experiences*", (Rook, 1984); "*a state in which an individual has the potential to interact with others, but is not doing so*" (Shalev, 1988) and "*a discrepancy between actual and desired interaction with others*" (Walton, 1991).

Based on the narrative review by Tzouvara et al., (2015) on the concept and the different theoretical approaches available regarding loneliness in the specific field of old age, it was identified that a series of terms are available in English (aloneness, solitude and social isolation) which, although they are often used interchangeably to refer to loneliness, in reality they refer to different meanings. From this work we can identify a series of elements that are essential for understanding the phenomenon of loneliness and at the same time to distinguish them from related terms that we have expressed above.

- Situational aspects: according to this criterion, we can make a distinction between a real/objective situation or a subjectively perceived situation. Once again we find the indirect reference to the already seen distinction between social isolation and loneliness.
- Cognitive aspects: of particular importance is the perception of control over the situation, making a distinction between whether the situation is controllable/chosen or whether it is perceived as uncontrollable/imposed.

- Emotional aspects: in this case I would refer to the attribution of emotional value to the experience of loneliness, which can be of a positive nature, perceived as neutral, or, on the contrary, perceived as having negative consequences.

Based on the interaction of these aspects, together with others that are also frequently referred to in the different conceptualisations of the phenomenon of loneliness, such as the subject's ability to cope with this phenomenon or whether this situation is derived from a freely chosen option (Díez and Morenos, 2015), as well as the subjective nature of the experience of the association with negative emotionality (Peplau and Perlman, 1982; Perlman and Peplau, 1998), it is possible to identify a taxonomic model of the phenomenon of loneliness.

In this taxonomic proposal, "being alone" (being alone or aloneness) would imply an experience of a conscious character in which a high level of control is perceived, which is freely chosen by the subject, in such a way that this experience is of a neutral character.

For its part, the term "loneliness" refers to a negatively experienced personal experience in which the subject identifies a need for interaction with others that is not met, either because of a quantitative deficit or because the available interactions do not meet the subject's expectations, generating a perception of lack of control (Tzouvara et al., 2015). This experience is independent of the objective or non-objective availability of the company, thus underlining the subjective and intrinsic quality of the condition of loneliness.

Similarly, a clear distinction must be made between "being isolated" and "feeling isolated or lonely". In this sense, "social isolation" would be identified as a situation in which there is objectively an absence of companionship or social support networks. In this case, it is clear that there is an objective reduction of contacts in the formal and informal support network. On the other hand, feeling isolated or alone will be linked to another series of factors, especially to the subject's choice in this situation, with the result that if this situation is chosen, we would be talking about aloneness, while if it is imposed by the context, it would be a situation of loneliness.

As a construct that complements this taxonomy, we should refer to those situations in which there is a situation of loneliness that is experienced as positive and serves as a resource for a process of personal growth or solitude (Hirigoyen, 2013).

In Spanish, we do not have the terminological diversity that could help to express the different nuances that the experience of loneliness can take on. Among the possible meanings in our language, only two antagonistic possibilities are taken into account. On the one hand, loneliness is a voluntary lack of company, which would give rise to a neutral feeling of chosen loneliness (aloneness,) and, on the other hand, the involuntary and negative lack of this experiences, associated with sadness and melancholy due to the loss of something, which is related to unchosen loneliness that provokes negative feelings of loneliness (loneliness).

Approaches to the phenomenon of loneliness are usually closer to the psychological tradition, and therefore tend to devote more attention to psychological factors. In the literature there is a clear perception, in general terms, of the fact that loneliness involves the experience of a painful, continuous and internal phenomenon, but despite this, there are qualitative differences with regard to the understanding and description of this phenomenon, taking as a reference the subjects who do or do not manifest this experience.

Cattan et al., (2005) define loneliness or emotional isolation as the subjective feeling of lack or loss of companionship, while they consider social isolation to be the objective absence of contacts and interactions between the older person and the social network.

Authors such as Weiss (1983) have argued that loneliness is a natural condition of the subject, a universal human experience resulting from the human need to belong (Baumeister and Leary, 1995; Peplau and Perlman, 1982; Rotenberg, 1999) without preferentially mediating socio-demographic or biographical variables, although there is a differential reception and experience of it depending on age (Nicolaisen and Thorsen, 2014a).

Jong Gierveld (1987) and Fokkema et al., (2012) delve deeper into the emotional dimension of loneliness, in such a way that for them this phenomenon is an individual feeling, of a negative nature, which is caused by the perception of a quantitative-qualitative deficit of social relations with respect to the subject's expectations and desires. In other words, for these authors, loneliness could be considered as a psychological construct, experienced negatively, due to a discrepancy between the social relations desired and those experienced. The quantitative character would be that social contacts do not occur in the quantity and frequency desired by the subject, while the qualitative dimension would have more to do with the level and intensity of intimacy developed in social contacts.

Hawthorne (2006) says that emotional isolation (or loneliness) is a subjective feeling of dissatisfaction with the availability of several social contacts.

In much the same way, Hawkley (2015) will say that loneliness is an unpleasant and distressing experience that accompanies the perception of a deficit in the quantity or quality of social relationships.

Authors such as Peplau and Perlman (1982) or Cacioppo and Patrick (2008) consider loneliness in terms of "social pain" whose main function would be to protect against a situation of social isolation (understood as a deficit of effective social networks or contacts).

In similar terms, Inagaki et al., (2015) express that loneliness is a worrying state that shows that there is a deficit in the basic coverage of the need for social contact.

As can be seen, all these definitions prioritise the affective and cognitive dimensions of the phenomenon of loneliness as a subjective emotional experience (Heinrich and Gullone, 2006; Hawkley and Cacioppo, 2010).

There is a certain consensus in the literature when it comes to categorising loneliness as a "negative mood", which has meant that on many occasions it can be confused with other emotional states such as depression and anxiety (Donaldson and Watson, 1996). It is for this reason that Weiss' (1973) distinction that loneliness refers

exclusively to feelings generated about social relationships, while depression has a much more generalist character, seems appropriate (Cacioppo et al., 2010).

Beyond the distinction between the positive or negative perception of the experience of loneliness, it is possible to establish other criteria that allow us to enrich the above taxonomy.

A first element would be to take into account the criterion of duration or chronicity of the experience of loneliness, in such a way that we can speak of a "trait" or "state" of loneliness (Perlman and Peplau, 1981, 1998; Pinquart and Sorensen, 2001). The consideration of trait loneliness would be assimilated with the identification of lonely personality profiles while the state of loneliness would be those situations of loneliness that fluctuate as a result of the interaction of multiple environmental and psychological factors. In other words, states of loneliness would have a contextual character. In line with this, Young (1982), referred to in Sánchez (2009), proposes a classification of loneliness according to its duration and persistence over time, in such a way that he speaks of "chronic loneliness" (a situation of dissatisfaction with social relationships that has a significant duration over time) and "situational loneliness" (which is mediated by specific life events).

Another element to take into account is the provision of support provided by social relationships. Using this criterion, Weiss (1973) distinguishes between "social loneliness" and "emotional loneliness". The former would refer to a deficit or inadequacy of the social network, the cause of which may be diverse, and which is expressed as feelings of boredom, nervousness, and marginalisation. In contrast, emotional loneliness takes the form of a deficit of emotional attachment in the area of close or intimate social relationships, with consequences perceived as more negative than social loneliness (examples are the feeling of absolute loneliness, the appearance of episodes of anxiety, outbreaks of irrational fear or the development of attitudes of mistrust towards others (Perlman and Peplau, 1998).

De Jong-Gierverd and Raadschelders (1982) empirically identified 4 groups or types of lonely people based on the interaction of the three dimensions of the concept of loneliness that they had established in their work. These three dimensions were

specifically the absence of relationships, the time issue, and the emotional state. On this basis, they presented the following typology (de Jong-Gierveld, 1987)

- Subjects with a high level of dissatisfaction with their social relations and who show signs of anxiety and despair.
- Subjects who, despite showing high levels of hopelessness, are resigned to the situation of loneliness.
- Subjects who express feelings of loneliness, but consider that this is a reversible situation and remain socially active.
- Subjects with little or no symptoms associated with loneliness.

A review of the literature shows that individuals who are lonely versus those who are not lonely do not show significant differences in variables such as levels of performance (frequency and intensity) of activities of daily living, time spent alone (i.e., time spent without direct contact with other individuals), target number of friends or acquaintances, etc. (Hawkley, Burlese, Bernts, & Early, 2003). (Hawkley et al., 2003). Significant differences appear in another set of variables more related to the subject's subjective assessment of the quantity, quality and intensity of the social relationships available to them, such as the level of fulfilment of the subject's expectations with respect to their social networks, the level of satisfaction with respect to them or perceived social acceptance (Asher and Paquette, 2003).

For the Spanish case, and with a special focus on the older adult population, the differential way in which this group conceptualises the phenomena of loneliness and social isolation can be observed based on various studies.

The results of the CIS study on loneliness (1998) showed that a significant number of older respondents emphasised the more negative aspects of loneliness when trying to propose a definition, most often equating it with feelings of emptiness and/or sadness or as the result of the loss of a loved one.

In the work of López (2005), a distinction is made between objective (social) and subjective (emotional) loneliness. The former is often more recognised and verbalised than the latter by the subjects who experience it.

Objective loneliness would be related to a situation in which the subject lives alone, without the company of either their family or other members of the close social support network such as friends. Objective loneliness is also related to a situation of self-perception of helplessness on the part of the elderly person in the face of scenarios of deteriorating health.

In contrast, subjective loneliness focuses on the emotional dimension, where the main difficulty identified is the unavailability of someone with whom to interact in order to communicate, especially with regard to feelings and emotions. The work of López (2005) shows that subjective loneliness tends to be made invisible due to multiple facts, among which the fact that it is "a price to pay" to maintain their emancipation situation with respect to family members or internment institutions stands out.

If we focus on the elements that appear as the most recurrent causes of the subjective feeling of loneliness in this group, it is possible to identify the following:

- Experiences associated with mourning the loss of close ones such as spouses (situations of social unprotection, loss of intimacy spaces, pathological grief, loss of roles that define the meaning of life, etc.).
- New family dynamics: new family models, dispersion of family members, absence of offspring, etc.
- Problems associated with physical and psychological deterioration.

1.2. MEASUREMENT OF SOCIAL ISOLATION AND LONELINESS.

A particularly problematic issue within the scope of this paper is how to approach the assessment and measurement of unwanted loneliness and social isolation.

In general, the use of different scales, structured questionnaires or questions validated in relation to the experience of these phenomena is most common.

For the assessment and measurement of social isolation, the most commonly used measurement tools are (Pinazo Hernandis and Donio Bellegarde, 2018):

- The Lubben Social Network Scale (LSNS) (Lubben and Gironda 2003) and the Lubben Social Support Scale for the Elderly Revised (LSNS-R) (Lubben, 1998).
- The Berkman-Syme Social Network Index (SNI).
- Duke Social Support Index (DSSI).

About unwanted loneliness, it is possible to find a significant number of proposals (Pinazo Hernandis and Donio Bellegarde, 2018):

- UCLA loneliness scale (or some modified version, a global measure of loneliness, as a unidimensional structure) (Russell et a., 1980),
- Jong Gierveld Scale (Jong Gierveld and Kamphuis, 1985).
- SELSA Scale (Social and Emotional Loneliness Scale for Adults).
- Eastern Scale of Social Loneliness, University of Granada (ESTE I and ESTE II),
- Scale for the Assessment of Social and Emotional Loneliness (a multidimensional measure of loneliness) (SESLA - S),
- ESLI (Emotional and Social Loneliness Index)
- Single question of loneliness.
- As two of the measurement instruments used in this work, we will make explicit the Jong Gierveld Loneliness Scale and the Duke Social Support Index (DSSI).

1.2.1. Duke Social Support Index (DSSI).

Social support is a multidimensional concept, which generates heterogeneity in its measurement (Gariépy et al., 2016). However, one of the tools frequently used in international research to assess perceived social support, due to its simplicity, brevity and multidimensionality, is the Duke Social Support Index (DSSI). It is a simple and brief structured self-assessment questionnaire that collects the interviewee's opinion of the availability of people able to offer help in a difficult situation, as well as of facilities for social relationships and for being able to communicate empathetically and emotionally.

It is a questionnaire consisting of 11 items, assessed on a Likert scale with 5 response options, scored from 1 to 5 (from much of what I want to much less of what I want). The range of scores is between 11 and 55 points (Bellón Saameño et al, 1996).

It comprises two dimensions, affective and confidential. Confidential support is assessed through 5 items of the questionnaire (sum of items 1, 4, 6, 7,8 and 10), with a total score of 25. To assess affective support there are 6 items (sum of items 2, 3, 5, 9 and 11), with a total score of 30; more than 18 points means good affective support. The cohort point established by the authors to consider the perception of social support is 32 points and above.

Sociocultural and idiosyncratic factors between Spanish-speaking countries may lead to differences in the interpretation of items in the domains of confidential and affective support.

When considering the two-factor structure proposed in the literature (Alvarado, Zunzunegui and Delisle, 2005; Ayala et al., 2012; Bellón et al., 1996; González-Ramirez and Landero-Hernández, 2014; Rivas-Diez, 2013), adequate values are reported for the reliability of the questionnaire. The applied measures show that the scale is acceptable as Cronbach's Alpha Coefficients of 0.60 to 0.88 are reported, in the global scale of 0.77 in the pilot test and increasing its internal consistency to 0.90 in the final sample. High reliability values were reported by other studies even though the population differs (Alvarado, Zunzunegui, & Delisle, 2005; Ayala et al., 2012; De la Revilla et al., 1991; González-Ramirez & Landero-Hernández, 2014; Piña-López & Rivera-Icedo, 2007; Rivas-Diez, 2013).

In general, the discriminative ability of the items is high, the item-total correlation values range between 0.60 and 0.88, with a mean value of 0.73.

It has been validated in Spanish (Bellón et al., 1996), with a high internal consistency (α=94). In general, the total item correlation indexes, related to the item's discriminative capacity, exceed 0.40, which indicates the quality of each item and, as a whole, the measurement of a unidimensional construct.

Coinciding with the initial validation, two dimensions were found: confidential support and affective support, with adequate internal consistency for both the scale (α=0.90) and the subscale confidential support (α=0.88), and acceptable affective support

(α=0.79) and temporal stability (intraclass test-retest correlations of ρ=.092 for the total scale).

1.2.2. Jong Gierveld Loneliness Scale.

Another validated measurement instrument is the Jong Gierveld Loneliness Scale (DJGLS) (de Jong Gierveld and Kamphuis, 1985), initially called the Rasch Type Loneliness Scale.

This measurement tool has its theoretical basis in the model proposed by De Jong Gierveld (1987), which conceptualises loneliness from a cognitive approach. In this model, the emphasis is placed on the discrepancy between the social relationships desired by the subject and those to which he or she actually has access. The greater the discrepancy between these two magnitudes, the greater the loneliness identified.

As studies on loneliness have gained more attention from the scientific community, this scale has become one of the most widely used, especially in Europe (De Jong Gierveld and Kampuis, 1985). Among its potentialities are the fact that it is based on a theoretical model, that it is easy to apply as it is on a short scale, and that no cultural biases have been identified in its application (Scharf and De Jong Gierveld, 2008).

The authors of the scale have consistently advocated its unidimensional structure (for a review, see De Jong Gierveld and Van Tilburg, 2011), although they have acknowledged shortcomings in its homogeneity and the scalability of subjects (e.g., Van Tilburg and De Leeuw, 1991).

It is based on a three-dimensional conceptualisation of loneliness:

- Type of lack: the nature and intensity of the relationships that the subject lacks;
- Time perspective: temporally experienced loneliness versus immutable loneliness; and
- Emotional characteristics: the lack of positive feelings versus the presence of negative feelings.

This scale attempts to propose a useful tool for measuring the basic construct of loneliness, although it is sensitive to the dimensions identified by Weiss (1973) of emotional and social loneliness.

The scale is constructed, as mentioned above, from eleven items. Six of them are sensitive to measure the emotional loneliness derived from the abandonment or absence of loved ones. These five items are formulated positively and ask about the feeling of belonging.

The other five items measure social loneliness produced by the desire to have someone to turn to in case of need. These items are negatively formulated and explore feelings of desolation and lack of attachment relationships.

It is possible to use the emotional loneliness and social loneliness subscales separately depending on the need of the researcher and the objectives of the study (de Jong Gierveld and Van Tilburg, 2010).

Factor analyses carried out by the authors of the scale suggest that the 11 items measure a single dimension of loneliness, but that the instrument is affected by a methodological factor, with positively formulated items loading in one direction and negatively formulated items loading in the opposite direction.

There is evidence that it is a reliable and valid instrument (Pinquart and Sörensen, 2001b), especially in research with samples of older people (Penning, Liu and Chou, 2014). The internal consistency of the scale (Cronbach's alpha or rho) has ranged from 0.81 to 0.9 (Bartlett, Warbuton, Lui, & Peach, 2008; Van Baarsen, Snijders, Smit, & Knipscheer, 1999; Van Tilburg & De Leeuw, 1991).

It is also a suitable instrument for use in different countries, as neither the content of the items nor the results of statistical analyses suggest that there is cultural variation in the items (van Tilburg et al., 2004). The scale has been widely used in different countries, showing generally adequate psychometric guarantees (Rokach et al., 2001).

A shortened version of the DJGLS was created for use in large research studies that require shorter instruments. It consists of six items, three of which are taken from the emotional loneliness subscale and three from the social loneliness subscale.

The DJGLS is validated in international samples of older people (Victor, Grenade et al., 2005) and has been translated into Spanish and validated in samples of Spanish older people in its full (Buz, Urchaga, et al., 2014; Buz and Pérez-Arechaederra, 2014; Pinazo-Hernandis, Hontangas, and Donio-Bellegarde, 2018) and reduced (Ayala et al., 2012) versions.

However, in Buz, Uchaga, et al., (2014) it was found that the DJGLS is a unidimensional instrument, which measures loneliness in general, not being able to differentiate between emotional loneliness and social loneliness in older Spaniards. In the same direction, the results of Tomás et al., (2018) confirm the unidimensionality of the scale, as well as support the argument of the authors of the original version of the instrument regarding the existence of a second method factor associated with the negative items of the instrument.

1.3. DIMENSIONS OF SOCIAL ISOLATION AND UNWANTED LONELINESS IN OLDER ADULTS.

Today, it is possible to state that one of the most significant phenomena by which Western societies in general can be characterised at the demographic level is their tendency towards an acute ageing.

This demographic revolution is so profound that all aspects of social life and society are affected without exception. However, the current level and form of population ageing is not homogeneous, but varies widely by geographical region and even within regions.

In Europe, at the beginning of the 1970s, people over 65 years of age accounted for 15% of the total population. This figure has risen to 20% at the beginning of the 21st century and is expected to reach 35% by 2050 (Christensen et al., 2009; Mirkin and Weinberg, 2001; Sanchez Morales, 2021).

Spain can currently be identified as one of the most ageing European countries, a phenomenon with an upward trend, as indicated by some of the projections made by the United Nations. According to this institution, Spain, together with Portugal, will be the two European countries with the oldest age structure.

According to data from the National Institute of Statistics (INE), in January 2018 there were 19.1 % of older people out of the total population (Abellán et al., 2019) while, according to the same source, on 1 January 2019 there were already 9,057,193 older people, 19.3 % out of the total population (47,026,208) (Abellán et al., 2019).

According to the INE projection (2018-2068), by 2033, the proportion of older people will be around 25.2% of the population (INE, 2018) and in 2068 there could be more than 14 million older people, 29.4% of the total population of 48,531,614 inhabitants. The greatest increases were recorded during the 1930s and 1940s, with the voluminous cohorts born during the baby boom reaching old age. The decline in the birth rate and the increase in life expectancy are the main causes of this trend (INE, 2017).

These same predictions would be confirmed by those made by the United Nations, which indicates that by 2030, the number of people over 60 years of age in our country will have doubled, and will increase more than threefold by 2050 (United Nations, 2017).

A particularly relevant issue in the progressive ageing of society is the fact that it is possible to observe how the proportion of octogenarians is also increasing, representing 6.1% of the entire population, a proportion which, on the other hand, will continue to gain weight among the older population in a process of ageing of the already old. A complementary emerging phenomenon to the one described above is the significant appearance of centenarians: there are currently 16,303 registered residents (Sanchez Morales, 2021).

As people live longer, the quality of that longer life becomes a central issue for personal and societal well-being, which now translates into several challenges to social institutions that must adapt to changing age structures (Rohr and Lang, 2009). One clear example, among others, of these emerging challenges is, that which links this generalised

ageing of the population to a foreseeable increase in the dependency ratio over the next 30 years (Cuadrado, 2019) in a significant way.

A question that has been gaining ground in recent decades both in academia and in care practice is what the foreseeable impact of the demographic developments discussed above and the emergence of new socio-health phenomena will be. So far, it has been observed that this profound demographic change has led to changes in the availability of family and social support flows in older adults, which has gradually resulted in the emergence and consolidation of unwanted social isolation and loneliness as problems of a social and health-related nature.

While the experience of social isolation and unwanted loneliness can occur throughout life, 50% of people over 60 are at risk of social isolation and one third will experience some degree of loneliness in their lifetime (Hawkley and Cacioppo, 2010).

In quantitative terms, data on the prevalence of loneliness are usually given, confusing "loneliness" with "living alone". Following this analogy, in Spain in 2015, 25% of the population lived alone, around 4,585,200 people, according to data from the National Statistics Institute (INE). Of this total number of households in which people live alone, 40 % of those living alone are people over 65 years of age and approximately 400,000 are over 85 years of age (INE, 2015). Data from 2017 (INE, 2017) confirm that the trend toward living alone when older is accentuated: of the 4,687,400 people living alone in 2017, 41.8 % (almost 2 million) were aged 65 or over.

According to the latest Continuous Household Survey of the National Statistics Institute (INE), a total of 4,732,400 people lived alone in Spain. Of this figure, 2,037,700 (43.1 per cent) were aged 65 or over, and of these, 1,465,600 (71.9 per cent) were women.

Studies dealing with social isolation and feelings of unwanted loneliness give a hazy picture, unclear in some cases, with very disparate and even contradictory data, with samples usually from other cultures and sometimes difficult to compare due to methodological issues (sample design, assessment tests, different ways of asking about loneliness, etc.).

In any case, despite the territorial differences, the results of studies conducted in the rest of Europe, which number in the hundreds, also show similar results: in the case of the United Kingdom (Brittain et al., 2017; Dahlberg and McKee, 2014; Victor and Bowling, 2012; Victor and Yang, 2012); Finland (Aartsen and Jylhä, 2011); Sweden (Dahlberg et al., 2015); the Netherlands (van Baarsen et al., 2001; 2002); and in cross-national studies such as those of Fokkema et al., (2012), Gierveld et al., (2012), Lykes and Kemmelmeier (2014) and Yang and Victor (2011).

Assuming the above, a snapshot of the challenge that unwanted loneliness and social isolation pose to Western societies would be as follows.

According to Eurostat data (2017), 6 % of the European Union (EU) population have no one to ask for help if they need it or have no one to talk to or discuss personal matters with. In this respect, the highest figures were recorded in France and Italy (12 %) and the lowest in Cyprus, Spain, Slovakia, the Czech Republic and Hungary (2 %).

In 2016, 18% of EU citizens aged 65 and over reported feeling lonely frequently (ECSWPR, 2021). About the phenomenon of social isolation, measured by the frequency of social encounters with friends, relatives, or (former) co-workers, older adults are significantly more affected than other age groups (ECSWPR, 2021). For the cIn of Europe, levels of social isolation in non-institutionalised older adults would be around 12% for the same year (Beridze G. et al., 2020). The prevalence of unwanted loneliness and social isolation among the older population varies widely across Europe. The work *Quality of life in Europe* (European Foundation for the Improvement of Living and Working Conditions, 2014) appears to identify a pattern in which loneliness is higher in southern Europe than in northern Europe (van den Broek et al., 2019; Fokkema et al., 2012; del Barrio et al., 012; de Jong Gierveld and Tesch-Römer, 2012; Hansen and Slagsvold, 2015; Sundström et al., 209).

This variation should be interpreted as a result of several factors, including individual and social characteristics, and the interactions between these factors (Dykstra, 2009). Differences in norms and values regarding family obligations as well as the composition of the social networks on which older people depend for support are additional factors that need to be considered (Johnson and Mullins, 1987; Jylhä and

Jokela, 1990). For example, family ties are stronger in Eastern and Southern Europe, so the individual's expectations regarding social support by and within the family are higher. The social support networks of older people in these countries are also mostly made up of relatives with fewer non-family relationships. Therefore, they may have more feelings of loneliness when their relationship with family members deteriorates.

In addition, these data need to highlight another issue: socio-economic inequalities appear to be central to addressing social isolation, as the difference in the rate of social isolation between the highest and lowest income Europeans was more than double.

In Spain and Latin America, studies are scarce, but some studies found that 23.1% of their sample of Spanish elderly people felt lonely (Losada et al., 2012) and that the majority of those living alone - 63.2% - had moderate to severe levels of loneliness. This same study highlights that loneliness is a feeling that increased among women, among older people, in households with lower incomes, among people who reported being in poorer health, and in single-person households.

When comparing the sample of people living alone with those living with others, almost two-thirds of the former experienced a higher degree of loneliness than those who did not live alone (Sánchez-Rodríguez, 2009; Velarde-Mayol et al., 2015).

Similar results are reported for Andalusia in the work of García-González (2020).

1.4. CHARACTERISATION OF SOCIAL ISOLATION AND UNWANTED LONELINESS IN OLDER ADULTS.

1.4.1. Gender differences.

The relationship between gender and the phenomena of social isolation and unwanted loneliness is a particularly controversial issue, as it has many nuances and sometimes contradictory results about a series of considerations that need to be taken into account and which are detailed below.

Firstly, it should be noted that women have higher levels of social isolation and unwanted loneliness, especially in the 85+ age group (Ausín et al., 2017; Dahlberg and McKee, 2014; Gerst-Emerson and Jayawardhana, 2015; Losada et al., 2012; Nicolaisen

and Thorsen, 2014; Pinazo Hernandis and Donio Bellegarde, 2018; Tesch-Römer et al., 2013; Zebhauser *et al.,* 2014;). In some cases, the prevalence of loneliness among women was more than double that of men (Beal, 2006; Zebhauser *et* al., 2011).

In the case of the Andalusian population, women have a slightly higher prevalence of general loneliness than men: 49% compared to 45%, and this difference by sex is maintained in both moderate and severe loneliness. These differences are even greater for emotional loneliness: 29% of women are emotionally lonely compared to 19% of men. In contrast, men have a higher prevalence of social loneliness: 27.5% compared to 24.5% of women (García-González, 2020).

This is not an exclusive characteristic of the Spanish case but can be identified in very disparate contexts worldwide, with their cultural, social and developmental differences, obviously (Pinazo Hernandis and Donio Bellegarde, 2018). Moreover, women tend to live longer than men, being more likely to live alone as they get older, either because of widowhood or the loss of other people in their generation (Dahlberg and McKee, 2014; Pinazo Hernandis and Donio Bellegarde, 2018).

Regarding the greater predisposition of the female gender to score negatively on the phenomenon of loneliness, this could be explained by the circumstances that are usually associated with the condition of being an "older woman". Gender differences in ageing are notable at the demographic and socio-economic levels.

Women tend to have lower incomes and lower pensions than men and, consequently, their living conditions are worse. This can facilitate situations of social isolation. Men, on the other hand, tend to be better protected because they generally have more years of education and higher income levels than women.

One aspect, moreover, that could contribute to explaining this difference in favour of women is related to how feelings of loneliness are asked about in the different measurement and data collection instruments. Social desirability bias may influence the differential responses of men and women. It may seem culturally more acceptable for women to talk about their feelings and thus report their loneliness more readily than men

(Savikko et al, 2005). In this sense, the type of instrument used to measure loneliness might contribute to the observed gender differences.

On the other hand, gender differences have been identified that may contribute to men feeling lonely more often than women, as women are more likely to establish new relationships, for example, and tend to have more diverse social networks, including close relationships with family, friends and neighbours. Men, on the other hand, tend to focus more on intimate relationships with their partners (Antonucci et al,, 2005).

Other research suggests that older women perceive more closeness in their social relationships than men, and that they are more likely to have a close member of their social network other than their spouse (Green, 2002). Likewise, men's loneliness depends to a large extent on the perception of their friendship relationships, while women's loneliness is more associated with the lack of close relationships (Buz and Prieto, 2013).

All these considerations would put older men in a more vulnerable position to feelings of loneliness, especially when their spouses are absent and they are forced to live alone, for example.

In contrast to these results, the meta-analysis conducted by Pinquart and Sörensen found that differences in loneliness between men and women explained only 0.6% of the variance. More recent research also confirms that gender alone is not predictive of loneliness (Dahlberg, 2015). This ambiguity of the relationship is confirmed in many studies that find an association between the two variables in bivariate correlations, but whose relationship disappears in multivariate analyses (Cohen-Mansfield, 2016; Martínez, 2017).

Further gender and life course research on the pathways that lead to unwanted loneliness in old age is important to deepen this relationship.

For its part, the literature does not point to differences in the risk of isolation, although that of the family network is somewhat higher in women and that of the friendship network is higher among men. Thus, we find the first feature of loneliness and isolation: emotional loneliness is more feminine and social loneliness is more masculine,

an aspect closely linked to the life trajectories linked to the generations of women and men aged 55 and over, which show large gender differences among the older cohorts. (García-González, 2020)

1.4.2. Differences by age group.

The relationship between social isolation and unwanted loneliness concerning age is not clear, as the evidence from different studies is not homogeneous.

First, there is a significant body of work suggesting that the older the age, the higher the prevalence of social isolation and unwanted loneliness (Luhmann and Hawkley, 2016).

When research is conducted with samples composed exclusively of older people, an increase in social isolation and unwanted loneliness is generally noted in the later stages of life. In addition, many studies indicate that people over 80 years of age tend to feel lonely more often than those who are younger (Pinazo Hernandis and Donio Bellegarde, 2018).

The same is true in Andalusia. The percentage of people who are lonely is 42% in the 55-64 age group, 45% in the 65-79 age group and 67% in the 80+ age group. The age gap is slightly higher in relative terms when looking at severe versus moderate loneliness. The data follow the same trend in emotional and social loneliness. In emotional loneliness, from 55 to 79 years of age, the prevalence is 22%, a figure that rises to 39% for the group aged 80 and over. In social loneliness, the rates are 25% and 35%, respectively.

The risk of isolation shows the same trend: it increases markedly with age, from 9% in the 55-64 age group to 27% in the 80+ age group. For the friendship network, the percentages are even higher for the three age groups: 22%, 34% and 48%, respectively in ascending order of age group; on the other hand, the risk of isolation from the family network is at much lower levels even for the oldest.

In general, the differences are mainly found among older women, with two clear behaviours in all prevalences: on the one hand, between men and women, there are few

differences up to the age of 79, and from the age of 80 onwards loneliness is significantly higher for women; on the other hand, the increase in loneliness from the age of 80 onwards is much higher among women than among men. All this indicates that the age effect is much more sensitive in the female group. These changes are closely linked to people's life trajectories and the loss of life and skills associated with ageing (García-González, 2020). (Garcia-Gonzalez, 2020).

Data from IMSERSO (2016) (based on Continuous Household Survey, 2015) show a percentage of older people in single-person households ranging from 19.3% in people aged 65-69, to 20.71% in people aged 85+; with women accounting for 72.93% of older people living alone and widows accounting for 70.52% and singles for 16.14%.

Following Sacramento Pinazo Hernandis (2018), it seems that, similar to what happens with gender, the increase in loneliness in older people could be explained by the consonance of life circumstances that tend to occur more frequently with advancing age (Pinazo Hernandis and Donio Bellegarde, 2018). In this sense, on the one hand, the fact that older people are more likely to have suffered losses (of spouse, friends and family) affects the size and composition of their social networks (Luanaigh and Lawlor, 2008; Nicolaisen and Thorsen, 2014; Nyqvist et al., 2016; Victor et al, 2005). On the other hand, deteriorating health and the increased likelihood of disability or dependency diminish older people's opportunities for social integration and consequently expose them to an added risk of feeling more lonely (Ferreira-Alves et al., 2014; Pinazo Hernandis and Donio Bellegarde, 2018).

However, it is also possible to identify some research that found no significant differences according to age after controlling for the effect of the other variables (Zebhauser et al., 2015) and even suggesting that loneliness decreases over the life course (Luhmann and Hawkley, 2016). Finally, some research has found that loneliness follows a U-shaped distribution across the lifespan, i.e. it is more prevalent in adolescents and young adults and older people and less prevalent during adulthood (Luhmann and Hawkley, 2016; Pinquart and Sörensen, 2001; Victor and Yang K, 2012).

1.4.3. Differences by educational level and socioeconomic status.

The association between loneliness and educational attainment and income is still unclear.

If we focus on educational level, the literature shows that levels of loneliness are higher among people with lower levels of education, conclusions that are also reached in the Andalusian population (people with secondary or higher education have a loneliness rate of 42%, compared to 62% of those with no education) (García-González, 2020) (García-González, 2020).

The prevalence of severe loneliness is twice as high in the uneducated group as in the population with secondary or higher education. These differences are replicated for emotional loneliness and, to a lesser extent, for social loneliness. Similarly, the risk of social isolation increases as the level of education is lower (it doubles among people with no education compared to those with university studies), a trend that is repeated in the friendship network, but not in the family network (García-González, 2020).

The same is true for income level, with which educational attainment correlates strongly (García-González, 2020). Income level tends to have a stronger relationship with loneliness than educational level (Pinazo Hernandis and Donio Bellegarde, 2018; Pinquart, 2003; Pinquart and Sörensen, 2001, 2003).

One possible explanation for these differences could be the fact that people with higher socioeconomic and educational levels tend to have a larger social network than those with less education and reduced economic resources, which would provide them with more opportunities for social interaction (Hawkley et al, 2008; Pinazo Hernandis and Donio Bellegarde, 2018).

1.4.4. Differences by marital status.

The relationship between marital status and loneliness is often mediated by a number of other factors that sometimes do not allow a definitive and categorical conclusion to be drawn about the link between the two variables. While some recent research has not detected statistically significant associations between marital status and

loneliness (Pinazo Hernandis and Donio Bellegarde, 2018; Zebhauser et al, 2014) there are studies that are able to establish relationships between social isolation and unwanted loneliness in non-institutionalised older adults with indicators of social integration such as couple relationships, perceived social support and acceptance (Adam et al., 2014).

In the case of Andalusia, the rate of loneliness among widowed people is twice as high as among married people: 60% compared to 30%. In the case of single people who do not cohabit with anyone and those who are divorced or separated, loneliness is around 54%, and among single people who do cohabit, it reaches 49%. It is worth highlighting the high level of severe loneliness among single people who do not cohabit, which reaches 20% and is three times higher than in the rest of the groups (García-González, 2020).

With regard to emotional loneliness, the pattern is similar: widows are the most prevalent (almost one in two) and cohabiting people, whether married or single, have the lowest rate, at around 20%. On the other hand, in social loneliness, the differences by marital status are reduced within the same trend framework. In this case, the group of single women who do not cohabit again shows the highest prevalence of social loneliness, at around 40%. The risk of social isolation increases in the same way as that of loneliness: it is higher among widowed and single people who do not cohabit, with one in four at risk of isolation - a very similar percentage to that of single people who do cohabit, curiously enough - and only one in ten among married people (García-González, 2020).

In terms of isolation from the network of friends, the risk is highest among widowed and single people (cohabiting or not) with 43% and 35%, respectively, and somewhat lower among married people (28%) and divorced people (24%). (Garcia-Gonzalez, 2020)

Equally interesting is the analysis by marital status of the risk of isolation from the family network: it barely exists among married people (barely 2%), is quite high among divorced people (15%) and single cohabiting people (22%) and is only 8% among widowed people (García-González, 2020). This may be because the family network (when available) is activated as protection when a vulnerable subject profile is identified (the case of widows).

As with educational attainment, it is important to control for the effect of gender and age on marital status - the older and female, the greater the likelihood of widowhood, basically.

In the case of loneliness, the trends are similar, so there is no gender or age effect. On the other hand, in the case of the risk of social isolation, the risk is higher among women than among married men, and lower among widowed, divorced or single women, which shows a marked gender character in the relationship between isolation and marital status. For their part, the three age groups considered show the general trend of increasing the risk of isolation with age. (Garcia-González, 2020)

Research generally agrees that having a partner acts as an important protective factor against social isolation and unwanted loneliness, such that married (or cohabiting) people are at lower risk of experiencing these situations than those who are widowed, single or separated (Ferreira-Alves et al., 2014; Gerst-Emerson and Jayawardhana, 2015; Luanaigh and Lawlor, 2008; Pinazo Hernandis and Donio Bellegarde, 2018).

But simply having a partner is not enough to prevent people from feeling lonely (Expósito and Moya, 1999). More than the mere presence of a partner, what is most associated with low levels of social isolation and unwanted loneliness is good relationship quality, including intimacy and good communication with a partner (De Jong Gierveld and Van Tilburg, 2010). Although it also contributes to alleviating social loneliness, having a partner is beneficial, especially against emotional loneliness (De Jong Gierveld and Van Tilburg, 2010; Pinazo Hernandis and Donio Bellegarde, 2018).

Unmarried status, which generally includes single, divorced or widowed people, has been consistently associated as a risk factor for unwanted social isolation and loneliness (Cohen-Mansfield et al., 2016).

Among people without a partner, those who are single tend to report lower levels of loneliness than those who are widowed or divorced/separated (López Doblas, 2005). This difference could occur because while divorced and widowed people were left alone because of a forced situation (due to force majeure), single people may be single either because they have not found their ideal partner or because they have preferred and chosen

to be alone. In addition, having never married, they are more likely to have devoted themselves to cultivating friendships and relationships with other family members (Pinazo Hernandis and Donio Bellegarde, 2018).

On the other hand, widowhood has often been associated with an increased risk of social isolation and loneliness (Losada et al, 2012). The feeling of loneliness tends to be more intense in people who are recently widowed, regardless of the presence of children and the frequency of their visits (Pinazo Hernandis and Donio Bellegarde, 2018; Victor et al, 2000; Victor et al, 2005). The situation of widowhood is particularly complicated due to the loss of an important emotional bond, and a major change that affects many spheres of life, and can facilitate a situation of isolation. In female caregivers, and cases of husband's illness, it is common for the wife to withdraw from her social network to care for him, often without realising it, and this isolation contributes to an increased sense of loneliness when her husband dies. In addition, relationships with lifelong friends can be more difficult in the absence of a partner.

Widowhood rates increase with age, but more women are widowed than men. The proportion of widowed women aged 65-69 represents 20.9% of the total and among those aged 70 and over 52.3%. In contrast, the proportion of widowed men aged 65-69 represents only 5.0% of the total and among those aged 70 and over 18.0% (IMSERSO, 2015).

The relationship between marital status and gender also influences the level of social isolation and unwanted loneliness. Thus, men who are not married tend to feel more lonely than women in the same situation (Pinazo Hernandis and Donio Bellegarde, 2018; Pinquart, 2003). Married men, on the other hand, are less lonely than married women. Marriage is more beneficial for men than for older women, meaning longer life expectancy, more life satisfaction and better health. Pinquart (2003) explains that the highest levels of loneliness correspond in divorced men compared to women in the same situation; and in single men compared to women in the same situation, given that women tend to have more frequent contact with their children, siblings and friends (Pinazo Hernandis and Donio Bellegarde, 2018).

Women's longer survival is a disadvantage, as when men reach an age where illness and disability are common, they often have the support and care of their wives. However, the reverse situation is less frequent, because their husbands are generally no longer around when women reach that stage when they are likely to be more dependent and in need of care (IMSERSO, 2017).

Gender also makes a difference in relation to widowhood. In the first place, the dependence that men in this age group currently have on women for some activities of daily life becomes more visible when the woman is no longer alive. The way in which the man assumes the tasks that were previously carried out by his wife will mark his process of adaptation to the new situation.

Secondly, widowhood among women often has negative economic consequences.

Thirdly, it often entails a very great affective loss. Thierry (1999) calls this state of vulnerability of widowers "widowhood shock or broken heart theory", which is even associated with increased mortality.

From all of the above, it seems to be possible to affirm that living with another person provides the individual with greater security, trust and mutual help. To this should be added the fact that losing a partner implies, in some cases, the need for a residential change (Pinazo Hernandis and Donio Bellegarde, 2018).

1.4.5. Differences by household type

In terms of living together, although it is known that being alone is not synonymous with feeling lonely or being socially isolated, there is a large body of evidence on the association between these three variables (Cohen-Mansfield et al., 2016; Ferreira-Alves et al., 2014; Martínez, 2017; Victor et al, 2005;).

Data published by the European Parliament (2015) reveal an increase in the number of women living alone in EU countries. They have risen from 14.2% of the total female population in 2010 to 18.4% in 2013. For men, the increase was from 10.8% in 2010 to 15.1% in 2013. Among women living alone, older women account for the highest proportion.

The results of the 2015 Continuous Household Survey indicate that 22.4% of Spaniards aged 65 and over living in family dwellings live alone. Among people aged 85 and over, this percentage rises to 34.2% of all Spaniards in this age range (INE, 2016). Moreover, this cohabitation situation is more common among women than among men, especially in the 85+ age group: 40.9% of women in this age group live alone compared to 21.4% of men in the same age group (INE, 2016). Women over 65 are 2.4 times more likely to live alone than men of the same age. Because they live longer than men, women are more likely to live alone and to live alone longer than men who stay alone. Many men who stay alone end up preferring other more comfortable alternatives, such as moving in with their children or institutionalisation, or some even choose to live with their new partners (López Doblas, 2005; Martínez, 2017; Pinazo Hernandis and Donio Bellegarde, 2018).

In the case of Andalusia, recent studies show that people living in single-person households have a higher prevalence of loneliness than those living in non-single-person households: 66% compared to 42%. It should be noted that severe loneliness is almost three times higher. This difference is also found in emotional loneliness (45% and 19%, respectively) and to a lesser extent in social loneliness (35% and 24%) (García-González, 2020).

On the other hand, in single-person households the risk of social isolation doubles concerning those that are not single-person households, reaching one in four, and the risk of isolation from the family network is multiplied by six, reaching one in seven; in contrast, no differences are found between types of house the hold for the risk of isolation from the friendship network, reaching around a third in both. (García-González, 2020).

As noted, women over 65 are 2.4 times more likely to live alone than men of the same age. Because they live longer than men, women are more likely to live alone and to live alone longer than men who remain alone. Older women are more vulnerable to feelings of loneliness for this reason (Donio Bellegarde, 2017; Losada et al, 2012; Martínez, 2017; Pinazo Hernandis and Donio Bellegarde, 2018).

Older people living alone have been found to be lonelier than those living with a partner, and more likely to experience social isolation, although the frequency of their

social interactions and the size of their social networks may be similar (Hughes et al, 2004). In fact, Jong Gierveld (1987) noted that the most important protective factor against social isolation and unwanted loneliness was living with a partner, as discussed above. Steed et al., (2007) add that being alone by choice is a different situation. López-Doblas (2005) also noted that living alone can have different meanings if this situation was self-willed or if it resulted from a condition that was imposed by life circumstances.

It has been found that the feeling of loneliness of people living alone also depends on other factors, such as having lived alone before (de Jong Gierveld, 2003) or whether the person has a good social support network (Zebhauser, 2014).

Moreover, culture can also influence the feeling of loneliness of older people living alone. For Spaniards in general, for example, living alone when one is older is associated with a negative condition, such as abandonment or family neglect (Buz and Prieto, 2013).

1.4.6. Differences in health status

As we already know, health is a complex and multidimensional issue that cannot be simplified without running the risk of falling into serious pitfalls, however, about the phenomenon of unwanted social isolation and loneliness in older adults it is possible to establish a number several ships.

In the case of the Andalusian population, there is a difference of 20 percentage points in the feeling of loneliness between people who say they are in poor or fair health (60%) and those who say they are in good or very good health (40%). Moreover, severe loneliness is three times more prevalent among the former, with a prevalence of 12% (García-González, 2020).

The figures for emotional loneliness are even more disparate, with a rate of 40% among those reporting poor health and only 16% among those reporting good health. For social loneliness, on the other hand, the gap is narrower: 31% versus 23%. In the same way, it is necessary to control for age and gender: generally, older people and women report a worse state of health. (García-González, 2020)

In light of the data and putting them in relation to the conclusions obtained through a bibliographical review, it is possible to identify a series of evidences.

Firstly, it can be observed how functional ability has been consistently related to unwanted loneliness and social isolation, such that poor functional status is related to increases in these variables while high functional competence for activities of daily living (ADLs) is associated with a significant decrease in ADLs (Cohen-Mansfield et al, 2016; Martinez, 2017).

On the other hand, it is clearly observed that mobility influences people's functional capacity and also enables interaction with people in the environment, showing that it is directly related to these variables, in such a way that a worsening of mobility conditions leads to a worsening of conditions of unwanted loneliness and social isolation (Cohen-Mansfield et al., 2016; Martínez, 2017).

It is also important to take into account the sensory conditions of the elderly, in such a way that the literature suggests that having visual and hearing impairment hinders interaction and communication with the environment, which has been linked in many studies to an increase in social isolation and unwanted loneliness in the elderly (Cohen-Mansfield et al., 2016; Martínez, 2017).

About comorbidity, some available studies have shown that the greater the comorbidity, the greater the significant increase in both variables considered (social isolation and unwanted loneliness) and the higher the levels of loneliness (Cohen-Mansfield et al., 2016; Martínez, 2017).

As far as depression is concerned, the relationship is clear: people who report feeling depressed have a higher prevalence of loneliness. First of all, it should be noted that one in two people report feeling depressed sometimes (33%) or almost always (17%), which is highly relevant as a public health problem. That said, rates of loneliness are much higher among people who report feeling depressed. The same is true for the risk of social isolation, which rises from 9% among people who never report depression to 38% among those who report feeling depressed regularly (García-González, 2020). Similarly, the risk

of isolation from family and friendship networks increases among people who report feeling depressed (García-González, 2020).

On the other hand, perceived health is one of the health variables that has been most closely related to unwanted loneliness and social isolation, showing a directly proportional relationship with these variables, so that people who perceive their health as poor feel more lonely and socially isolated (Cohen-Mansfield et al., 2016; Martínez, 2017). People with mental health problems are particularly at risk. Depression is the mental illness most commonly linked to feelings of unwanted loneliness.

The risk of social, family and friendship isolation is also higher among people who report poor health, being higher among men and older people and among people who have seen their health deteriorate or lost functional autonomy (García-González, 2020).

CHAPTER 2. THEORETICAL BACKGROUND: DETERMINANTS AND EFFECTS OF UNWANTED SOCIAL ISOLATION AND LONELINESS.

As has been said on several occasions throughout this paper, loneliness and isolation are two terms that tend to be confused in the literature. Their indistinct use can be explained by the fact that, as we have seen when making a series of terminological observations, social isolation and loneliness are most often interpreted as the objective and subjective dimensions of the same phenomenon.

However, despite this, we find that from a theoretical point of view there has been an uneven effort to propose explanatory frameworks for each of these phenomena (Arruebarrena and Sánchez-Cabaco, 2020).

Loneliness has been the dimension on which the greatest effort has been made in terms of theoretical foundations, attempting to explain not only the causes of the phenomenon but also providing interpretations of it (Arruebarrena and Sánchez-Cabaco, 2020). However, in the case of social isolation, the most that have been achieved is to establish a series of descriptors or determinants that are associated with this phenomenon without itisg possible to specify an integrated and systematic model or theory.

On this basis, this chapter aims to provide a theoretical approach to both phenomena, opting for a cumulative strategy. For both cases, the **main determinants** that the scientific literature identifies as significant for the appearance and development of these phenomena will be systematically presented. Once this has been done, the **theoretical basis of the phenomenon of loneliness will be** complemented with those models and explanations of a theoretical nature that are present in the literature. This chapter will end with a description of the **effects derived** from the phenomena of social isolation and unwanted loneliness.

2.1. DETERMINANTS OF SOCIAL ISOLATION AND UNWANTED LONELINESS IN OLDER ADULTS.

Before we begin, it should be noted that in terms of the theoretical formulation of the phenomena of social isolation and loneliness, the former has a clearer and more

manifest deficit than the latter (Machielse, 2015). This may be partly due to the fact that social isolation is identified as a phenomenon that has more tangible dimensions than loneliness. This is why we will first discuss the determinants associated with social isolation and loneliness, and then present some theoretical explanations of this second phenomenon.

Before going further into what the literature identifies as the main determinants of social isolation and loneliness, it should be pointed out that, as will be seen below, a significant part of the determinants described have already been reflected in the characterisation of these phenomena. Nevertheless, this section includes references that specify the anteriority of these determinants about the situation of isolation and unwanted loneliness.

In addition, we will try to contextualize the scenario in which the current aging process is developing in Western societies. As stated at the beginning of this work, a significant part of the relationship between social isolation and unwanted loneliness in older adults has to do with sociodemographic changes and changes in the way of aging in which the elderly are immersed.

A first issue to take into account is the one related to the modification of the family structure, which has undergone great changes, going from the multigenerational structure to the more individualistic nuclear family without a traditional family support system. In relation to this, it is not possible to ignore that the social support of most of the subjects is determined, among other factors, by the availability of relatives and friends throughout the life course. Changes in demographic dynamics create new scenarios in the coexistence between generations and in the time of life shared between them. Similarly, there is a change in loss calendars (in most cases, one of the main explanatory factors of experiencing phenomena such as social isolation and loneliness).

In general, it can be said that there is a trend towards a scenario in which social networks are more durable, but narrower. The population without descendants –which was traditionally absorbed into extensive family networks (Jong Gierveld and Dykstra, 2006)– will find themselves in a situation of greater vulnerability, given the lower existence of horizontal ties or derived from their early disappearance.

In the relatively near future, it will be possible to identify ageing generations with high infertility rates - 20% among those born in the 1960s and possibly around 25% among those born in the mid-1970s (Esteve, Devolder and Domingo, 2016). In addition, these generations will coincide with the fact that they will be generations with a lower presence of spouses and first-line blood relatives.

This poses a serious risk for this population in terms of family ties and support, as fewer offspring, in interaction with migration patterns, can influence the availability of support networks and thus the situation of social isolation and unwanted loneliness, as there is an increase in intergenerational distance, which affects the availability of both instrumental and emotional support.

A second issue to take into account is the increasing geographical distance from members of the family and social network, which puts in crisis many of the dynamics of exchange and support that have been traditional until now (Knijn and Liefbroer, 2006). Proximity is a clear determinant of reciprocity strategies and in the recent process of modernisation of society, it has been compromised by the processes of social mobility. In many cases, the choice of residence is strongly related to work-related motivations, but it is also related to other issues such as culture, education or economic status (Golant, 2003; Marcellini et al., 2007).

In addition to the above, a significant number of those factors that lead to overexposure to the phenomena of social isolation and unwanted loneliness in older adults have to do with age-related or life-cycle specific elements (loss of close relationships and shrinking social networks, sensory impairments, chronic health conditions, cognitive impairment, limited economic resources, mobility limitations and other physical and cognitive impairments, etc.).

As can be clearly seen, all these changes have had a significant impact on shaping a new social and health and social phenomenon: social isolation and unwanted loneliness in non-institutionalised older adults. This socio-health phenomenon is a major challenge not only on a social level but also on a political and socio-health level. These phenomena are a problem in themselves, but they are also a problem insofar as they act as determinants of other health and social problems, as we have seen. Public health concerns

about these phenomena are not new, although they have generally been underestimated and underestimated about the evidence supporting their importance for public health (Holt-Lunstad et al., 2017).Although social isolation and unwanted loneliness are experiences that can be experienced throughout the life cycle, it is possible to state that older adults are particularly vulnerable to them since a series of associated factors have been identified that increase the risk of experiencing them, as will be seen below.

2.1.1. Determinants of social isolation.

In general, social isolation refers both to the absence of satisfactory social relations and to a low level of participation in community life. Rubio (2004) finds that the difference between isolation and loneliness is related to the cause that has provoked the isolation, differentiating between subjective loneliness when the lack of social relations is imposed by external circumstances and goes against the person's expectations, and isolation without loneliness when this lack of relations is more or less voluntary or conforms to the person's previous expectations.

Findlay and Cartwright (2002), after conducting a comprehensive review of the available empirical evidence, concluded that the risk factors for social isolation in older people are 11: loss, poor physical health, mental illness, being a carer, communication problems, language problems, place of residence, fear and feelings of vulnerability, gender and marital status, community attitudes and transport.

Nicholson (2012) points out that physical, psychological, economic, changes in work and family roles and environmental factors can be considered risk factors for social isolation in older people.

As can be seen, the interaction between structural and psychosocial factors could explain much of the dynamics of isolation, but it would still be possible to find people who, even with the weight of social and psychosocial variables playing against them, are able to maintain connections and overcome isolation. It is possible to find people who even in very inclusive societies and social groups remain isolated and vice versa. In other words, there is a final group of psychological factors, more linked to the subjective and emotional (loneliness) that can influence this equation.

Research has shown how certain personality styles (introversion, hostility, paranoid) can help generate psychological processes of isolation and loneliness (Halliday, Banerjee, Philpot, & Macdonald, 2000).

On the affective level, feelings of rejection and being alone are related to social anxiety, aggressive or victimised feelings and depression (Twenge, Baumeister, Tice and Stucke, 2001). In this sense, the parallelism suggested by some authors (Eisenberger, Lieberman and Williams, 2003; MacDonald and Leary, 2005; DeWall and Baumeister, 2006) between physical pain and social pain from social rejection and exclusion found in the neuroanatomical and functional level of the nervous system is noteworthy.

Finally, cognitive aspects are implicated in this process, for example, with elements of higher processing impairment or with processes of internalisation of a social stigma (Muñoz, Sanz, Pérez-Santos and Quiroga, 2011).

However, none of the groups of factors alone seems to be able to explain the kind of extreme situations of isolation that we find in our societies (homelessness, isolated elderly, etc.). Thus, the fact that a person finds himself/herself in a situation of extreme isolation at a given moment in his/her life is a function of the interaction of the person's biography with his/her relational world in a given social and cultural framework.

Following these authors, and making a broader review of the literature, the following risk factors can be identified, which in turn group together a larger number of variables:

a) Physical determinants.

Having physical health problems is one of the main predictors of social isolation (Gardner, Brooke, Ozanne and Kendig, 1998) and, in turn, older people who are socially isolated are at greater risk of health problems (Hall and Havens, 1999). Havens and Hall (2001) and Havens et al., (2004) found that those older people who had 4 or more chronic health problems had 1.3 times higher risk of social isolation than those with less than 4 chronic illnesses. In contrast, social support and having a social network are associated with improved health and well-being (Edelbrock et al., 2001).

Having a poor body image, due to being overweight, can cause the person to decrease or even cease social contact to the point of putting him or herself at risk of social isolation (Nicholson, 2012).

Vision and/or hearing loss in older people is associated with an increased risk of social isolation (Mick, Kawachi and Lin, 2014; Schneider et al., 2011; Pronk et al., 2014). These difficulties can lead to problems in communication (Heine et al., 2002; Thodi et al., 2013), with fewer social interactions and impaired social functioning (Garijo and Sebastian, 2008; Jang et al., 2003; Strawbridge et al., 2000; The National Council on the Aging, 1999; Weinstein and Ventry, 1982) that if prolonged over time could lead to social isolation.

Several studies highlight the negative impact of urinary incontinence on the quality of life of older people, including social aspects (Ghodsbin et al., 2012); on their lifestyle, including social activity (Gavira Iglesias et al., 2000); and its relationship with an increased risk of social isolation (Fultz and Herzog, 2001; Takahashi, 2015; Yip et al., 2013).

Aspects such as sleep quality or daytime alertness can affect psychological variables such as social support (Costa, Ceolim, & Neri, 2011; Driscoll et al.,2008).

People who abuse alcohol have more limited social networks, and there is a clear relationship between heavy drinking and social impairment (Hanson, 1994; Wadd et al., 2011).

Older people who have a good social support network report less functional disability (Mendes de Leon, Glass and Berkman, 2003), and those who feel part of a social network have a lower risk of functional disability (Mendes de Leon et al., 1999).

b) Psychological determinants.

Several authors have found a relationship between depressive states in older people and an increased risk of social isolation and, in fact, it may be a circular problem (Anderson, 2001; Dorfman et al., 1995; Holvast et al., 2015; Iliffe et al., 2007). In this sense, a person may develop a depressive disorder that as a consequence leads to a

distancing from family, friends and society and becoming socially isolated, which reinforces the depressive disorder.

There is a relationship between cognitive impairment and social isolation (Bassuk, Glass, & Berkman, 1999; Havens et al., 2004; Shankar et al., 2013).

Experiencing a traumatic event, such as the loss of a loved one, may cause the older person to avoid social contacts, which increases the risk of social isolation. The loss of a family member, friend or close neighbour can lead to increased social isolation in older people (Wenger and Burholt, 2004).

In contrast, being part of a church or maintaining a social network based on religious commitment seems to be important aspects of older people's social lives that increase the perception of social support (Moxey et al., 2011).

c) The role of the caregiver as a determinant.

Being a primary caregiver, especially if the person has a mental disorder, on a long-term and full-time basis, especially with few informal supports, can lead to social isolation (Brodaty, and Hadzi-Pavlovic, 1990; Gopinath et al., 2015; Hayes et al., 2015; Highet et al., 2004).

d) Communication-related determinants.

One of the problems faced by older people is access to new technologies, such as the internet or computers. Older people who become familiar with new technologies enhance their social inclusion through their use of these technologies (Fokkema, and Knipscheer, 2007; Selwyn et al., 2003; Shapira, Barak, and Gal, 2007; White et al., 2002).

On the other hand, if the host language is not your mother tongue, it could be a risk factor for social isolation in older immigrants (Ip, Lui, and Chui, 2007; Treas, and Mazumdar, 2002).

e) Environmental factors.

Older people who live in dangerous communities, or where lack of safety is a problem and where feelings of fear and vulnerability are increased, are at greater risk of social isolation (Ross and Jang, 2000).

Moving to a nursing home can exacerbate social isolation, even when the move was intended to have the opposite effect (White et al, 1999). Buys (2001) found that even among people who have been friends for years, when one of them goes to a nursing home, they generally stop receiving visits from these friends.

People living in urban environments are at greater risk of isolation because they have less contact with family and friends than those living in rural areas (Ibrahim et al., 2013). In contrast, Findlay and Cartwright (2002) note that it is people living in rural settings who are most at risk of isolation, especially those who live far from cities, cannot drive and whose families do not live in their area.

Living alone is a risk factor for both increased social isolation and decreased social networks (Berkman, 2000; Havens et al., 2004; Howat et al., 2004; Iliffe et al., 2007; Losada, 2012; Lubben and Gironda, 2003).

A negative community attitude towards older people can have the effect of impairing the ability of older people to have satisfying and meaningful interactions in their community (Findlay and Cartwright, 2002).

Transport accessibility can become a key variable in social exclusion (Lucas, 2012), affecting older people's mobility and therefore opportunities for social interaction.

f) Economic factors.

Having a restricted economy (Illiffe et al., 2007) and low income (Bassuk, Glass, & Berkman, 1999) are factors associated with social isolation, along with having inadequate personal resources (Ackley y Ladwig, 2010). Socioeconomic status also appears to be a risk factor for social isolation (Havens and Hall, 2001; Losada, 2012; Iliffe et al., 2007).

Retiring can be a stressful event in older people's lives and can lead to a decrease in social contacts, especially those that were clearly related to their work activity and social support from co-workers (Nicholson, 2012).

g) Socio-demographic factors.

As for gender, this is a controversial issue where it is not yet possible to clearly identify the direction of the relationship between variables. Gardner et al., (1998) and Edelbrock et al., (2001) find that men are much more prone to isolation than women. In contrast, other authors find that being female increases the risk of social isolation (Ibrahim et al., 2013) and loneliness (Losada, 2012).

As already presented above, age is also an element related to isolation, although it is not yet possible to establish the direction of the relationship. Nevertheless, it can be stated with a certain degree of certainty that age is also visible as a determinant since older people show in absolute terms (and relative to younger cohorts) higher levels of social isolation than other age groups (Losada, 2012; Cornwell and Waite, 2009).

There are some aspects of a person's social reality that can be attributed to race, such as family composition or social support received and given (Peek and O'Neill, 2001).

Lower educational attainment appears to be related to a higher risk of social isolation (Bassuk, Glass, and Berkman, 1999; Iliffe et al., 2007).

The loss of a spouse is a factor that can trigger social isolation (Chipperfield and Havens, 2001). There is also a clear relationship between being single and social isolation (Boden-Albala et al., 2005; Fratiglioni et al., 2000). On the other hand, being married is associated with increased adherence to healthy behaviours (Cacioppo et al., 2011).

2.1.2. Determinants of unwanted loneliness.

Cohen-Mansfield and Parpura-Gill (2007) proposed a model with the aim of developing an explanatory model of the predictors of unwanted loneliness in this population group and, at the same time, to check whether this was the greatest predictor of loneliness. depression in older people. Within their model they include four types of

barriers that, according to the authors, prevent the establishment of new social relationships and are determinants of loneliness and, in turn, of depression. The proposed model includes a total of 21 variables, divided into four types of barriers:

- Environmental factors and resources.
- Health factors.
- Psychological factors.
- Stressful life events.

The results of the multivariate analyses showed that the model explained 42% of the variability of loneliness. It was also revealed that the main predictor of loneliness was psychological barriers followed by environmental and health barriers. Furthermore, stressful events were shown to have no explanatory effect on loneliness, and it was confirmed that loneliness was the most important predictor of depression in the elderly population.

a) Environmental determinants.

The particularities of the community in which people live lead to other decisive factors of social isolation and/or feelings of loneliness. These factors include social infrastructure in neighborhoods, the built environment, but also issues of distance and lack of transportation. For example, rural older people with functional impairments have reduced ability to maintain social connections (Victor et al., 2012). At the same time, older people living in unsafe and disadvantaged neighborhoods in large cities are equally exposed to isolation and loneliness (Scharf and De Jong-Gierveld, 2008). High living costs, limited job market opportunities, lack of access to communication technologies and the Internet are additional risk factors.

As in the case of social isolation, there is evidence of a relationship between experiencing loneliness and low income (Cohen-Mansfield et al., 2016).

The broader socioeconomic and cultural context also determines feelings of loneliness (Jivraj et al., 2012). The overall welfare regime and access to support therefore

have a direct impact on older people's isolation and loneliness, including pension policies that affect income levels and thus the ability to participate in society.

Individual circumstances that increase the likelihood of feelings of unwanted loneliness are elements such as marital status (single, divorced or widowed); the absence of family, close relationships or a good quality social network (Hansen and Slagsvold, 2015). Also, people who live alone, become or cease to be caregivers are more likely to experience these situations (Ekwall et al., 2005).

Within this individual dimension we would find that additional risks of feeling lonely and isolated are associated with migration status (Victor et al., 2012); being of a minority or ethnic background or having low education (Cohen-Mansfield et al., 2016).

Along with these factors, it is also possible to identify a series of structural causes that have to do with socio-cultural changes that have the particularity of increasing the complexity of the genesis and development of the experiences of unwanted loneliness of older adults. Some of these causes considered as structural would be:

- Changes in family structures and patterns, which are less extended and more fragile.
- New forms of work and production, which imply greater mobility (children no longer necessarily live close to their parents all their lives).
- New models of communication and neighbourhood and social relations.
- The impact of new technologies on forms of relationships and leisure.
- Urban planning is not designed for neighbourhood coexistence, or depopulation in rural areas.
- The growing model of individualisation and the exaltation of independence and emancipation.

The way older people live together has changed steadily over the last few decades, with the number of people living alone and the number of single-person households increasing. In many cases, living alone is a forced situation, with negative physical and emotional consequences for older people as we have seen (Doblas and Conde, 2013).

According to various studies, family loneliness is experienced by institutionalised older adults at a higher level compared to those who are not institutionalised. This aspect can be related, on the other hand, to the less time family members have to visit their relatives, given the various activities they carry out such as work, study, childcare, and social life.

In the same sense, it can be said that loneliness is lower in non-institutionalised older adults, who also obtain the highest percentage in the perception of well-being from family support.

However, the abandonment and disinterest of the family are also present in the thoughts of the non-institutionalised elderly; previously, it was common to belong to an extended network and the elderly had a place, a role and it was this nucleus that offered them the necessary care; currently, the family does not take the elderly into account in its structure and denies them their usual space, and relegates them to a passive role, generating low self-esteem and suffering due to neglect. Villalobos (2015) states that institutionalisation precipitates the detriment of the adult, due to feelings of loneliness generated by the separation from their family group.

For its part, marital loneliness is reflected a greater extent in institutionalised adults, which can be explained by the absence of a partner in 91% of them, which even leads many relatives to choose to institutionalise the adult so that they can relate to other people and not feel so much the absence of their partner; however, as Lopez Suarez (2019) refers, the first cause of institutionalisation is loneliness, but this continues, even after admission to the gerontological centre.

In addition, this can be explained by the separation from family, friends and neighbours. Most the older adults enter the institution because they were lonely, but this loneliness remains, since the relationships they find there, although there are many, are not necessarily of quality and of ir entire satisfaction.

On the other hand, there is a tendency to identify and naturalise situations of social isolation and unwanted loneliness in older adults as a given issue for this age group without being able to consider alternatives (Cohen-Mansfield et al, 2016; Díez and

Morenos, 2015), which is why there is recurrent inaction when it comes to addressing this problem. However, on most occasions, these are not experiences freely chosen by the subjects, ut are a consequence of events over which the older person has no capacity to act (López-Doblas, 2005).

This tendency is often an explanatory factor as to why older people tend to ask for help in their environment for material matters, but do not ask for help in emotional matters (Martínez, 2017).

b) Health determinants.

Any form of health loss is closely related to the risk of loneliness, so people with dementia, poor physical health, reduced mobility, disability, and sensory impairment are at significantly higher risk of loneliness (Gallo-Estrada and Molina - Mula, 2015).

c) Psychological determinants.

Interest in studying the influence of psychosocial factors on the development of loneliness in older people has increased in recent years, as the importance of psychological factors in the development of loneliness is increasingly recognised. For example, Pikhartova et al., (2016) found that participants' stereotypes and expectations about loneliness predicted their future experience of loneliness, and this effect was independent of other sociodemographic, health and loneliness variables at baseline. For these authors, this suggests that the development of the feeling of loneliness would be the consequence of a "self-fulfilling prophecy".

Models that have included psychological variables such as self-efficacy (Cohen-Mansfield and Parpura-Gill, 2007) or the subjective evaluation of the social network (Losada et al., 2012; Sánchez, 2009), have shown how the predictive capacity of these variables is very important in explaining the development of loneliness in old age.

The literature (Halliday et al, 2000), moreover, suggests that certain personality styles (introversion, hostility, paranoid) facilitate the appearance of psychological processes that generate situations of social isolation.

The work of Hauge and Kirkevold (2010) shows that among those who say they "do not feel lonely", the causes of loneliness are mainly due to the individual's own issues (internal causal attribution) such as personality traits (hyper-critical, negative or passive attitudes and behaviour). Related to this, it is possible to identify a stigmatising construction of loneliness. Loneliness is often perceived as a sign of weakness or as a situation in which the subject has full capacity to act and overcome, as it is not a physical ailment (Weiss, 1983). This stigmatising construction of loneliness can condition the possibility of its evaluation, as it can generate situations such as individuals who experience this situation not assuming it due to the social sanction to which they are subjected (de Jong Gierveld, 1998).

In contrast, an external causal attribution model prevails among subjects who report experiencing loneliness, in such a way that the main cause of loneliness would be the lack of opportunities to maintain social contact with relevant people. As stated by Castro (2015), the need to make an adequate causal attribution to the situation of loneliness is essential to develop appropriate management and coping strategies, so that the discrepancy between expectations about desired relationships and the real possibility of access and enjoyment can disappear.

The interaction between structural and psychosocial factors could explain many of the conditions associated with social isolation, but it would still be possible to identify subjects who, despite participating in all these facilitating factors, would not be in a situation of social isolation and vice versa. In the latter case, a list of possible personal factors must be used.

d) Stressful life determinants.

Finally, and although less frequent, it would be necessary to highlight a series of traumatic events such as abuse, imprisonment, addiction, homelessness can also lead to loneliness (Gallo-Estrada and Molina - Mula, 2015).

2.2. THEORETICAL APPROACHES TO UNWANTED LONELINESS.

As we have seen, there are multiple definitions of loneliness, which respond to the multidimensional and subjective nature of this phenomenon. Thus, unlike social isolation, it is possible to find multiple theoretical approaches to loneliness.

In the literature, it is possible to identify up to eight theoretical perspectives that take up the challenge of providing a causal explanation for the phenomenon of loneliness. Karnick (2005) indicates that Peplau and Perlman (1982) make a classification of these models using the following categories as a reference, resulting in 8 models, to which should be added the Cognitive-Behavioural and Reinforcement Approach described by Young. There are clear overlaps between the different models, and we can affirm the existence of 4 major fundamental theoretical approaches applicable to the study of the phenomenon of loneliness. We refer to the existential, psychodynamic, interactionist and cognitive approaches as presented by Donaldson and Watson, 1996; Tzouvara et al., (2015) and Berg, (1982). The main criterion of differentiation between the different approaches will be the significance given to the origin, causality or nature of the deficit or social dysfunction experienced by the subject who is in a situation of loneliness (Peplau and Perlman, 1982).

However, although there is a sufficient catalogue of theoretical references on this phenomenon, it is not possible to identify any approach that is specific or directly focused on old age (Donaldson, 1996).

These different theoretical perspectives illustrate the various ways in which the study of loneliness has been approached and what can be understood by the concept in different studies. However, few studies make the theoretical basis of their approach to loneliness explicit.

In the following, we provide a more detailed description of each of these approaches and relate them to the different models identified.

2.2.1. Existential Theoretical Approach.

This approach has its main reference in the approaches of existential philosophy and humanistic psychology. This set of models understands that loneliness is an unavoidable experience of the human being which, although it does have a painful connotation, is an opportunity for self-realisation and personal development (Karnick, 2005). Rokach (1988) states that loneliness is a concept in which the subjective dimension prevails and is clearly multidimensional, which is often expressed in aversive terms with expressions such as pain or discomfort, but that it is nevertheless a natural and structural experience of the human being, which can manifest itself throughout the life cycle and in the face of multiple stimuli (Tzouvara et al., 2015, p. 330).

In this vein, Tillich (1952, 1963) posits that solitude is contingent on life as it endows the subject with stimuli for introspection and creativity. The existential theory sees loneliness as a reflexive condition that provides the opportunity for an individual to find and possibly construct an understanding of self. It is seen as a positive opportunity, which is compounded by the experience of "love". Loneliness is portrayed as a necessary aspect of life, as "in the most intimate life, moments when we are basically alone" (Donaldson, 1996).

Because of the ambivalent nature of loneliness, he proposes the distinction between the term "loneliness", which is used to refer to the painful experience of loneliness, versus a positive dimension, which would be expressed through the term "solitude" (Donaldson and Watson, 1996; and Karnick, 2005).

More specific theoretical models are briefly outlined below.

- Existential-Humanist Approach**:** Existentialist authors such as Moustakas, 1961 and 1972, (Peplau and Perlman, 1982) do not focus so much on the causal dimension of loneliness, since they interpret it as an inherent phenomenon of the human being. For this model, loneliness would be an ambivalent experience, in which the inherent painful experience does not cancel out the possibility of a positive experience that can be productive and creative. This author defines loneliness as "*a chosen state of being that includes the anguished loneliness of existential loneliness,*

that is, a state that involves being alone with others, nature and the Universe" (Karnick, 2005, p. 10) and raises the distinction between "*anguished loneliness*" and "*existential loneliness*", both experiences being spaces that inescapably allow self-confrontation and self-encounter of the subject with his own reality (Donaldson and Watson, 1996, p. 954).

- Phenomenological perspective: In this perspective, with the main reference to Carl Rogers, loneliness is interpreted as an experience determined by the present situation of mismatch in the subject's self-concept.

As we have seen, this approach establishes a relationship of normality with the experience of loneliness, even raising positive aspects of this situation. However, it is also necessary to highlight a series of limitations and criticisms of these approaches.

A first criticism is the lack of a clear distinction between the objective and subjective dimension of loneliness, as well as the failure to establish clear criteria for when it is a space of enjoyment or a painful experience (Donaldson and Watson, 1996).

On the other hand, criticism is made of the ontological construction of loneliness that these approaches make, without taking into account the elective dimension of the subject in this situation at any time (Tzouvara et al., 2015). To this should be added the fact that it is a model that is unnecessarily complexified by the introduction of the abstract concept of "love" (Peplau, 1982).

2.2.2. Psychodynamic Theoretical Approach.

This approach is based fundamentally on Freud's psychoanalytical postulates, defending the principle that how attachment relationships are established during childhood, as well as the conflictive events that may be experienced at this stage, will shape the personality and coping strategies of adulthood (Donaldson and Watson, 1996).

Loneliness is thus configured as a pathological issue that appears as a result of the subject's difficulty in establishing healthy relationships. Sullivan (1953) describes loneliness in terms of "*a most unpleasant experience, related to the inadequate fulfilment of the human need for intimacy and interpersonal relationships*" (referred to in Tzouvara et al., 2015, p. 340). Underlining the construction of loneliness as a pathological issue

Birren and Sloane (1980) described loneliness as a "*mental state symptomatic of neurosis and whose origin comes from a "previous life" that makes it difficult for a lonely older person to form relationships"* (Donaldson and Watson, 1996, p. 953).

For their part, other authors (Fromm-Reichmann, 1959; Sullivan, 1953; Zilboorg, 1938, cited in Peplau and Perlman, 1982) have defended the idea that loneliness is an experience susceptible to being experienced by any subject insofar as the desire to maintain spaces of intimacy is a need common to human beings, although conditioned by personal resources moulded during the maturation process, and which, therefore, do not always have to be functional or effective.

Followers of this theory approach the study of loneliness through the study of the individual and his or her early development. (Birren, 1980).

The main criticism made of this approach is that the conceptualisations they propose arise almost exclusively from clinical activity, which implies a bias that tends to pathologise the construct of loneliness (Karnick, 2005), minimising the possible specific weight of other variables such as socio-cultural environments or the life cycle (Donaldson and Watson, 1996).

2.2.3. Interactionist (or attachment) Theoretical Approach.

The interactionist theory of loneliness (Weiss, 1973) builds on Bowlby's Attachment Theory (Bowlby, 1981) and combines the individual emotional aspects of loneliness with the social aspects. Attachment theory proposes that all individuals are social beings and therefore have interaction needs that must be met. Loneliness appeared in situations where there is a deficient social network and/or there is a deficit of intimate attachment figures (Donaldson and Watson, 1996; Tzouvara et al., 2015) as well as depending on personality type.

Its author of reference is Robert. S. Weiss, who defines loneliness as "*the deficiency of the basic need for intimate relationships that occurs when a person's social needs are not satisfied*" (Weiss, 1973) and also raises the need to establish the difference between social loneliness and emotional loneliness, as we have seen previously.

Other significant definitions in this approach are those of Rook (1984), who defines loneliness as a "*lasting condition of emotional discomfort that occurs when the person feels distanced, misunderstood or rejected by others or does not have adequate social contacts to develop desired activities that facilitate social integration and emotional intimacy*" (Tzouvara et al., 2015, p. 330) or that of Killen (1998), who emphasises the negative effects of loneliness in the lives of subjects and defines it as "a *condition of distressing, depressing, dehumanising and detached feelings that a person endures as a result of the emptiness produced by an unfulfilled social or emotional life*" (in Tzouvara et al., 2015, p. 330).

Two theoretical concretisations of the approach described above are presented below.

- Interactionist approach: The interactionist approach shares the idea of theoretical models already seen that loneliness is an experience inherent to the nature of the human being. The causes of loneliness could be of an internal or external (or situational) nature, but the latter will be especially decisive. Its main author is Weiss (1983),
- Sociological explanations: For the theorists of this model (Bowman, 1955; Reisman et al., 1961; Slater, 1976, cited in Peplau and Perlman, 1982) loneliness would be a statistically frequent phenomenon as a consequence of different social dynamics, practices and structures.

The main criticisms made of this set of theories are, on the one hand, the consideration that social loneliness is not necessarily related to the appearance of negative feelings linked to the experience of loneliness (Donaldson and Watson, 1996), i.e., certain parallelism is proposed between the concept of social loneliness and social isolation. This has been criticised because the conditions described as causing loneliness are not necessarily negative conditions and therefore other factors must be involved in creating the state of loneliness (Wenger, 1996) and that social loneliness (i.e. social isolation) is an objective position which does not necessarily cause loneliness. (Larsen, 1985).

On the other hand, a certain reductionist view of this approach is criticised about the causes of loneliness around the availability or not of social networks or attachment

figures, ignoring other variables identified as significant such as elements of psychological orientation, age, culture or gender (Tzouvara et al., 2015).

2.2.4. Cognitive Theoretical Approach.

This approach is based on cognitive approaches and theories, such as Weiner's attributional theory, which is based on the principle that human experiences, including loneliness, can be explained on the basis of situational, environmental, behavioural and personality-based issues of the subject who experiences it (Tzouvara et al., 2015). In this explanation, loneliness is not only explained by social deficits but is also conditioned by the subjects' ability to manage and respond to the experience of loneliness. Thus, in these approaches, emphasis is placed on the specific weight that the cognitive processes of the subjects themselves have on the experience of loneliness (Donaldson and Watson, 1996; Tzouvara et al., 2015).

In this approach we can find a large number of definitions, being particularly significant the one proposed by de Jong-Gierveld (1987, 1998), based on a systematic review of the literature and empirical analysis of the meaning of loneliness for subjects in and out of this situation. In this way, loneliness could be defined as "*a situation experienced by the individual in which there is an unpleasant or unacceptable lack of certain relationships*", in which the lack of relationships may be due to a double situation: on the one hand, a deficit in the number of relationships that are valued as desirable or admissible, and on the other hand, a lack of intimacy spaces. From this assessment it, follows that loneliness is an experience that groups together the way in which the subject perceives, experiences and evaluates his or her isolation, as well as a deficit of communication with other subjects (de Jong-Gierveld, 1987, p. 120).

In this approach we find the following approaches:

- Cognitive approach**:** For this approach (with main references in Heider's Attribution Theory developed in 1958 and main authors Peplau and collaborators, loneliness is nothing more than the discrepancy between desired and experienced levels of social interaction, something that tends to occur with a high level of frequency in human experience. In this sense, Perlman and Peplau (1981: p.31) define loneliness as an

"*unpleasant experience that occurs when a person's network of social relationships is deficient in some way important to the individual, either quantitatively or qualitatively*". As can be clearly seen in this definition, the emphasis is on the fact that cognitive processes of various kinds (beliefs, expectations, social norms, causal attributions, etc.) are key components that mediate a subjective experience of loneliness. The causes of this discrepancy may be multiple, ranging from elements associated with the subject's personalit, to situational issues, to biographical elements, and most especially those of a cognitive nature.

- Cognitive-Behavioural and Reinforcement Approach described by Young**:** Young (1982) defines loneliness as "*the perceived absence of satisfying social relationships, which is accompanied by symptoms of psychological distress related to this perceived lack"* (cited in Pinquart and Sorensen, 2001). Young's proposal has many similarities with the above approach and takes as its starting point Beck's Cognitive-Behavioural Theory and Reinforcement Theory. In this way, he proposes that the availability of a repertoire of social relationships functions as a protector against the experience of loneliness, in such a way that the absence (real or perceived) of such a repertoire is seconded by a series of manifestations such as anguish, sadness, depression, anxiety, fear or anger.
- Privacy approach**:** The main authors of this approach are Derlega and Margulis (1982), whose work is based on the reformulation of works in the field of social psychology (Irwin Altman, 1975, 1976, 1977 cited in Derlega and Margulis, 1982). In this approach, aspects such as the consubstantiality of this phenomenon to the human experience are repeated, as well as its causality in internal and external elements to the subject himself, although special attention is paid to the contemporary determinants of loneliness (without discarding the weight of past biographical experiences).
- General Systems Theory: Finally, we come to the model proposed by Flanders (Flanders, 1982), in which loneliness is understood from an ambivalent position. On the one hand, loneliness involves the experience of a painful event, but at the same time, it is adaptive in nature. The latter is explained by the need to find a point of balance between a situation of total absence of relationships and one in which the individual experiences social overload or saturation that generates stress. In this

model, the causal explanations for loneliness can be found both in the individual him/herself and can be derived from situational elements.

As can be clearly seen from the above approaches, there is a multiplicity of conceptual proposals, which have evolved over time as interest in the scientific study of loneliness has progressed. In general, it can be affirmed that all these approaches are highly conditioned by the theoretical approaches to the study, resulting in the impossibility of reaching a consensus on the explanation and definition of loneliness. All these issues contribute to making the study of this phenomenon more difficult.

This theory suggests that loneliness can be combated with interventions that raise self-esteem and the social skills available to them, and there is some empirical evidence to support this position. This theory does not take into account the strong links between social networks and loneliness (Wenger, 1996) and does not account for people with cognitive impairment. (Riberio, 1989).

Similarly, another series of limitations are identified in this approach. Some of these limitations would be, for example, not taking into account the cultural components related to the phenomenon of loneliness, the role of the subject's cognitive impairment in the experience of this situation or the availability or not of objective social support networks (Donaldson and Watson, 1996; Tzouvara et al., 2015).

By way of summary, it can be said that, on a significant number of occasions, the approaches proposed are based on a review of previous theories or are based on clinical practice to explain the phenomenon of loneliness. For the most part, loneliness is related to a negative experience inherent to human beings (even defined as pathological in some proposals) whose causality can be diverse, although with a strong weight on the subject's present events.

2.3. EFFECTS OF SOCIAL ISOLATION AND UNWANTED LONELINESS IN OLDER ADULTS.

The WHO considers social support networks to be a social determinant of health on a par with education, gender, social status, physical environment or health services.

Living alone, social isolation and unwanted loneliness are phenomena that seriously condition the quality of life and health conditions of the elderly population. These phenomena are independently related to similar health outcomes. However, there is a deficit of work examining how the experiences of living alone, loneliness and social isolation combine and how these groups might be linked to health (Pynnonen, 2017).

Today, social isolation and unwanted loneliness have become a public health problem, not only as a source of suffering and as an influence on the health of older people, in terms of morbidity and mortality, but also because of their significant impact on society and health systems.

The social consequences of social isolation and unwanted loneliness have not received the same attention as the physical and psychological effects. However, it has been suggested that both factors may be associated with difficulties in maintaining previous levels of social participation (Goll et al., 2015).

Socially connected people can receive structural support information from network members or co-residents, which can help them actively cope with different everyday situations (Waite and Hughes 1999). The results of different studies show that social isolation and loneliness have a direct relationship with the competence necessary to develop tasks such as access to material resources such as information, autonomy with respect to mobility or the decision-making process of financial nature (Lin, 2012).

Along with this, we find that social isolation and unwanted loneliness are directly related to socially disruptive or risky behaviour (Gardner et al., 2005; Umberson et al., 2006).

Social isolation and unwanted loneliness have been linked to adverse health outcomes through lifestyle or health-related behaviours. The quality and quantity of social relationships can exert favourable or unfavourable influences on health behaviours and outcomes. A meta-analysis of patient adherence to medical treatment found that higher structural, functional and quality measures of social connectedness were associated with better adherence, with the strongest effect on social support (Donovan et al, 2016, 2017).

About the potential impact on the healthcare system, social isolation and unwanted loneliness have been identified as social predictors of higher numbers of doctor visits, re-hospitalisations and increased hospital stay (Zhang, 2018). This may be due not only to the isolation-loneliness-health relationship, but als to the fact that older people who experience these situations use visits to healthcare staff not always for health reasons but to satisfy part of their need for interpersonal interaction.

Finally, regarding the consequences in terms of morbidity and mortality, a significant relationship is identified with pathologies such as depression (Alpass and Neville 2003), poorer cognitive functions (Cacioppo and Hawkley 2009), cardiovascular disease (Valtorta et al., 2016b), poorer self-rated health (Nummela et al., 2011), worsening physical functioning (Perissinotto et al., 2014) and lifestyle (Alpass and Neville, 2003).

Over the past twenty-five years, the importance of social factors related to unwanted isolation and loneliness on mental health has been highlighted (Cattan et al., 2005; Corrigan et al., 2003; Chester et al, 2014; Gardner, Pickett and Brewer, 2000; Hawton et al., 2011; Heinrich and Gullone, 2006; Leary, 1990; Leary, Twenge and Quinlivan, 2006; Linz and Sturm, 2013; Muñoz, Vázquez and Vázquez, 2003; Stenseng et al., 2015; DeWall and Baumeister, 2006; DeWall et al., 2010).

Regarding the impact of these psychosocial circumstances on their health, living alone, being socially isolated and loneliness have been considered psychosocial health risk factors and have been included in the screening criteria for the detection of frail elderly in primary care (Martín Lesende et al., 2010). This should make these phenomena a particularly relevant public health concern.

In terms of mortality, these phenomena are a strong predictor of mortality. The associated risk among these variables is considered to be comparable to that of other well-established risk factors for mortality (Holt-Lunstad et al., 2017; Holt-Lunstad et al., 2010; Luo et., 2012; Chopik, 2017; Tilvis et al., 2011).

Social isolation has been associated with a significantly increased risk of premature all-cause mortality based on studies spanning more than 40 years. The excess

mortality attributable to the risk of social isolation rivals the impact of physical risk factors such as obesity and smoking (Donovan et al., 2016). However, the evidence establishing loneliness as a risk factor for premature mortality is not as extensive, but it is growing (Donovan et al., 2016).

To clarify the extent to which these psychosocial situations (living alone, objective and subjective loneliness) pose a real risk to health risknstad et al., (2015) conducted a meta-analysis to test the relationship of these three factors with mortality. After controlling for the influence of potential covariates, they found that living alone increases the probability of dying by 32% and that social isolation and loneliness increase the probability of dying by 29% and 26% respectively.

When it comes to explaining the relationship between social isolation and unwanted loneliness and its effects on health conditions, two broad explanations are often proposed. The first one considers pathophysiological elements, while the second one gives more importance to aspects of social moulding and behavioural elements.

From a pathophysiological point of view, social isolation and unwanted loneliness induce a situation of psychological stress that would alter the immune response by activating two axes: on the one hand, the hypothalamic-pituitary-adrenal axis is constantly activated and on the other the neuroendocrine (sympathoadrenal) axis (Yang and Glaser, 2000). However, this relationship remains to be confirmed (Hackett et al, 2012).

On the other hand, we would find that social isolation and unwanted loneliness would generate a state of hypervigilance that alters the psychological processes that influence physiological functioning, decreasing sleep duration and quality (Ong et al, 2012) and increasing morbidity and mortality (Cacioppo et al, 2015; Gené-Badia et al, 2016).

Likewise, some studies link neuroendocrine alterations similar to those linked to stress, the cause of which would be social isolation and unwanted loneliness (Holt-Lunstad et al., 2017).

In addition to this explanation, it has been identified how social isolation and unwanted loneliness affect health outcomes through behavioural pathways as the social network shapes behaviours and lifestyles from adolescence to old age. These phenomena have been associated with adverse health behaviours: poorer health practices (e.g., alcohol consumption and smoking) and fewer health-promoting behaviours (e.g., less physical activity, poor nutrition) among older people.

From this point onwards, the following section will be devoted to a differentiated examination of the health effects of the phenomena of social isolation and unwanted loneliness in older adults.

2.3.1. Effects of social isolation.

Already in the 1990s, authors such as Baumeister and Leary (2022), starting from the premise that human beings need belonging which consists of a desire to form and maintain a certain number of meaningful and positive social relationships, established that, from this point of view, people who experience significant and persistent difficulties in establishing and maintaining such satisfactory relationships with other people, and therefore have difficulties in meeting their belonging needs, are at risk of experiencing feelings of deprivation which manifest themselves in different ways on multiple levels.

During this time, reviews and systematisations of the health effects of the phenomenon of social isolation have been carried out (Heinrich and Gullone, 2006; Jones and Hebb, 2003; Marangoni and Ickes, 1989).

First, it is possible to cite evidence linking social isolation with a significant increase in mortality risk (Berkman and Glass, 2000; Berkman et al., 2004; Bower, 1997; Holt-Lunstad, Smith and Layton, 2010; Patterson and Veenstra, 2010; Shiovitz-Ezra and Ayalon, 2010; Seeman et al., 2002; Friedmann et al., 2006; Stuck et al., 1999; Stuck et al., 2002).

We also found references to increased hospitalisations and re-hospitalisations (Giuli et al., 2012; Hastings et al., 2008; Jordan et al., 2008; Löfvenmark et al., 2009; Mistry et al., 2001).

Turning now to a more detailed analysis, which presents the effects grouped by areas, we can mention the following:

a) Physical.

In the physical sphere, social isolation is related to:

- an increased risk of developing health problems (Rutledge et al., 2008; Thurston and Kubzansky, 2009); chronification of poor health status (Bower, 1997) and a poorer prognosis for recovery from ongoing disease processes (Berkman and Glass, 2000; Berkman et al, 2004; Friedmann et al., 2006; Holt-Lunstad et al., 2010; Patterson and Veenstra, 2010; Shiovitz-Ezra and Ayalon, 2010; Seeman et al., 2002; Stuck et al., 1999; Stuck et al., 2002).
- increased exposure to disabling processes or disability (Berkman and Glass, 2000; Berkman et al., 2004; Bower, 1997; Seeman et al., 2002; Friedmann et al., 2006; Holt-Lunstad, Smith and Layton, 2010; Patterson and Veenstra, 2010; Shiovitz-Ezra and Ayalon, 2010; Stuck et al., 2002; Stuck et al., 1999).
- elevated risk of smoking, low activity levels and unhealthy behaviours (Shankar et al., 2011). House (2001) compares the health risks of social isolation with those of smoking and obesity.
- hypertension (Bower, 1997).

b) Affective:

People suffering from extreme social isolation also tend to experience feelings of despair, lack of affection, rejection, depressive mood problems, and feelings of impatience and appear to maintain self-devaluative cognitive functioning patterns (Paloutzian and Ellison, 1982; Rubinstein and Shaver, 1982; Twenge et al., 2003).

There is also evidence that feeling socially isolated produces feelings of loneliness, depression, anxiety and anger (Baumeister and Tice, 1990; Baumeister and Leary, 1995; Cacioppo and Hawkley, 2003; Cacioppo et al., 2010; Chester et al., 2013; Chipuer, 2001; Twenge et al., 2001).

There are some theories about the relationship between social isolation and the propensity to develop aggressive behaviours (Leary et al., 2006), in the sense that aggressiveness would be a control strategy over a situation lacking relational stimuli experienced by the subject in social isolation. Twenge et al., (2007) found that reconnecting with some social activity, even if only by recalling it, reduces aggressive behaviour.

c) Psychopathological.

The above variables have an impact on the increased likelihood of psychopathological problems (Asher and Paquette, 2003). Some of the psychopathological problems found among these population groups are personality disorders, depressive episodes and depression (Chou et al., 2011; Prince et al., 1997; Warner, 1998), suicide (Centers for Disease Control and Prevention, 1996), self-injurious behaviours (Donovan et al, 2016; 2017). and alcohol dependence (Green et al., 1992; Nolen-Hoeksema and Ahrens, 2002).

On the other hand, as positive effect of social isolation, DeWall et al., (2011) found that exclusion sets in motion an automatic process of emotion regulation, in which positive emotions become very accessible, connecting the research to positive mental health.

d) Cognitive.

Isolated individuals tend to develop negative self-evaluation processes in the sense of negative self-evaluations, such as feelings of inferiority, unattractiveness or social competence among others (Anderson et al., 1983; Kupersmidt et al., 1999) leading to low self-esteem (Leary, 1990; Nurmi et al., 1997; Peplau and Perlman, 1982).

In parallel, cognitive variables related to suspicion of others and sensitivity to rejection have been identified, indeed perceptual biases have been observed that lead to the perception of others as "hostile" (Cacioppo and Hawkley, 2003; Ernst and Cacioppo, 2000; Gardner et al., 1998; Rotenberg, 1999) and to perceiving neutral information as hostile, which has implications for aggressive behaviour (DeWal et al., 2009).

A decrease in social interaction may hurt the cognitive status of older people (Zunzunegui, Alvarado, Del Ser and Otero, 2003) and not participating in leisure activities seems to be an antecedent of decreased cognitive functioning (Wang et al., 2002).

Experimentally, Twenge et al., (2001) have been able to demonstrate downward effects on higher cognitive processing, with a significant decrease in cognitive performance in complex tasks such as logic and reasoning, both in speed and accuracy; while simple information processing does not seem to be affected (Baumeister et al., 2002).

On the other hand, findings suggest that social exclusion interferes with executive control of attention, and this effect is manifested in specific aspects of cognitive performance and brain function (Campbell et al., 2006).

e) Behavioural.

Along with social exclusion come self-conscious, unassertive and socially unskilled behaviour (Ernst and Cacioppo, 2000; Inderbitzen-Pisaruk et al., 1992).

Social exclusion generates behavioural patterns of self-neglect or poor self-care or self-regulation, e.g. engaging in unhealthy behaviours versus a decrease in healthy behaviours (Baumeister et al., 2005; Twenge et al., 2002).

Risk behaviours such as increased alcohol consumption (Hanson, 1994), sedentary behaviour (Eng, et al., 2002) and even a worsening of prosocial and helping behaviours also appear, as rejection temporarily interferes with some emotional responses, thus affecting the capacity for empathic understanding of others, resulting in reduced helping or cooperative behaviours (Ciarocco and Bartels, 2007; Twenge et al., 2002; Twenge et al., 2007).

Social isolation also leads to reduced sensitivity to physical pain, emotional insensitivity, and reduced empathy for another person's suffering (DeWall and Baumeister, 2006).

2.3.2. Effects of unwanted loneliness.

Firstly, it is important to highlight that it is possible to identify well-established epidemiological evidence that identifies unwanted loneliness as an important predictor of premature death, with similar or greater effects than other well-established risk factors such as smoking and obesity (Luo et al., 2012).

Unwanted loneliness can coexist with a wide range of health problems, making it a risk marker of high clinical relevance (Matthews et al, 2019).

a) Physical.

Unwanted loneliness is mainly associated with pathologies related to hyperstimulation of the hypothalamic-pituitary-pituitary-adrenal-cortical axis, cardiovascular risk, high blood pressure, hyperlipidaemia, sleep disturbances, alterations in immune function and effects on the transcription of some genes, etc. (Hawkley and Cacioppo 2010).

Basically, in the physical sphere, loneliness behaves as a potent cardiovascular risk factor, affecting our immune system and leading to cognitive impairment and mental health problems, reduced functional capacity and premature death (Christensen et al, 2020; Hackett et al, 2012; Hawkley et al, 2010; Holt-Lunstad and Smith, 2016; Thurston and Kubzansky, 2009; Valtorta et al, 2016; Whisman, 2010;).

Secondly, it is possible to establish a clear relationship between loneliness and frailty in older people. It is estimated that around 10% of people over 65 are frail.

Davies et al., (2021) have assessed the trend in frailty status associated with unwanted loneliness over 14 years in a representative sample of older English adults. This research suggests that both loneliness and social isolation are associated with an increased risk of developing frailty and therefore provide an opportunity to attenuate that risk. Because loneliness is a separate construct and is independently associated with frailty, such findings support interventions that target both and support the need for further research on the effectiveness of such interventions when these constructs are analysed separately.

b) Psychopathological.

Within the psychological effects, it is also possible to identify a series of emotional effects associated with unwanted loneliness, which are undoubtedly the most verbalised by the older adults who experience them. Among the most frequent feelings are those of isolation and emptiness or sadness and fear (Martínez, 2017).

With regard to mental health, there is sufficient evidence that unwanted loneliness is significantly related to mental health, independently of other variables important for health, such as living alone and perceived health (Losada et al., 2012). It has been associated with depression (Cacioppo et al., 2010; Martinez, 2017), anxiety (Dahlberg et al., 2018; Gale et al., 2018; Gerino et al., 2017; Tomstad et al., 2017; Wang et al., 2018), low self-esteem (Pinson, 2010, Martinez, 2017), emotional instability, negative self-thoughts (Stolz et al., 2016), etc.

Unwanted loneliness is not a diagnostic feature of depression, although it may be an associated symptom. These phenomena likely influence each other and the pathogenesis of depression in multifaceted ways. Some observational data suggest that loneliness predisposes to avoidance of others, social isolation and subsequent depression (Donovan et al., 2016; 207).

On the other hand, other studies identify depression as a risk factor for loneliness. Thus, research such as Prieto-Flores et al., (2011) and Fernández et al., (2018) suggested that loneliness and depression have a feedback relationship, thus generating a synergistic effect between the two that is very difficult to combat and causes considerable deterioration in the elderly person.

Unwanted loneliness has also been associated with suicide across all ages (Donovan et al., 2016; 2017). As expected, depression is the most important cause of suicide, however, unwanted loneliness has been found to be an independent factor contributing to the increased risk of suicide attempts.

In recent years, suicide is a matter of great concern, particularly among people over 75 years of age (Pitchot, 2014). Thus, depression, together with other psychiatric

disorders, are clearly the most important risk factors for suicide in older people. In this sense, most older adults who commit suicide live alone. However, the relationship between loneliness and suicide is complex. In fact, social isolation has a more significant impact than loneliness as such; and the risk of suicide is particularly high during the year following the death of the spouse, with the loss of a loved one being one of the most stressful life events for the elderly person (Pitchot, 2014)

Finally, unwanted loneliness increases the risk of specific psychiatric disorders and their consequences (Tomstad et al., 2019) and perceived financial adequacy (Donovan et al., 2016; 2017).

There is also evidence that mental health problems put individuals at risk of physical health problems (Gardner et al., 2005).

c) Cognitive.

In the cognitive dimension, it is possible to identify a series of effects derived from unwanted loneliness. When loneliness is experienced, it generates an activation that implicitly causes hypervigilance towards social threats, generating cognitive biases in attention and memory (Cacioppo and Hawkley, 2009; Cacioppo and Cacioppo, 2014; Martínez, 2017).

Most studies indicate that there is a significant negative association between unwanted loneliness and general cognitive ability (Donovan et al., 2016).

This negative relationship between this variable and intelligence has also been seen, with levels of unwanted loneliness being associated with lower intelligence, fu one review study, loneliness was found to be the only significant predictor of cognitive ability in older people.

Concerning memory, inverse associations have been found between loneliness and immediate and delayed recall, such that people with higher levels of social isolation and unwanted loneliness perform worse on immediate and delayed recall tasks.

As for processing speed, it is possible to identify an inversely significant association between this variable and unwanted loneliness.

Several studies identified that a higher level of loneliness significantly predicted an increased risk of dementia and Alzheimer's disease at follow-up.

In particular, unwanted loneliness has been found to be an independent risk factor with a cumulative effect on cognitive decline and dementia risk in some studies, suggesting shared and distinct mechanisms (Donovan et al., 2016).

Regarding loneliness as a predictor of cognitive impairment, the work of Zhong et al., (2017) and Donovan et al., (2017) agree with this proposal. In particular, the study by Donovan et al., (2018) identifies loneliness as a relevant neuropsychiatric symptom in preclinical Alzheimer's disease. Related to this, previous studies (Wilson, 2007) support the relationship between loneliness, cognitive impairment and Alzheimer's disease. In addition, people with Alzheimer's dementia are characterised by being more dependent and vulnerable.

On the other hand, and in the same vein as the relationship between loneliness and depression, a bidirectional relationship between loneliness and cognitive impairment has also been reported (Zhong, 2017). This could imply that the factors of loneliness, dementia and depression are interrelated, as several studies also support the relationship between depression and dementia (Prieto-Flores, 2011).

Multiple studies show a clear relationship between unwanted loneliness and accelerated cognitive decline, independent of well-established socio-demographic risk factors such as age, female sex, low education, low socio-economic status, etc. Cognitive decline is estimated to be approximately 20% faster (Donovan et al, 2016, 2017).

CHAPTER 3. INTERVENTION IN SOCIAL ISOLATION AND UNWANTED LONELINESS OF NON-INSTITUTIONALISED ELDERLY

The centrality given to the issue of social isolation and unwanted loneliness in older adults does not begin to become visible until relatively late in life. It was not until the first decade of the 21st century that this issue began to be placed on the agenda of both public policy and research organisations (Department of Health, 2001; World Health Organisation, 2002; López, 2005). In fact, until well into the last decade, it is possible to identify a clear deficit in terms of research on the subject, and the results of this research, at that time, were considered confusing and lacking in coherence by different experts (Elkan et al., 2001; Findlay, 2003).

Gradually, this phenomenon has become more and more central, due to the recognition of its seriousness and extent, especially in the so-called industrialised countries, which has encouraged greater efforts and resources to be devoted to research to determine not only the components and determinants of these phenomena, but also to establish intervention strategies to deal with them, with effective clinical, economic and social effects (Dickens et al., 2011).

This change in attitude towards the phenomenon of social isolation and loneliness in older adults has favored the production of scientific material very focused on the aspect of intervention in a relatively short time. Social isolation and unwanted loneliness among the elderly have gradually come to occupy the focus of attention in the field of health and social policy in many countries. However, despite the fact that the health consequences of loneliness and social isolation are well documented, the evidence on the prevention and intervention of these phenomena is still deficient.

An effective strategy to obtain a complete and in-depth view of this particular aspect would be to consider the different systematic reviews that have been carried out on the subject so far.

Systematic reviews that address the issue of interventions in the field of social isolation and loneliness often discuss interventions that address both issues interchangeably. The available literature argues in two directions for this choice.

Firstly, because both concepts are used interchangeably in practice and research (Cattan and White, 1998; Findlay, 2003; Cattan et al., 2005).

Secondly, both practitioners and researchers often start from a multidimensional consideration of social isolation, which incorporates concepts related to quantitative and qualitative aspects of social relationships, such as social support, network a of social relationships, loneliness, etc. (Dickens et al., 2011; Chen and Schulz, 2016; Morris et al., 2014).

However, we also find references that advocate a clear distinction between the two concepts, as they refer to completely different situations, although they are significantly related (Cohen-Mansfield and Perach, 2015).

Another important aspect highlighted by these reviews is the low quality of the available evidence, as research on interventions on social isolation and loneliness in older people that provide evaluation data on their effectiveness is scarce.

In addition, the existing publications reflect very diverse methodological designs (Lezaun et al., 2018; Martínez, 2017), mostly finding studies conducted with small samples and suboptimal study designs, without control groups, difficult to compare and generally of poor quality due to the many limitations and difficulty of the subject under study (Bartlett et al., 2013). However, we can also find randomised controlled trials, with experimental and control groups, with pre- and post-intervention measures of much greater methodological consistency (Pitkala et al., 2009).

In any case, and as highlighted by several authors (Cohen-Masfield and Perach, 2015; Findlay, 2003; Masi et al., 2011; Ong et al., 2016) we have more intervention programmes than evidence of their benefits, due to a lack of methodological rigour and evaluative deficiencies; very varied approaches (cognitive, relationship-building, companionship, increasing relationship opportunities, technologies, etc.) that make their

comparison very complicated; and a lack of multidimensionality in the way of understanding interventions in social isolation and unwanted loneliness.

In short, despite the growing interest in generating valid knowledge in this field, it is possible to identify numerous problems in research aimed at evaluating the effectiveness of interventions to reduce loneliness and social isolation among older people.

The following is a brief summary of the main **issues and findings** arising from the main systematic reviews that have studied the effectiveness of interventions commonly used to reduce social isolation and unwanted loneliness in older people, presenting them in a narrative form.

3.1. ISSUES RELATING TO THE THEORETICAL UNDERPINNING AND EVALUATION OF THE INTERVENTION.

In terms of theoretical underpinning, it should be noted that the different reviews, on a significant number of occasions, reveal that no underlying theoretical basis or rationale was provided for the categorisation of interventions. The lack of theoretical underpinnings or explanations as to why interventions were categorised in a certain way could lead to difficulties in trying to distinguish in which context a particular category of intervention is most appropriate or effective. This reduces the value of the accumulated evidence base, as we are less able to identify candidate characteristics that may contribute to the effectiveness of interventions.

In presenting their findings, the different reviews have used a variety of terms to categorise the characteristics of the interventions such as format, nature, context or approach.

About the instrumentalisation of the measurement/evaluation of these situations of unwanted loneliness and social isolation, there are a number severalties to be taken into account.

About measurement, we find that the main identifiable difficulty is that different measurement instruments have been used, which makes it difficult to make comparisons

of effectiveness between interventions (Gené-Badia et al., 2020), essentially because the tests that measure loneliness or social network are not measuring the same construct, making the results difficult to compare (Lezaun et al., 2018).

On the other hand, there are a number of difficulties related to outcome evaluation (Pitchot, 2014). The most common evaluation strategy is that which adopts an exclusively quantitative approach, which is significantly biased because, although they provide valuable insights into the effectiveness of interventions, there is a clear deficit when it comes to identifying the factors that may influence their implementation (Pitchot, 2014). However, in the last decade it is relatively common to identify different projects that have evaluated their interventions with mixed methodologies (quantitative and qualitative) in the same evaluation process (Lezaun et al., 2018) as well as an emergence in the use of qualitative methodologies for the evaluation of intervention programmes against unwanted loneliness and isolation (Hemingway and Jack, 2013; Swindells, 2013).

3.2. ISSUES RELATING TO THE CONTENT OF THE INTERVENTION.

With regard to content, it should be noted that interventions to reduce unwanted loneliness and/or social isolation are complex, as they have several interacting components (for example, goals, personnel, activities, resources, and mode of implementation).), which can interact with the characteristics of the local context in which they are applied (for example, age profile of participants, health status, environment such as housing or cultural characteristics) (Holt.-Lunstad, 2010).

These characteristics should be sufficiently described to allow the use of the body of evidence to identify which characteristics are effective in a particular context and for which specific population.

In addition, there is high variability in the nature of the interventions, which makes direct comparison significantly difficult (Cattan et al., 2005; Dikens et al., 2011; Facoya et al., 2020; Findlay, 2003; Hagan et al., 2014; Landeiro et al., 2017).

Concerning the nature of the interventions, four strategies can be identified, which are the most scientifically endorsed (Masi et al., 2011):

- Those that enhance social skills.
- Those aimed at strengthening social support.
- Those that increase opportunities for social interaction.
- Those aimed at socio-cognitive training.

Regarding the context of these interventions, it is mainly community-based, although it is possible to identify some interventions in specific contexts, e.g. in residential homes for the elderly. Still, this is not usual. This is particularly relevant since, as some authors highlight, interventions on unwanted loneliness and/or social isolation seem to be absent from residential centres despite the overwhelming prevalence of this (Drageset et al., 2011; Jansson et al., 2017; Slettebø, 2008;), reaching in some cases almost 60% of the people residing in them (Lezaun et al., 2018).

If we identify the specific content of some of these interventions, we find those using animal-assisted therapy, such as the programme by Banks and Banks (2002) or Vrbanac et al., (2013); others using physical exercise (Tse et al., 2014) or indoor gardening programmes to facilitate increased socialisation and life satisfaction, reduce loneliness and promote activities of daily living for older people (Brown et al., 2004).

It is also possible to identify interventions in the context of service provision, focused on providing assistance in carrying out a particular activity (Siette et al., 2017; Wigfield et al. 2021), which offer the main advantage of ensuring that support can be sustained in the medium to long term.

Along with these, we found a significant number of technology-based interventions, showing that frequent use of technology was associated with greater subjective health and well-being in older adults, which also allowed them to reduce the digital divide associated with this age group (Chopik, 2016; Czaja et al., 2017).

Technology-based interventions and physical activity programmes appear as a promising alternative, although several authors have raised the alarm about the need for "good" interventions and not just "technologically innovative" interventions, which is a great danger at the moment (Czaja et al., 2017; Lezaun et al, 2018; Stojanovic et al., 2016).

3.3. QUESTIONS REGARDING THE FORMAT [INDIVIDUAL VERSUS GROUP] OF THE INTERVENTION.

The intervention programmes analysed develop both individual programmes (in which there are no exchange situations between participants or other residents) and group intervention programmes (in which participants interact with each other at some point during the workshop or programme).

In the Cattan et al., (2005) review, group-based interventions predominate (17), compared to individual (10), service delivery (3) and community development (1).

The question of individual or collective character is an important characteristic because group interventions are likely to be more appropriate for addressing social loneliness among individuals with insufficient social ties (Mills, 2017) than individual interventions. However, it is only one of many intervention characteristics that may be directly, or through interaction with other characteristics, associated with intervention effectiveness.

A special type of intervention is called "One-to-One" interventions, which generally involve pairing an individual with a professional or volunteer, who regularly connects with each other. These are interventions that have been widely use, and have shown positive effects on health, helping people to reconnect with others. However, their effect has not been evaluated in many studies, which limits the conclusions that can be drawn about the effectiveness of this approach.

Group interventions usually bring people together around a common interest. They may include, for example, social activities, educational sessions, physical activity sessions, group discussions or group therapy. Miyawaki (2015) suggests that group activities can be particularly important for minority groups who share the same cultural values and who may have difficulty interacting with the wider community due to language or cultural barriers. Such interventions can enhance an individual's sense of belonging while alleviating social isolation (Platt, 2009). According to the Social Care Institute for Excellence (2021), research evidence is in favour of group activities with a creative (e.g. Mindfulness), therapeutic (cognitive therapy, stress reduction etc.) or discussion-based

approach (Creswell et al., 2012) and social support interventions (Saito et al., 2012). Other examples of group interventions that have reduced social isolation include discussion groups on health-related issues among women living alone; bereavement support for the recently widowed (Cattan et al., 2005; Windle et al., 2011).

Different authors prefer group therapy to individual therapy in homes for the elderly, as it favours social contacts between them, improves communication skills and allows new relationships to be established. For this reason, it seems interesting to promote group interventions, taking advantage of the institutionalised environment in which people can interact more easily with each other.

There is limited evidence of the effectiveness of interventions to reduce social isolation based on community development and neighbourhood relationships. However, the literature suggests that there is considerable potential for developing such approaches (Buffel et 2, 2018).

It is generally accepted that educational and social group interventions targeting specific groups can alleviate social isolation and loneliness in older people, while the effectiveness of interventions focusing on home visits and befriending has not been demonstrated (which does not mean that they are unimportant).

There are numerous possible explanations for the variability of intervention effects. For example, group interventions may provide beneficial effects and create a sense of safety and belonging, but the true effect of the intervention may be masked by the nature of meeting in a group (Cacciopo, 2015).

Individual interventions, on the other hand, could offer a higher quality of the links created and influence empowerment to participate socially (Nicholson, 2012).

Although there are no definitive results, those identified suggest that both group and individual formats may be worthwhile in addressing loneliness and social isolation among older people. However, the superiority of one over the other could not be firmly determined due to the arguments outlined above.

Stojanovic et al., (2016) conducted a review and update of interventions on loneliness and social support published in Spanish and Italian. The results of these interventions were particularly significant in showing a reduction in loneliness and social isolation. Among them, community-based programmes showed an important role in increasing social inclusion, while educational interventions focusing on social involvement and support were effective in reducing loneliness (Lezaun et al, 2018).

3.4. ISSUES RELATING TO THE USE AND EVALUATION OF STANDARDISED INTERVENTIONS.

An additional issue is the need to test individualised interventions, as the individuality of the experience of social isolation and loneliness is an important issue that has also been highlighted in the literature (Landeiro et al., 2017).

There is no one-size-fits-all approach to loneliness interventions (Holding et al, 2020), and it is recommended that an assessment of individual needs be undertaken, as well as subsequent tailoring of programmes to meet the needs of individuals (Mann et al, 2017), specific groups or the extent and determinants of an individual's isolation and loneliness. This includes socio-demographic factors, i.e. age, poverty, being a carer; the social environment, access to transport and physical or mental health among others (Valtorta and Hanratty, 2012).

This same line of considering the individuality of the experience of social isolation and unwanted loneliness raises the need to take into account the needs of less researched groups, such as people with physical disabilities or minority ethnic groups, carers, recent immigrants, people with hearing and visual impairments, people who have been isolated for a long time, and males (Wenger et al., 2004). Several authors have reported that the recruitment of participants in the primary studies was heavily skewed towards the female population. This may be due to the reluctance of older men to participate in services and activities compared to women.

3.5. FINDINGS RELATED TO THE EVALUATION OF THE EFFECTIVENESS OF INTERVENTIONS.

At this point, it seems particularly relevant to highlight the accumulated evidence regarding the effectiveness of interventions in the light of the different reviews consulted (Cattan and White, 1998; Cattan et al., 2005; Dickens et al., 2011; Findlay, 2003).

The evaluation of interventions and the dissemination of the results of the research carried out is of great importance in order to advance knowledge and to be able to plan new interventions to combat social isolation on this basis.

In general, these programmes have been found to improve not only feelings of perceived loneliness, but also other related factors such as quality of life, psychological well-being, socialisation or depressive symptoms.

Programmes that include group therapies assess factors such as socialisation, among others, as these therapies allow participants to share their experiences with other members of the group. But not only group therapies, but also animal-assisted therapies, which work on an individual level, confirm an increase in interactions between participants. Given the interaction of loneliness with social isolation and depression, it would be interesting to implement programmes where participants can interact and form bonds.

Individual reviews highlighted the particular effectiveness of psychoeducational approaches and social skills training. They have also found that group interventions that actively involved people in the design, targeted specific groups, and included an educational or therapeutic aspect, were more effective in alleviating social isolation (Dickens et al., 2011; Windle et al ., 2011). Along with this, various articles show that group interventions, with support and educational activities, aimed at specific groups and that are supported by existing community resources, which also include specific training and support for facilitators (Cattan et al ., 2005; Dickens et al., 2011; Findlay, 2003) generally voluntary for these actions, seem to be the most effective interventions (Elston et al., 2019; Leigh-Hunt et al., 2017; Lezaun et al., 2018 ; Lim et al., 2020).

Regarding the effectiveness of interventions mediated by technological components, three out of four identified technological interventions reported positive results (Pitchot, 2014), although at the same time it is possible to identify a series of empirical evidence capable of questioning some of the benefits of these types of systems. Initially, Pitkala et al., (2009) found encouraging results on the efficacy of this type of intervention, but more recently Chipps, Jarvis and Ramlall (2017), after carrying out a systematic review, showed that some programs obtained moderate efficacy and that the studies that endorsed them showed lack of rigor, concluding that the evidence for this type of intervention is inconsistent and weak.

In a broad sense, it can be argued that the most effective interventions were those that specifically targeted socially isolated or lonely individuals, had a sound theoretical basis, used a multi-level approach and involved the active participation of the participant.

3.6. MAIN RECOMMENDATIONS FOR INTERVENTION DERIVED FROM THE FINDINGS

In relation to the above, a number of indicators of effective interventions can be identified:

- The work of Dickens et al. (2011), confirms that theory-based interventions that could be qualified as methodologically sound provided more beneficial effects.
- Interventions are more effective if they include more than one methodology. In the same vein, active search processes are not sufficient as the sole element of the intervention, but can be very useful if coupled with engagement and intervention strategies.
- Interventions are more likely to be successful if the older person is involved in all steps, from planning, implementation and evaluation of the intervention.
- The intervention will be more effective if the evaluation is tailored to the intervention and includes a process evaluation.
- High-quality selection, training and support for intervention facilitators and coordinators is one of the most important factors underpinning successful interventions.

- Interventions that have demonstrated some effectiveness are those that involve some educational component and social or group activities; and if they are targeted to a specific population group (e.g. widowed, women, etc.).
- Interventions are more likely to be successful if they use community resources and empower the community itself. The work of Saito et al. provides significant evidence on the effectiveness and sustainability of interventions mediated by community structures (Zhong, 2017). Based on this work, it could be argued that a rational use of existing community services could influence the sustainability of interventions and generate positive outcomes, and would also "solve" the problem with respect to the intervention agents commonly found in the literature. In this same direction point to the results presented by Nicholson (2012), in which academic and community resources were used in the intervention and which had as their main foundation the fostering of open communication and the promotion of relationship-building techniques to help older adults connect with others (Nicholson, 2012).
- This suggests that it is not enough to simply go to the person's home or enrol them in a group, but that intervention activities need to be specified and tailored to the needs of the individual in each case. Systematic reviews suggest that programmes that are tailored to individual needs may be more appropriate and successful. When it comes to preventing social isolation, the effectiveness of such group activities from community-based senior centres is clear. On the other hand, when it comes to intervention with socially isolated people, who are unlikely to come to a senior centre on a voluntary basis, it is important to emphasise more individualised interventions, with a home-based approach by a professional, with the aim of assessing the health and needs of the socially isolated older person and acting as a link between the older person and the normalised network of social and health care resources.
- Some particular results to be taken into account are those related to groups with special characteristics. In this regard, some evidence has been identified about the beneficial effects of participatory arts programmes for older people with sensory impairments (Vogelpoel and Jarrold, 2006). This would be of particular importance not only because evidence on interventions targeting people with sensory impairments is lacking, but also because these groups often report lower estimates of self-reported health and engage in fewer social interactions (Laghi et al., 2011).

CHAPTER 4. OBJECTIVES.

The objectives that articulated the present research were the following:

- Main Objective:

To design, based on scientific evidence, and evaluate the effectiveness, in terms of reducing social isolation and improving HRQOL, of a multi-component non-pharmacological intervention, based on the clinical relationship, in elderly people living at home.

- Secondary Objectives:
  e) To identify the determinants of social isolation and loneliness in non-institutionalised older adults.
  f) To assess the compatibility and sustainability of the proposed intervention with the clinical practice of Primary Health Care professionals.

However, as already anticipated in the introduction, the present work was developed on the basis of the concatenation of three studies with their respective designs that articulated the objectives indicated above in a specific way. The objectives for each of these studies are as follows.

4.1. FEASIBILITY CONDITIONS OF A MULTICOMPONENT INTERVENTION TO REDUCE SOCIAL ISOLATION AND LONELINESS IN NON-INSTITUTIONALISED OLDER ADULTS.

The initial research questions that guided the study were: *Are there elements that act as conditions of viability in the practice of an intervention aimed at early identification and/or reduction of the situation of social isolation and loneliness in non-institutionalised older adults? Is it possible to design an effective and viable intervention in this area?*

On the basis of these, the following objectives were established:

- **Specific Objective 1**: To identify the possible structural, organisational and professional role-related elements of the primary care system that may condition the

viability of an intervention in the field of social isolation and loneliness in non-institutionalised elderly people.

- **Specific Objective 2**: Based on the identification of the above elements, propose a feasible and sustainable intervention design, using an evidence-based practice approach and expert panel.

4.2. EFFECTIVENESS OF A MULTICOMPONENT NON-PHARMACOLOGICAL INTERVENTION TO REDUCE SOCIAL ISOLATION AND LONELINESS IN COMMUNITY-DWELLING ELDERLY: A RANDOMISED CLINICAL TRIAL.

- **Specific Aim 1: To** assess the effect of a multicomponent intervention (based on the previous study design) on reducing social isolation and loneliness and improving health-related quality of life (HRQoL);
- **Specific Objective 2**: To identify factors associated with the improvement of social isolation and loneliness in non-institutionalised older adults.

4.3. CONDITIONING FACTORS FOR ADDRESSING SOCIAL ISOLATION AND LONELINESS IN NON-INSTITUTIONALISED OLDER ADULTS IN PRIMARY HEALTH CARE.

The initial research question guiding the study was *What are the factors that have influenced/conditioned the effectiveness of an intervention on social isolation of older people living at home, from the perspective of the intervention agents?*

On the basis of these, the following objectives were established:

- **Specific Objective 1**: To identify the main determinants of effectiveness and sustainability of interventions in the field of social isolation and loneliness with non-institutionalised older adults from the point of view of the agents.
- **Specific Objective 2**: Propose strategies to improve the intervention.

CAPÍTULO 5. ESTUDIO 1: ESTUDIO DE LAS CONDICIONES DE VIABILIDAD DE UNA INTERVENCIÓN MULTICOMPONENTE PARA REDUCIR EL AISLAMIENTO SOCIAL Y LA SOLEDAD NO DESEADAS EN ADULTOS MAYORES NO INSTITUCIONALIZADOS

5.1. METODOLOGÍA

5.1.1. Diseño.

Diseño mixto o híbrido, que contempla: 1) Diseño cualitativo con análisis Sistemático de Teoría Fundamentada (Glaser y Strauss, 1967) de datos recolectados mediante un diseño narrativo de tópicos (Mertens, 2005). El trabajo se fundamentó en el uso de técnicas conversacionales y narrativas de carácter individual (entrevistas en profundidad) y grupal (grupos focales y entrevistas dialógicas).para identificar los posibles elementos condicionantes de la viabilidad y sostenibilidad de una intervención con la práctica clínica; 2) Aplicación de Panel de Expertos – DELPHI para el diseño de una intervención de carácter viable, sostenible y eficaz, en el que se utilizó rondas sucesivas de cuestionarios anonimizadas.

5.1.2. Ámbito.

El estudio se ha desarrollado en trece centros de Atención Primaria del distrito sanitario de Córdoba y Guadalquivir, que abarcan tanto zonas urbanas como rurales, con pluralidad de condiciones de carácter socioeconómico y sanitario.

En estos centros se llevó a cabo el estudio experimental “Efectividad de una intervención no farmacológica multi-componente para reducir el aislamiento social y la soledad de mayores residentes en su domicilio”, financiado por la Consejería de Salud de la Junta de Andalucía, del que forma parte este primer análisis.

5.1.3. Sujetos.

Se realizó un muestreo estructural, intencional y de variación máxima, identificando tres perfiles: medicina de familia y atención comunitaria, enfermería comunitaria y enfermería de gestión de casos.

El censo de sujetos participantes en el estudio experimental anteriormente señalado estaba compuesto por 14 profesionales médicos, 20 profesionales de enfermería y 6 profesionales de enfermería gestora de casos. La selección se llevó a cabo entre aquellos que mostraron mayor motivación y compromiso con la intervención mencionada. Además, se realizó una valoración de sus posibilidades para ofrecer información detallada sobre el propósito del estudio.

El número de informantes (n=24) vino determinado por el criterio de saturación. Con ello, la recogida de información continuó hasta que se identificaron la mayor diversidad de aportaciones abordadas en profundidad.

Se excluyó expresamente la figura del profesional de trabajo social en el estudio teniendo en cuenta que los contenidos de la intervención contemplaban habilidades clínicas más identificadas con las profesiones de la salud (medicina y enfermería).

Para la aplicación de la técnica de panel de expertos se aplicaron los siguientes perfiles:

- Enfermera Gestora de Casos con al menos 5 años de antigüedad en el puesto de trabajo (n=8)
- Enfermera de Atención Comunitaria con al menos 10 años de antigüedad en el puesto de trabajo (n=6)
- Medico de Atención Comunitaria con al menos 5 años de antigüedad en el puesto de trabajo (n=6).

5.1.4. Dimensiones.

En los guiones de entrevista se utilizaron las siguientes categorías de partida:

- Conocimientos previos sobre el aislamiento social y soledad.
- Importancia otorgada por los profesionales sanitarios a estos problemas.
- Competencias de los profesionales sanitarios en la atención a estos problemas.
- Dificultades/ facilitadores para su abordaje sanitario

Para la realización del Panel de Expertos – Delphi se utilizaron las siguientes dimensiones de consenso:

- Contenidos de prácticas de intervención.
- Estructuración temporal.
- Soporte de aplicación.
- Rol profesional implicado.

5.1.5. Recogida de datos.

Se realizaron tres grupos focales, una entrevista dialógica y siete entrevistas individuales durante los meses enero a mayo de 2018 (inicio del proyecto donde se inserta el estudio, finalizado en 2020). Uno de los grupos focales se llevó a cabo con enfermeras gestoras de casos, otro con enfermeras de familia y otro mixto, con ambas. De forma individual se entrevistaron a una enfermera de familia, una enfermera gestora de casos, un médico de familia y cuatro médicos internos residentes, y se realizó una entrevista dialógica con dos enfermeras de familia.

Las entrevistas y grupos se registraron mediante grabación en audio y video, para ser transcritas posteriormente.

Para la realización del Panel de Expertos – Delphi se utilizaron técnicas de consenso. El estudio incluyó tres rondas consecutivas, de cuestionarios de encuestas, implementadas entre mayo y junio de 2018. Los participantes completaron las tres rondas consecutivas de cuestionarios en línea a través de Survey Monkey, en los que calificaron la relevancia de los ítems presentados mediante una escala Likert con valores entre 1 y 10 (siendo 1 *absolutamente irrelevante* y 10 *absolutamente relevante*).

En el caso de que los participantes puntuasen un ítem con una calificación de 8 o más, se les pedía que elaborasen una pequeña argumentación con la finalidad de que pudiera ser analizada por los autores y comunicada al resto del panel en la siguiente ronda.

5.1.6. Análisis de los datos

Se llevó a cabo un análisis de contenido mediante el método de las comparaciones constantes (Glaser, B. G. y Strauss, A., 1967) con la herramienta Weft-QDA. Se trata de un método inductivo en el que se combina la codificación de categorías con la comparación constante entre ellas. Este proceso se articula en tres niveles progresivos de reducción y estructuración teórica de la información: codificación abierta, axial o focalizada y selectiva. Así mismo, se elaboraron memos analíticos y teóricos que sirvieron para desarrollar y definir las categorías.

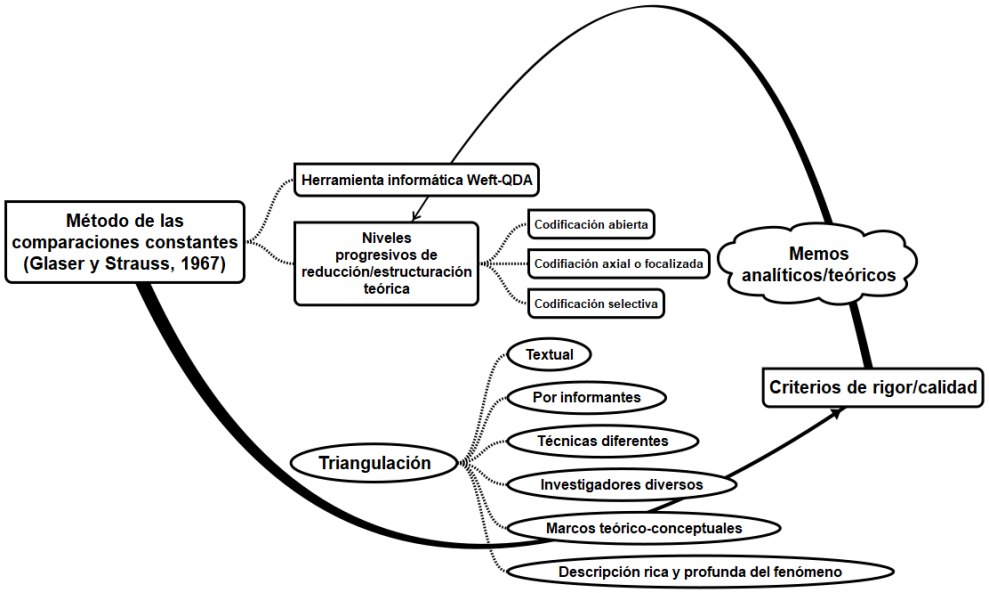
Cada categoría resultante se contrastó con las transcripciones originales para su validación. Además, durante las entrevistas, o inmediatamente al final de estas, se realizaron resúmenes de las aportaciones o se requirió confirmación a los informantes para verificar la información. Por otro lado, la utilización de diferentes maneras de obtener información (grupos focales y entrevistas individuales o dialógicas), junto con la triangulación de investigadores y la interacción y diálogo constante con los marcos teórico-conceptuales de los investigadores en el análisis contribuyó al rigor del estudio

Igualmente, se ha procedido al registro, y posterior análisis, del innegable papel que los investigadores han jugado en la generación de los resultados, y en la creación de la versión interpretativa propuesta.

Para garantizar la transferibilidad (la posibilidad de generalizar los resultados obtenidos a otro contexto cuyo significado sea similar al del contexto estudiado) se ha realizado una descripción rica y profunda del fenómeno estudiado.

El proceso de análisis del estudio se realizó mediante el Método de las Comparaciones Constantes (Glasser y Strauss, 1967), como ilustra la Figura 1.

Figura 1. Análisis de datos: sus elementos ordenados e interrelacionados.



Fuente: Hernández – Ascanio et al (2021).

Para la obtención de resultados en la aplicación de Panel de Expertos – DELPHI, se aplicó el criterio de estabilidad (Landeta, 1999) a través del cálculo del Rango Intercuartílico Relativo RIR=(Q3-Q1)/Q2 obtenido tras tres rondas sucesivas de preguntas sobre los diferentes contenidos de las dimensiones planteadas.

Los datos cuantitativos se analizaron estadísticamente mediante análisis de frecuencias para medir el nivel de consenso entre los paneles de expertos, con declaraciones categorizadas según los siguientes criterios:

a. Se aprobó una declaración para su inclusión en el modelo si recibió una puntuación de 8 o más por al menos el 80% de los participantes en el panel.

b. Una declaración requería una nueva calificación si recibía una puntuación de 6 por al menos el 80% de miembros de cada panel, o una puntuación de 8 por un número de miembros del panel entre el 70 y el 79,9%. En este caso, el ítem se acompaña de una

síntesis de los argumentos aportados por los panelistas que habían puntuado de forma más positiva.

c. Se rechazó una declaración si su puntuación fue de 5 o menos en al menos un 80% de los miembros del panel.

Cada una de las rondas fue acompañada de un informe elaborado por los autores en las que aparecían reflejadas las proposiciones aprobadas con sus respectivas calificaciones, las proposiciones que debían ser vueltas a calificar (acompañadas de un argumentario elaborado a partir de las valoraciones de los panelistas que habían calificado más positivamente el ítem) y las calificaciones del propio panelista interesado.

5.1.7. Validez y rigor.

Para el estudio cualitativo, se siguieron los Standards for reporting qualitative research (SRQR).

5.1.8. Limitaciones.

Entre las limitaciones del estudio se encuentran no haber incluido otros perfiles profesionales tales como equipo de salud mental, trabajo social o gerencia, pero entendemos que sus aportaciones serían relativas a aspectos muy particulares del fenómeno estudiado.

En esta misma línea, plantear que el discurso proporcionado por profesionales médicos puede estar condicionado dada una menor representación de informantes con este perfil con respecto a otros perfiles, aunque se ha garantizado la saturación temática y conceptual a partir de un diseño muestral de carácter estructural tal y como ya se ha mencionado.

5.1.9. Consideraciones éticas.

El estudio se llevó a cabo siguiendo los principios éticos de la Declaración de Helsinki (Krleza-Jeric y Lemmens 2009) y contó con el permiso del Comité Ético para la provincia de Córdoba.

Antes de llevarse a cabo las entrevistas y los grupos focales, los participantes fueron informados del trabajo, y dieron su consentimiento informado. En todo momento, se garantizó el anonimato de la persona. Para ello, se han anonimizado las respuestas, usando pseudónimos. Los datos personales obtenidos han sido tratados de acuerdo con el Reglamento UE/2016/679, de 27 de abril de 2016, General de Protección de Datos, y la Ley Orgánica 3/2018, de 5 de diciembre, de Protección de Datos Personales y garantía de los derechos digitales.

5.2. HALLAZGOS Y DISCUSIÓN.

5.2.1. Hallazgos con respecto a los elementos de viabilidad.

A continuación, se presentan los principales resultados obtenidos a partir de las categorías analíticas aplicadas en el diseño de la investigación. En primer lugar, se identifican cuáles son las construcciones mentales de las que parten los diferentes profesionales sanitarios que prestan servicio en Atención Primaria a la hora de conceptualizar, por un lado, y dimensionar, en términos de importancia y gravedad, por otro, el fenómeno del aislamiento social y la soledad en adultos mayores no institucionalizados; y posteriormente, se presentan los elementos que facilitan o dificultan la atención a esta problemática, diferenciando: 1) elementos de carácter estructural y organizacional, asociados al sistema de prestación de servicios de salud, especialmente de carácter público; 2) elementos de carácter profesional, asociados a los diferentes perfiles/ categorías profesionales; y 3) elementos de carácter particular, asociados a las circunstancias particulares tanto de los sujetos afectados como de los profesionales sanitarios.

a) Los conceptos de aislamiento social y soledad frente a vivir solo: dificultades para identificar y diferenciar estos conceptos.

Los resultados revelan que los profesionales tienen dificultades para identificar y diferenciar estos conceptos

> *"Yo creo que son primos hermanos, que son casi lo mismo, por no decir sinónimos. […] No se relacionan y no le llegan visitas a su domicilio de familiares o amigos." (MIR3)*

Esto se hace especialmente patente a la hora de identificar situaciones de soledad *cuando no se vive solo*

> *"Esa mujer no está sola, está con el marido y un hijo que también vive allí. No está bien, … pero bueno." (EAP8)*

No obstante, también encontramos profesionales que confirman la posibilidad de experimentar estos fenómenos, aunque se forme parte de núcleos de convivencia más amplios.

> *"Bueno, realmente no tiene por qué estar directamente relacionado. Hay quien vive con un hijo o una hija, o con marido porque vive todavía y no tiene apenas contacto con nadie más fuera de ese círculo, y eso al final pues hace que no sólo estén aislados del resto del mundo, sino que también se sientan solos porque no encuentran con nadie diferente con quien compartir sus cosas o con quien hablar" (EAP6)*

Esta situación es especialmente frecuente cuando en el hogar existen personas mayores en situación de dependencia o de fragilidad y cuidadores/as principales. Ambas situaciones son reconocidas como importantes determinantes del aislamiento y la soledad.

> *"Como las personas cuidadoras de inmovilizados. Esas personas se sienten en aislamiento. Están solas, no pueden moverse de su lado." (EAP12)*

A pesar de ello, el "patrón de convivencia" es uno de los marcadores clave utilizados por los profesionales para identificar y diferenciar estos conceptos, es decir, los profesionales siguen identificando, mayoritariamente, aislamiento social y/o soledad con vivir solo.

> *"[los identificas] Mirando los que están solos, personas mayores que tienen sus hijos pero que ellos viven solos, […]" (EAP12).*

Junto al "patrón de convivencia", otros marcadores recurrentes para identificar las situaciones de aislamiento social y soledad son los "perfiles de riesgo", situaciones que desencadenan la pérdida de relaciones sociales, como: patologías, personas que se jubilan,

cuando ocurre la emancipación de los hijos, o ante el fallecimiento de personas de su misma edad, incluso del mismo cónyuge. En todos estos casos, intuitivamente se plantea la soledad y/o el aislamiento social como fenómenos secundarios a situaciones de pérdida y duelo.

> *"[…] el caso de mayores que por sus propias limitaciones físicas o psíquicas se van volviendo dependientes" (EAP3)*

> *"Cuando se jubilan ya cambian el chip, porque ya parece que se aíslan un poco más […] Otra cosa es también la falta de hobbies." (EGC2).*

> *"Su entorno va desapareciendo, ya no trabajan, fallecen amigos, sus hijos tienen su vida y se van desconectando de la sociedad." (MIR4)*

Por último, hay que señalar que es el personal de enfermería (aunque no en todos los casos) el que expresa de forma más clara la distinción entre aislamiento social y soledad, e identifica los posibles componentes y atributos propios de cada uno de estos fenómenos.

> *"La soledad a lo mejor es más subjetiva, un sentimiento o una sensación. Y el aislamiento pienso yo que es más objetivo, porque verdaderamente es una falta de una red de apoyo y es objetivable, más que el sentido de soledad. Y habrá casos, yo creo en que la soledad degenera en aislamiento social, y habrá casos que estén con un aislamiento social evidente pero que no se sienten solos." (EGC3)*

b) Importancia y gravedad del Aislamiento social y soledad.

Los resultados revelan un consenso pleno sobre la importancia, tanto cuantitativa como cualitativa, de estos fenómenos, y sobre su repercusión en los sistemas sanitario y social.

Respecto a la importancia del problema, los informantes aluden a sus enormes dimensiones, pero dimensiones "ocultas", enfatizando en la invisibilidad de estos fenómenos.

"Tenemos en mente la punta del iceberg, pero luego hay mucho, mucho" (EAP1).

"Lo que no se visualiza parece que no existe, pero también existe y tenemos que verlo cada vez más" (EAP4).

Respecto a la gravedad del problema, los profesionales participantes reconocen que la aparición de este tipo de fenómenos afecta, de forma significativa, al estado de salud de los mayores, de tal forma que los identifican claramente como vector sindémico en los procesos de salud / enfermedad en este tipo de sujetos

"El hecho de estar solas muchas veces les agrava problemas, porque no tienen personas que estén pendientes de hacer un buen seguimiento de los tratamientos, por ejemplo, o empiezan a abandonarse, ya no cuidan las comidas, las actividades de autocuidado y es cuando aparecen cuadros de malnutrición por ejemplo o problemas relacionados con la higiene como úlceras […]" (EAP7).

"El hecho de no hablar con otras personas hace que aparezcan problemas psiquiátricos a la larga, se van ensimismando y van perdiendo el contacto con la realidad, lo que es la puerta de entrada a trastornos mentales serios […]" (MIR4).

Además, los participantes también aluden a su correlato con el uso de los recursos sociosanitarios, y señalan que las situaciones de aislamiento social y soledad son, a menudo, causantes de un aumento la demanda clínica e hiper-frecuentación de los recursos sociosanitarios por parte de los sujetos afectados por estos fenómenos.

"Tiene que ver con hiper-frecuentación. Por la hiper-demanda, porque al final termina siendo una sobrecarga, porque te llaman con mucha frecuencia, porque suelen tener caídas, heridas, no tienen cuidado." (EGC5)

Pero, más allá de las consecuencias sanitarias, los informantes alertan de un "riesgo social" asociado a este tipo de fenómenos, pues la modificación de los modelos de residencia y a la disminución de los lazos y recursos comunitarios está ocasionando una desatención difícil de resolver.

"Los hombres tenían su trabajo, su taberna y allí tenían sus relaciones sociales más o menos cubiertas. Y las mujeres […] tenían la Iglesia. y además las parroquias movilizaban ese tipo de recursos" (EGC3).

[Sin embargo, donde los mayores viven ahora] "Son pisos muy antiguos […], hay barreras, pero además la gente que vivía en su bloque o se han ido o han fallecido, y la gente que está llegando ahora nueva o son estudiantes, o son inmigrantes o están vacíos. Entonces tenemos pisos que están vacíos, mayores que viven en pisos de dos plantas o cuatro plantas y resultan que conocen a un vecino o ninguno. Entonces es la diferencia, una diferencia brutal" (EGC5).

Esto genera numerosos interrogantes: ¿quién va a cuidar de nuestros mayores?, ¿el sistema sociosanitario? ¿está preparado?

"Tenemos recursos, pero son escasos, como Promove. También está Cruz Roja con el voluntariado, pero desgraciadamente no todos los casos detectados tienen acceso a esos recursos" (EAP1).

c) Elementos de carácter estructural y organizacional que facilitan o dificultan la atención.

El bloque de elementos de carácter estructural y organizacional es el que presenta un mayor número y diversidad de elementos. Un primer elemento es el déficit manifiesto de recursos para la identificación o diagnóstico de este tipo de situaciones, puesto que no existen protocolos o programas específicos.

"Hablé con la enfermera gestora de casos y no, tuvimos que ver los que tenemos en mente del cupo, los que cumplan las condiciones. Pero listado no hay." (MIR3)

"Bueno, a lo mejor hay más. Lo que pasa es que no hay un censo. Si es que el problema es que es un tema muy oportunista, que no se ha hecho como tal una captación. (EGC5)

Para identificarlos es necesario recurrir a otro tipo de programas y registros, dirigidos a otras situaciones de salud / enfermedad.

> *"En el plan de altas temperaturas, ¿cuántos te salen que tú creas que puedan estar en aislamiento? (EGC1)*

Un segundo elemento es el "entorno de práctica" en el que llevar a cabo el trabajo asistencial. Los médicos refieren encontrarse limitados por el lugar donde, mayoritariamente, desarrollan su actividad: los centros de salud, ya que estos espacios no facilitan la identificación de situaciones de aislamiento social o soledad.

> *"Nosotros sólo nos encontramos con ellos en las consultas, o en algún aviso domiciliario como mucho. Con las agendas tan apretadas que tenemos no nos da tiempo de preguntar nada más que por la patología con la que vienen, con la petición que nos traen" (MIR2).*

En cambio, las enfermeras reconocen un mayor conocimiento de los entornos domiciliarios que la profesión médica, pues realizan, de forma más frecuente, visitas domiciliarias.

> *"Tú haces la visita por un alta hospitalaria o te lo derivan por diagnóstico de diabetes mal controlada, pero tú te vas dando cuenta de eso conforme haces varias visitas. Ves que esa mujer, a parte de la patología, ves que tiene eso" (EAP7).*

A los elementos anteriormente indicados habría que añadir la falta de tiempo reconocida por todos los profesionales participantes.

> *"El problema es que tenemos [mucha] carga asistencial. Ese es el problema. Entonces claro, tienes que sacar tiempo." (EAP6).*

> *"[…] nos falta tiempo para hacer este tipo de intervenciones" (EAP1).*

No obstante, este elemento hay que ponerlo en relación con la hegemonía del modelo biomédico, referida anteriormente, que sitúa en primer lugar otras situaciones de carácter físico.

> *"De hecho las visitas domiciliarias de simplemente charlar, cuando tú te ves agobiada esa la aplazas a cada tres meses o si no cuatro. Porque entre comillas, se puede dejar. Mientras que las úlceras por presión tienes que ir" (EAP5).*

Además, y relacionado con esta falta de tiempo, los profesionales reconocen que la atención a estas situaciones requiere desplazamientos, aún mayores en zonas rurales o centros de salud con cobertura a pluralidad de barrios.

> *"Si voy en coche o voy andando depende de la dispersión geográfica que tengas, el desplazarte es importante. Que tú tengas que desplazarte es un tiempo que pierdes, entre comillas." (EAP8)*

Por otro lado, los teléfonos, necesarios para mantener un contacto frecuente y fluido con los sujetos, no siempre están disponibles para muchos profesionales.

> *"El único para hacer llamadas al exterior es la administración del centro. Ahí, hablar 15 minutos es complicado, porque están entrando y saliendo pacientes." (MIR3)*

d) Elementos de carácter profesional que facilitan o dificultan la atención.

Respecto al bloque de elementos relacionados con el rol de los profesionales, aparece, como elemento especialmente significativo, la falta de formación.

> *"Para intervenir de una manera sistemática, habría que empezar educando a los profesionales" (EAP1).*

Los médicos identifican una formación con una marcada componente biomédica y un alarmante déficit en asuntos de carácter social.

"En la carrera jamás, puede que a lo mejor algún curso. La relación médico paciente y poco más" (MIR3).

"Cuando rotas por psiquiatría que pasamos dos meses, ellos sí te enseñan a hacer una entrevista más global de no solo los componentes médicos de la persona sino también su estado civil o social. Todo eso sí lo aprendes a hacer. Pero tampoco inciden en el tema del aislamiento. Está un poco dejado de mano." (MIR1).

"En la formación continua no se abordan estos temas, casi siempre son temas médicos. No se suelen dar problemas de la gente de mayor. No se suelen dar charlas" (MIR4).

Junto con la formación, el reconocimiento de la intervención en este tipo de problemáticas como función propia es otro elemento diferenciador de médicos y enfermeras.

Por una parte, la profesión médica refiere que la intervención sobre el aislamiento social y/o la soledad excede a sus competencias, y que su intervención se limita al abordaje (biomédico) de los problemas de salud.

"Nosotros podemos dar apoyo o mejorar nuestra parte, pero realmente, como no lo veo un problema exclusivo de salud, yo podré solucionar su problema de salud […], pero yo no puedo cambiar la situación. […] Yo no puedo llenar ese hueco, nuestro papel es limitado." (MED1)

Las enfermeras, en cambio, consideran estos fenómenos como problemáticas propias, identificadas en las taxonomías enfermeras, y con abordaje sanitario desde enfoques de carácter biopsicosocial.

"Son dos diagnósticos enfermeros y si lo son tenemos que trabajarlos." (EAP4)

"Tú no vas a una casa para curar o pinchar […]. Yo siento que hago y no voy a curar, ni a tomar tensiones, ni a pinchar. […] a veces vas simplemente para

apoyar a un cuidador porque quizás no está quemado, sino lo siguiente. O a un paliativo. Ahí hay intervenciones: el apoyo emocional, la escucha activa, la presencia, simplemente y no tienes por qué ir a curar. Estás haciendo un trabajo enfermero." (EGC5)

Aunque, también es cierto que encontramos enfermeras que no lo identifican con trabajo propio y proponen la utilización de otros activos de la comunidad tales como personal voluntario o filantrópico especialmente formado para abordar este tipo de intervenciones.

"Ahora, la actuación ante esa situación de soledad, no lo sé yo. No lo veo yo tan de enfermera. A lo mejor digo una barbaridad. La veo más de personas que quieran dedicar su tiempo al acompañamiento." (EAP5)

Además, las enfermeras refieren poseer unos niveles competenciales adecuados para abordar este tipo de situaciones que se incorporan tanto en la formación universitaria como en la formación continua de los profesionales

"Yo recuerdo que cuando estudié enfermería, una asignatura era para saber hablar con los pacientes, y eso es muy importante" (EAP9).

"Pero es que el desarrollo personal y la formación vienen después. Durante los estudios de la universidad aprendes lo básico, que te ayuda al principio para defenderte cuando empiezas tu carrera profesional, pero luego toca seguir formándote. Y es cuando empiezas a hacer cursos, sobre todo de aquellas cosas que vas viendo que te van haciendo falta, como el tema este del que estamos hablando" (EAP1)

Junto a esta identificación de la intervención sobre el aislamiento y la soledad como un campo de decisión e iniciativa propia por parte de las enfermeras, para el que, además, se consideran formadas, aparecen otros dos elementos facilitadores en este colectivo: unos modelos de relación usuario-profesional de carácter más cercano y confidente, y la ya citada práctica en entornos domiciliarios, lo que sitúa a la enfermera como el agente idóneo para el abordaje de este tipo de problemáticas.

"Y creo que, hablando de enfermería, que es la categoría a la que represento, lo veo como una necesidad en mi día a día en el trabajo [atender a mayores en aislamiento y soledad]." (EAP3)

"Entonces, de cara al usuario, somos más accesibles que los médicos. Te piden mil favores y se los haces, sin embargo, al médico no le piden nada." (EAP9)

"La enfermería es más de tú a tú, de confianza, de vínculo. Realmente, el médico es menos accesible. El médico no creo que esté ni receptivo ni tenga tiempo" (MED1).

"A nosotras nos dan más tiempo para dedicarle al domicilio que a ellos [los médicos]." (EAP6)

e) Elementos de carácter particular que facilitan o dificultan la atención.

Por último, centrándonos en el bloque de elementos de carácter particular, los profesionales identifican como elemento especialmente relevante el deseo y el nivel de proactividad del sujeto afectado para revertir su situación,

"Pero, también a veces te cuesta mucho trabajo entrar. Están aislados y metidos en sí. Y a muchos de ellos, que les propones cosas, después no quieren." (EAP6)

Junto a la disponibilidad/deseo del mayor, es igualmente importante, según los profesionales participantes, el nivel de sobrecarga emocional y frustración del profesional sanitario.

"Claro porque también si estás harto de todo lo que llevas encima dices: "¿ahora me voy a preocupar también por esto? Pues dices que no merece la pena, aunque sigue siendo la salud de la persona que es a lo que nosotros nos dedicamos." (MIR1).

En lo que se refiere a elementos facilitadores, una cuestión que emerge con importancia en el discurso es la automotivación, tanto individual como colectiva del equipo de trabajo.

> *"Tienes que estar motivado y verlo, porque si no, no actúas. Tienes que saber lo que estás buscando porque si no, no lo vas a encontrar nunca. Nunca vas a tener tu problema. Tienes que saber que saber lo que estás haciendo y estar motivado." (EAP4).*

> *"Yo no sé si es motivación de los profesionales o es que la persona cuando va a un sitio en el que todo el mundo lo hace, también lo hace […] porque a lo mejor tú vas a otro centro de salud que pasan un poco y tú pasas también." (EGC6)*

Si bien es un área muy subjetiva, los profesionales la señalan como una parte esencial a la hora de intervenir.

5.2.1. Hallazgos con respecto al diseño de la intervención.

Los resultados del Panel de Expertos – DELPHI permitieron diseñar una adaptación del programa de intervención Carelink propuesto por Nicholson y Shellman (2013), de tal manera que fuese neutralizar los elementos condicionantes que influirían en su viabilidad y sostenibilidad.

Basándose en revisiones previas (Dicken et al., 2011; Theeke y Mallow, 2013; Stanley et al, 2014;) el estudio propone una intervención psicosocial multi-componente, que incluye tres componentes básicos, que se detallan en la siguiente tabla.

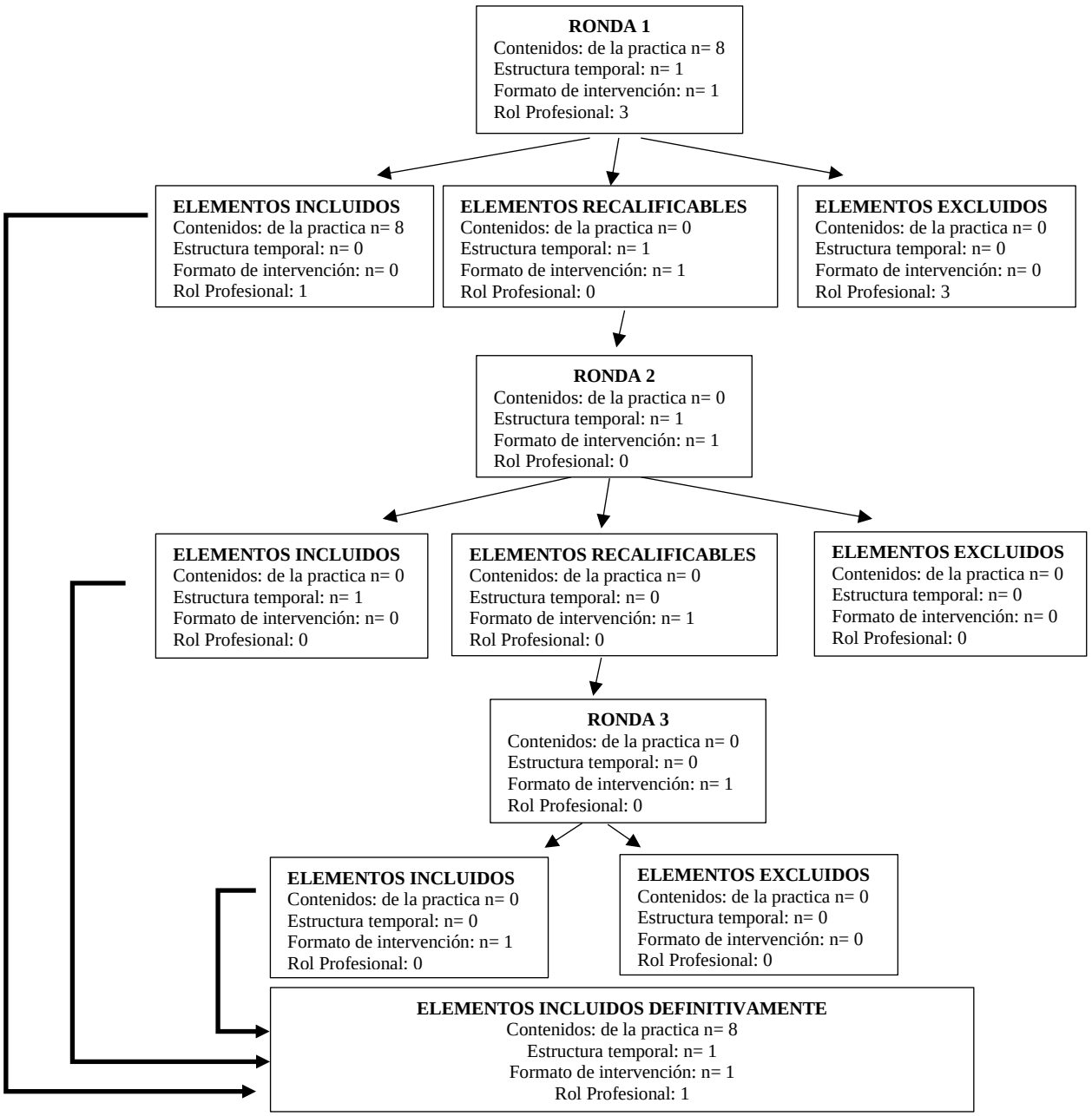
Tabla 1. Componentes y acciones de la adaptación del Programa Carelink

Componente	Acciones
Interacción y contacto social	- Acción 1: Conversación mientras se realizan actividades cotidianas - Acción 2: Discusión sobre noticias

Sentimientos de competencia y control personal	- Acción 3: Evocación y reminiscencia de actividades motivadoras o de contextos de participación deseables. - Acción 4: Identificación de causas, factores relacionados con la situación de soledad y aislamiento. - Acción 5: Planificación de actividades realizables por el sujeto. - Acción 6: Entrenamiento en habilidades de control y afrontamiento. - Acción 7: Refuerzo positivo de logros alcanzados y motivación para la consecución de los siguientes logros.
Participación en actividades sociales	- Acción 8: Información sobre recursos socio-comunitarios que favorezcan la participación y la vinculación con otras personas

Fuente: elaboración propia.

Diagrama 1: Flujo DELPHI diseño de intervención.



La intervención sólo ha sido modificada con respecto al número, la duración y la frecuencia de las sesiones, así como el número de pacientes, por la falta de tiempo para este tipo de intervenciones. Comprende 6 sesiones en casa (30 minutos) durante 16 semanas (una sesión cada tres semanas) y 5 sesiones telefónicas (20 min) que serán intercaladas (en las 16 semanas) en función de las características particulares de cada persona. La primera visita, orientada a la definición de objetivos y la creación de relación de confianza para futuras visitas, tendrá una duración de una hora. Las acciones en cada visita se adaptarán a las necesidades de cada caso.

Finalmente, el cronograma de la intervención es el siguiente, siendo:

D: Intervención en el domicilio de al menos 30 minutos de duración (D0 y DF tendrá una duración de al menos 1 h)

T: Llamada telefónica de al menos 20 minutos de duración.

Semana	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Sesión	D0 D1	T1		D2	T2		D3	T3		D4	T4		D5	T5		D6 DF

La opinión de los profesionales es homogénea en cuanto al contenido de las actividades a desarrollarse en cada uno de los momentos de intervención, ya sea utilizando la forma presencial o mediatizados por llamadas telefónicas programadas.

La conversación durante el ejercicio debe hacerse de manera presencial de forma que el mayor centre su atención en la conversación y ésta fluya.

La discusión de noticias podría llevarse a cabo indistintamente de una forma u otra, sobre todo una vez que el mayor entre en la dinámica de la actividad.

Y, por último, el coaching sanitario, aunque depende de lo que se vaya a tratar, sería posible a través de una llamada telefónica, siendo muy favorecedor el seguimiento en salud a través de esta herramienta.

Cuadro 1: Distribución de las acciones en función de las sesiones.

D0: Realizar valoración inicial.
D1: Conversar sobre la realidad y entorno del sujeto mientras realiza actividades cotidianas: 1) Identificar la realidad personal del sujeto; y 2) Caracterizar las posibles causas de la soledad/aislamiento.
T1: Conversar sobre la realidad personal del sujeto/Comentar noticias que lo vinculen con el entorno.
D2: Evocación y reminiscencia: 1) Identificar actividades motivadoras para el sujeto; 2) Identificar factores negativos que afecten a la motivación; y 3) Elaboración de un plan para la participación en actividades sociales.
T2 a T5: 1) Conversar sobre la realidad personal del sujeto/ Comentar noticias que lo vinculen con el entorno; 2) Contrastar/ hacer seguimiento del plan de actividades; 3) Reforzar los logros alcanzados; y 4) Proporcionar información sobre recursos existentes.
D3: Entrenar habilidades de control y afrontamiento.
D4 a D5: Conversar, mientras el sujeto realiza actividades cotidianas: 1) Hacer seguimiento del plan de actividades; 2) Identificar factores negativos que afecten al logro; 3) Reforzar los logros alcanzados; y 4) Entrenar habilidades de control y afrontamiento.
D6: Evaluación logros conseguidos, cambios de actitudes y valoración general del programa.

Fuente: Elaboración propia.

Para neutralizar los componentes asociados a los roles propios de cada uno de los perfiles profesionales, se consideró imprescindible implementar una actividad formativa que cubriera a todos los profesionales implicados en la intervención, con independencia de su perfil, y nivelara las competencias y conocimientos básicos imprescindibles para llevar a cabo la misma. La actividad formativa consistió en un plan de formación de 4 horas de duración. Este plan, llevado a cabo por profesionales expertos en la materia, incluyó: objetivos, contenidos, horas lectivas y mecanismo para comprobar que el investigador ha asimilado lo que deberá hacer en su intervención (mecanismo del tipo role-playing), con un experto que dará el feed-back de la ejecución.

5.2.2. Discusión.

a) Con respecto a los elementos de viabilidad.

Los resultados del estudio demuestran una conceptualización intuitiva de estos fenómenos en los sujetos participantes, más relacionada con el patrón de convivencia o perfiles de riesgo, que con la clara diferenciación técnico-científica expuesta en la literatura científica (Beller y Wagner, 2018; Weldrick y Grenier, 2018).

No obstante, y a pesar de que esta falta de diferenciación conceptual también es informada en estudios previos como los de Victor et al., 2000; Nicholson, 2009; Sabir et al., 2009; Holt-Lunstad et al., 2010; Valtorta y Hanratty, 2012 y Valtorta et al., 2016,

nuestros resultados señalan a un colectivo, el de las enfermeras, como el que expresa de forma más clara cuáles son los componentes y atributos propios de cada uno de estos fenómenos, así como la diferencia entre uno y otro. Estos resultados también coinciden con Tzouvara, Papadopoulos y Randhawa (2015) y Paque et al. (2018)

Esta mayor diferenciación técnico-científica evidenciada en las enfermeras puede deberse, en parte a que, la profesión dispone de una taxonomía en la que se identifican claramente los diagnósticos enfermeros de "Aislamiento Social" y "Riesgo de Soledad" (Puig, Lluch y Rodríguez, 2009) o a la perspectiva holística más frecuente en sus modelos disciplinares (Puig, Lluch y Rodríguez, 2009). Del mismo modo que las carencias en la profesión médica pueden deberse a la carencia de estas herramientas diagnósticas; o quizás, se trate de una cuestión de mayor calado y con trasfondo disciplinar, derivada de la hegemonía del modelo biomédico en la práctica profesional de este colectivo, hipótesis sugerida en el trabajo de Due et al, 2018.

Respecto a la invisibilización de los casos de aislamiento social y de soledad de adultos mayores no institucionalizados descrita en nuestros resultados, podría estar relacionada con esta falta de entidad del Aislamiento Social y la Soledad en el ámbito de la disciplina y profesión médica, lo que dificultaría la posibilidad de dimensionar en términos cuantitativos la presencia de dichos fenómenos. Numerosos trabajos, como los recientes de Lasgaard, Friis y Shevlin (2016), Beutel et al. (2017) o Tomstad et al. (2017) ya anticipan esta cuestión, dando claros ejemplos para el contexto europeo y americano. No obstante, esta "dimensión oculta" también puede deberse, sencillamente, al escaso contacto que la profesión médica tiene con las personas mayores que se encuentran en este tipo de situaciones, algo ya propuesto por Due et al, (2018).

Las consecuencias del aislamiento social y la soledad en la salud, bienestar y calidad de vida de las personas mayores, que tan claramente ven los profesionales participantes, también coinciden con los datos aportados por la bibliografía (Cantarero-Prieto, Pascual-Sáez y Blázquez-Fernández, 2018; Cohen-Mansfield y Perach. 2015; Finlay y Kobayashi, 2018; Gale, Westbury y Cooper, 2018; Klinenberg, 2016; Tabue et al. 2016); del mismo modo que su abordaje ineficaz afecta, por un lado, al estado de salud de las personas mayores, disminuyendo su bienestar y calidad de vida (Cotterell, Buffel

y Phillipson, 2018; Due, Sandholdt y Waldorff, 2017; Due et al., 2018; Kharicha et. al, 2017; Leigh-Hunt et al., 2017; Shovestul et al., 2020); y, por otro lado, al uso de los recursos sociosanitarios, provocando una hiper-frecuentación del sistema de salud (Courtin y Knapp, 2017; Franck, Molyneux, y Parkinson, 2016).

En lo que refiere a la identificación de cuáles son los principales elementos que actúan como facilitadores o disruptores en la implementación de intervenciones nuestros resultados se concentran en tres líneas fundamentales, en términos parecidos a los resultados expuestos por Yanguas, Pinazo-Henandis y Tarazona-Santabalbina (2018).

En primer lugar, elementos de carácter estructural y organizacional que se expresa fundamentalmente en: 1) una ausencia de protocolos o programas específicos de detección precoz e intervención, tal como confirman los trabajos de Cotterell, Buffel y Phillipson, (2018), quienes abogan por el diseño e implementación de dispositivos comunitarios que permitan prevenir y detectar en fases tempranas, situaciones de soledad y aislamiento social de adultos mayores no institucionalizados; y 2) severas limitaciones logísticas (expresadas en formas de organización de la carga de trabajo asistencial que se caracterizan por la saturación y la concentración en torno a roles profesiones específicos, especialmente el personal de enfermería) en consonancia con lo expuesto en el trabajo de Santos-Olmo et al. (2016).

Estas limitaciones de carácter estructural hacen que nuestros resultados señalen a actores del Tercer Sector como principales agentes de intervención, en consonancia con los trabajos de Ma et al, (2017) que apuntan, en este sentido, a un papel creciente de las organizaciones de voluntarios y del denominado Tercer Sector de Acción Social en la prestación de servicios relacionados con intervenciones en el ámbito del aislamiento social y la soledad en Europa en general, pero especialmente en los países nórdicos y anglosajones.

En segundo lugar, nos encontramos elementos de carácter profesional asociados a los diferentes perfiles/ categorías profesionales, tales como la formación, la identificación de esta área de intervención como una función propia de los diferentes perfiles profesionales o la vigencia de los modelos hegemónicos en la relación usuario – profesional. Los trabajos de Gardiner, Geldenhuys y Gott, (2018) demuestran en un

trabajo experimental, que el personal de enfermería era más sensible a la identificación de casos de aislamiento social y / soledad en mayores en los espacios normales de consulta comunitaria frente a los profesionales médicos que compartían censo.

En tercer y último lugar, nos encontramos con elementos de carácter particular. Por un lado, asociados a los propios mayores, tales como la predisposición y la proactividad a participar de las propuestas de intervención. Los trabajos de Courtin y Knapp, (2017) confirman los resultados obtenidos en nuestro trabajo en la medida en la que ponen de manifiesto que aquellos adultos mayores que presentaban mayores puntuaciones en la Escala de Motivación para Envejescentes (E.M.E) tienen un mejor rendimiento en los efectos de la intervención. Por otro lado, elementos de carácter volitivo y actitudinal (ya sea individual o colectivo) de los diferentes profesionales, tales como la sobrecarga emocional que suponen las intervenciones o la frustración por los bajos impactos, también puede actuar como factor condicionante en la calidad y eficacia de este tipo de intervenciones, en consonancia con lo expuesto por Franck, Molyneux y Parkinson (2016). El papel de la automotivación para responder a la problemática y hacer sostenibles intervenciones, ya sea identificado como elemento personal o propio del clima laboral colectivo, es una cuestión ya expuesta por diferentes autores en términos similares a los propuestos en este trabajo (Due, Sandholdt y Waldorff, 2017; O'Rourke, Collins y Sidani, 2018)

b) Con respecto al diseño de la intervención.

El diseño de intervención utilizado en el presente trabajo supone una adaptación del Programa CARELINK. Como ya se ha dicho, dicha adaptación consistió fundamentalmente en un acondicionamiento del formato de intervención sin que ello conllevara modificaciones sustanciales de sus contenidos.

En la intervención implementada nos encontramos con una serie de fortalezas que permitían anticipar un resultado eficaz de la misma a la luz de la revisión llevada a cabo previa a la adaptación. Entre estas fortalezas nos encontramos con que la intervención es de carácter multicomponente, incorporando diferentes metodologías en los que se combinan tanto elementos de búsqueda activa como de enganche e intervención directa. Además, nos encontramos con que la intervención asume un enfoque de empoderamiento

del mayor que participa del mismo, de tal forma que el mayor tiene capacidad decisoria junto con el agente de intervención (que actúa mayoritariamente como facilitador del proceso, especialmente en las últimas etapas y a la misma vez va incorporando elementos de carácter cognitivo y comportamental que le permiten una progresa autonomía (Nicholson, 2012),. En el carácter multicomponente de la intervención se incluyen aspectos tanto motivacionales, como educativas así como de entrenamiento de habilitades, lo que supone un factor positivo identificado en la bibliografía (Dickens et al., (2011).

Otro elemento a tener en cuenta es que la intervención supone movilizar recursos ya presentes en el individuo o en su entorno cercano, ya sea a nivel de red social o comunitaria, lo que le da una mayor sostenibilidad y capacidad de acción por parte del propio mayor (Zhong, 2017).

Por último, es importante poner de manifiesto, que la intervención cuenta con elementos de carácter evaluativo que permiten valorar la consecución de los objetivos planteados. Esta evaluación asume elementos fundamentalmente de carácter cuantitativo, lo que también hay que reconocer como un sesgo.

Como debilidades de la intervención, nos encontramos en primer lugar, con que el modelo original no explicita la fundamentación teórica que lo sustenta, a pesar de presentar evidencias de la eficacia metodológica (Dickens et al., 2011). Junto con esto, es preciso decir que, si bien en este trabajo se ha hecho una evaluación de proceso de la intervención, esta evaluación no es un elemento definitorio de la intervención, sino que ha venido determinada por el proceso de investigación de este proyecto. Si bien es cierto que los agentes de intervención han recibido una capacitación específica inicial y una mentorización durante el desarrollo del proyecto para asumir su papel, esta formación debe reforzarse de forma más sistemática (Dickens et al., 2011). Por último, es preciso manifestar que el carácter individualizado de la intervención no ha propiciado la aplicación de determinadas prácticas de reenganche comunitario que pudieran haber creado sinergias con respecto a los resultados (Laghi et al., 2011; Vogelpoel y Jarrold, 2006).

CAPÍTULO 6. ESTUDIO 2: ESTUDIO DE EFECTIVIDAD DE UNA INTERVENCIÓN MULTICOMPONENTE NO FARMACOLÓGICA PARA REDUCIR EL AISLAMIENTO SOCIAL Y LA SOLEDAD EN ANCIANOS QUE VIVEN EN LA COMUNIDAD: UN ENSAYO CLÍNICO ALEATORIO.

6.1. METODOLOGÍA

6.1.1. Diseño.

Se trata de un ensayo clínico controlado aleatorizado por cluster, de dos grupos paralelos, multicéntrico. El estudio fue llevado a cabo entre abril de 2018 y diciembre de 2019. El protocolo del estudio fue publicado en enero de 2020 (Hernández Ascanio et al, 2020) y se registró en ClinicalTrials.org (NCT03345862). Además, el estudio fue financiado por la Consejería de Salud de la Junta de Andalucía en la convocatoria abierta y permanente para la realización de Proyectos de Investigación e Innovación en el ámbito de la Atención Primaria del Servicio Andaluz de 2016.

6.1.2. Ámbito.

El estudio se ha desarrollado en trece centros de Atención Primaria del distrito sanitario de Córdoba y Guadalquivir, que abarcan tanto zonas urbanas como rurales, con pluralidad de condiciones de carácter socioeconómico y sanitario.

En estos centros se llevó a cabo el estudio experimental "Efectividad de una intervención no farmacológica multi-componente para reducir el aislamiento social y la soledad de mayores residentes en su domicilio", financiado por la Consejería de Salud de la Junta de Andalucía, del que forma parte este primer análisis.

6.1.3. Sujetos.

Los criterios de inclusión de los participantes fueron: edad de 65 años o más, residentes en su domicilio (no institucionalizados), presentar aislamiento social (puntuación menor a 32 en el cuestionario del Duke Social Support Index (DSSI).

Los criterios de exclusión a la hora de participar en el estudio consistían en presentar al menos uno de los siguientes indicadores: 1) grave deterioro cognitivo (8-10

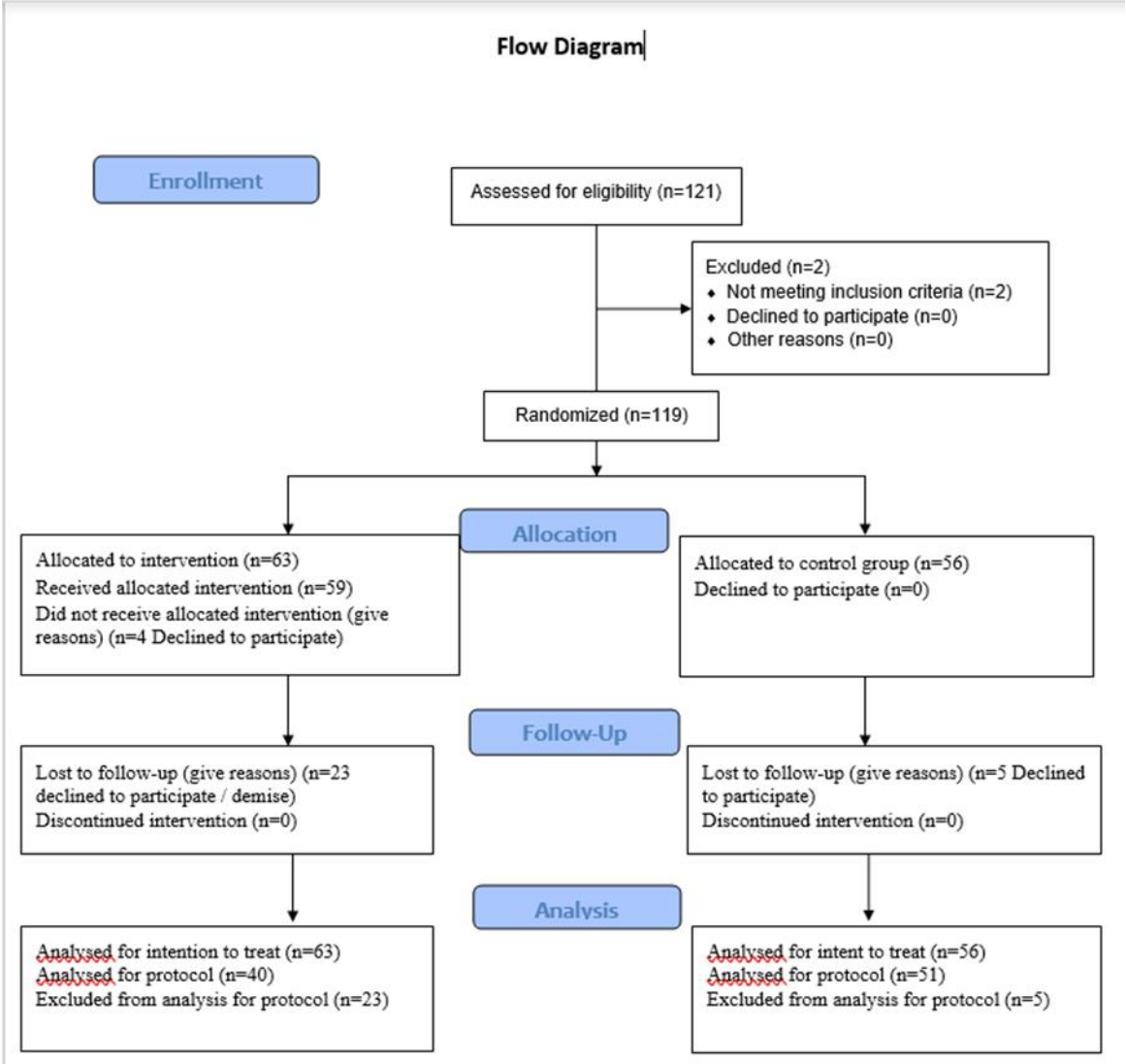
errores en el Short Portable Mental Status Questionnaire de Pfeiffer) (Martinez de la Iglesia et al, 2001); 2) diagnóstico médico de demencia; 3) dificultad para responder a las escalas de medición por barreras de idioma, 4) incapacitación física, psíquica o legal; o 5) no otorgar consentimiento para la participación en el estudio.

Se fijó un tamaño muestral de 57 sujetos por grupo para detectar un aumento de 3 puntos en el Duke Social Support Index (DSSI) o una reducción de 0,9 puntos en la Escala De Jong-Gierveld de Soledad tras la intervención, con una potencia del 80%, un nivel de confianza del 95%, razón de tamaño muestral entre grupo control y el experimental de 1:1, y estimando un porcentaje de pérdidas o retiradas en el seguimiento del 20%.

Los sujetos participantes en el estudio fueron captados mediante muestreo consecutivo, a través de 32 profesionales sanitarios (3 residentes de medicina familiar y comunitaria, 9 médicos de familia, y 20 enfermeras), de 13 centros de salud. Se realizó una asignación aleatoria con una ratio 1:1 en función del centro de salud en donde se hizo la captación (9 centros en el grupo experimental, 19 investigadores -57 pacientes: 3 pacientes/investigador-; y 8 centros, con 14 investigadores -57 pacientes: 4 pacientes/investigador, en el grupo control). Esta asignación aleatoria fue efectuada de manera centralizada usando el programa EPIDAT, versión 3.1.

Aunque en un principio se pretendía reclutar a 114 pacientes para el estudio, se logró reclutar a 121 sujetos, de los cuales 92 completaron el estudio. 40 recibieron la intervención y 52 el tratamiento convencional. En el grupo de control, 4 sujetos declinaron continuar, mientras que en el grupo experimental se identificaron hasta 23 sujetos que declinaron continuar o fallecieron (Figura 2).

Figura 2: Diagrama de flujo de captación e intervención.



Fuente: elaboración propia.

6.1.4. Variables.

Las variables basales del estudio responden a las 4 categorías de determinantes comunes al aislamiento social y a la soledad no deseadas indicadas en capítulos previos de este trabajo: a) Factores sociodemográficos; b) De salud; c) Psicológicos; d) Eventos vitales estresantes) tal y como se puede observar en la siguiente tabla.

Tabla 2: Variables de estudio.

VARIABLES BASALES	
Asistencia recibida por parte del personal de AP en los últimos 3 meses	Historia Clínica
Profesional que le atendió	Historia Clínica
Edad	Referido por el paciente
Sexo	Referido por el paciente
Estado civil	Referido por el paciente
Vivir solo/a	Referido por el paciente
Nivel de estudios	Referido por el paciente
Última ocupación que tuvo	Referido por el paciente
Frecuencia cardíaca	Medición directa por parte del profesional que supervisa la intervención.
Tensión arterial	Medición directa por parte del profesional que supervisa la intervención.
Peso	Medición directa por parte del profesional que supervisa la intervención.
Talla	Medición directa por parte del profesional que supervisa la intervención.
Nivel de movilidad	NOC 02208
Funcionalidad	Escala de Barthel (Wylie, CM. 1967).
Morbilidad crónica	Identificación mediante CIE - 9
Multi-morbilidad	Índice de Charlson (Charlson, M.E, Pompei, P., Ales, KL y Mackenzie, C.R., 1987).
VARIABLES RELATIVAS A LAS CAUSAS DEL AISLAMIENTO Y / SOLEDAD	
Posibles factores relacionados con el aislamiento social y soledad	Referido por el paciente
Redes de apoyo	Referido por el paciente
Expectativas insatisfechas en su relación con familia y amigos	Referido por el paciente
Depresión	NOC 1208
Habilidades de afrontamiento	NOC 1302
VARIABLES RELATIVAS A LA EFICACIA DE LA INTERVENCIÓN	
Aislamiento social	DUFSS
Soledad	Escala de J de Jong – Girvield
Calidad de vida relacionada con la salud (CVRS)	Escala Euroqol-5D (Badia et al., 1999)

Fuente: Hernández – Ascanio et al (2020).

Más concretamente, las variables utilizadas fueron: a) Factores sociodemográficos (edad, sexo, estado civil, nivel de estudios, última ocupación que tuvo); b) De salud (frecuencia cardíaca, tensión arterial, peso, talla, Índice de Masa Corporal, nivel de movilidad, funcionalidad, morbilidad crónica, asistencia a centros sanitarios en los

últimos 3 meses); c) Psicológicos (depresión, y habilidades de afrontamiento); d)Eventos vitales estresantes (vivir solo, situación económica, ayuda económica redes de apoyo, expectativas insatisfechas en su relación con familia y amigos)

Además, el aislamiento social, la soledad y la calidad de vida relacionada con la salud (end-point u outcomes) fueron medidos en todos los instantes/ momentos para el grupo experimental, mientras que para el grupo control sólo tuvo dos momentos de medición (T1 y T3).

Para medir el aislamiento social se utilizó Duke Social Support Index (DSSI) que recoge la opinión sobre la disponibilidad de otras personas para ofrecer ayuda en las dificultades, habilidades en las relaciones sociales y comunicación empática y emotiva. La escala tiene dos dimensiones: confidencial y afectiva. Consta de 11 ítems que se contestan mediante una escala de 1 a 5 puntos (límites: 11-55), donde las puntuaciones altas representan un mayor apoyo social. Una puntuación igual o mayor a 32 indica un apoyo normal, mientras que menor a 32 indica un apoyo social percibido bajo (Ayala et al., 2012; Bellón et al., 1996; De la Revilla et al., 1991).

Para medir la soledad, se empleó la Escala De Jong-Gierveld de Soledad, que valora la percepción subjetiva individual de la participación social o el aislamiento en población mayor. Se distinguen dos componentes: soledad emocional y soledad social. Consta de seis ítems en su versión abreviada, que se puntúan en una escala de 0 a 2, aunque posteriormente se recodifica como dicotómica (0 o 1). La escala total indica un mayor sentimiento de soledad con las puntuaciones altas (Límites: 0 a 6). Fue validado para España en población de 60 y más años por Ayala et al., (2012).

Para evaluar la Calidad de vida relacionada con la salud (CVRS) se usó el EuroQol-5D (EQ-5D). Esta escala incluye 5 dimensiones. Cada respuesta se codifica como 1, 2 o 3 respectivamente. Con estos datos se establece el estado de salud del individuo mediante un número de 5 dígitos (uno por cada dimensión estudiada). Con este sistema se pueden codificar 243 estados teóricos de salud distintos. La segunda parte del EQ-5D es una Escala Visual Analógica (EVA) que va desde 0 (peor estado de salud imaginable) a 100 (mejor estado de salud imaginable). En ella, el sujeto debe marcar sobre una línea vertical el punto que mejor define su estado de salud global en el día de hoy. El

uso de la EVA proporciona una puntuación complementaria al sistema descriptivo de la autoevaluación del estado de salud señalado anteriormente. Sus propiedades psicométricas han sido validadas tanto en población general como en grupos con patologías y se cuenta con un índice de valores de preferencias para los estados de salud, obtenidos en población española (Badía et al., 1999).

6.1.5. Intervención.

En el grupo experimental se llevó a cabo una intervención sistematizada multicomponente de carácter no farmacológico, mientras que en el grupo de control sólo se realizó un seguimiento de la situación.

La intervención realizada en el grupo experimental fue una adaptación del programa de intervención CARELINK (Hernández - Ascanio et al., 2020) a través de un enfoque de sociología clínica. La modificación consistió en una adaptación del número, duración y frecuencia de las sesiones, pero no se realizaron cambios en el contenido de las mismas.

Como se indica en el capítulo anterior, la intervención modificada comprende 6 sesiones presenciales de al menos 30 minutos, y 5 llamadas telefónicas de al menos 20 minutos. Las sesiones presenciales y telefónicas se intercalaron a lo largo de 4 meses (16 semanas), en función de las características individuales de cada persona. El primer contacto, orientado a realizar una evaluación inicial, definir objetivos y crear una relación de confianza, fue de una hora de duración y se realizó de forma presencial. El contenido de la intervención incluía tres componentes esenciales, como se detalla en la Tabla 1.

Tal y como aparece reflejado en el modelo de intervención original (Nicholson y Shellman, 2013), en la terapia de reminiscencia, los adultos mayores discutieron aspectos positivos de sus vidas cuando creían que estaban más integrados socialmente. El objetivo de esta técnica era permitir que la persona recordara el valor y la relativa facilidad del compromiso social. El objetivo era capacitar a los adultos mayores para que tomasen medidas para participar socialmente como lo hicieron en el pasado. La charla de ejercicio es cuando el agente de intervención y el adulto mayor realizan ejercicios de fisioterapia orientados a objetivos mientras discutían los aspectos sociales de la salud. La idea era

realizar una actividad común para enfocar la atención, para que la discusión social fluyera de forma natural. En una discusión orientada a objetivos y dirigida a la participación social, el agente de intervención y el adulto mayor se sientan cara a cara y discuten sobre el aislamiento social. Hablar directamente sobre estos problemas psicosociales puede motivar al adulto mayor a buscar nuevas soluciones. Los participantes tenían la capacidad de influir en la interacción de la forma que eligieran. El fomento de la comunicación abierta entre el agente de intervención y el adulto mayor creó una atmósfera cómoda para que los adultos mayores discutieran sus difíciles problemas sociales. La capacidad de alterar el plan de atención para cada visita les dio a los adultos mayores la sensación de dirigir la visita, lo que apoyó el empoderamiento. El coaching se enfocó en brindar un estímulo constante para lograr la integración social y los objetivos específicos del adulto mayor. A medida que los adultos mayores lograron o incluso intentaron lograr sus objetivos sociales, se les animó a continuar y se les dio una retroalimentación positiva. El modelado se centró en compartir experiencias personales relacionadas con el comportamiento social apropiado, con el objetivo de alentar a los adultos mayores a emular esas experiencias sociales.

La modificación realizada fue el resultado de un estudio inicial que pretendía comprobar la viabilidad de la intervención para ser probada en la práctica clínica de nuestros servicios de Atención Primaria (capítulo 5 de este manuscrito). Sin embargo, las dificultades en un primer estudio piloto condicionaron que este estudio fuera finalmente realizado por personal voluntario, compuesto por estudiantes del grado de enfermería de la Facultad de Medicina y Enfermería de la Universidad de Córdoba y voluntarios de organizaciones no gubernamentales relacionadas con el tema.

Participaron en el proyecto como agentes de intervención: 13 Estudiantes de enfermería (de los que abandonaron 2), 17 voluntarios de organizaciones sociales (de los que abandonaron 8) y 2 profesionales de la salud.

Todos los agentes de intervención participaron en una actividad formativa con características semejantes al del modelo original (Nicholson y Shellman, 2013), descrita en el capítulo anterior de este manuscrito.

6.1.6. Recogida de datos.

El tiempo de seguimiento de cada paciente fue de 6 meses. Las personas del grupo de intervención fueron evaluadas en tres instantes diferentes: a nivel basal, previo al inicio de la intervención (T1), un segundo instante a la finalización de esta (transcurridos 4 meses del inicio de la intervención) (T2) y un tercer instante final coincidiendo con el transcurso de 2 meses de haber concluido la intervención (T3). En el grupo control sólo se hicieron dos mediciones, en el instante basal (T1) y a los 6 meses de dicha medición (T3). Tanto en el grupo experimental como en control se registraron las pérdidas (traslado de domicilios, fallecimiento, etc,) y las retiradas (negativa a continuar,..) producidas.

6.1.7. Análisis de los datos.

Para la descripción de la muestra se ha utilizado la media y desviación estándar, en el caso de variables cuantitativas; y la frecuencia absoluta y relativa en el caso de las variables categóricas. Para contrastar la bondad de ajuste a una distribución normal de los datos provenientes de variables cuantitativas se empleó con el test de Kolmogorov-Smirnov.

Además, se ha usado la prueba t de Student o U de Mann-Whitney, según estuvo indicado, para la comparación de dos medias aritméticas independientes, y la prueba de la Chi-cuadrado, o el test exacto de Fisher, para la comparación de las variables categóricas.

Para comprobar el efecto de la intervención sobre el aislamiento social, identificar los factores asociados o determinantes y controlar posibles factores confundentes, se realizó un análisis de regresión logística binaria, considerando como variable dependiente el apoyo social (apoyo social bajo: puntuación ≤ 32 en el Duke Social Support Index (DSSI) vs. apoyo social normal, puntuación mayor de 32). Las variables ordinales fueron tratadas como variables dummys. La bondad de ajuste del modelo de regresión logística se evaluó con la prueba de Hosmer-Lemeshow.

La estrategia de modelización consistió en partir de un modelo máximo con todas las variables independientes presumiblemente predictoras o confundentes, e ir eliminado de este, paso a paso, aquellas con valor de $p \leq 0.05$, hasta lograr el modelo más

parsimonioso. Las variables introducidas en el modelo máximo fueron: grupo, edad, sexo, estado civil, convivencia (vive sólo o acompañado), nivel de escolarización, situación económica, ayuda económica que recibe, red de apoyo social (cuenta con personas que le ayudan), demanda médica en AP, demanda de enfermera de AP, asistencia de atención domiciliaria, movilidad NOC, depresión NOC, afrontamiento NOC, apoyo social basal, sentimiento de soledad, estado de salud (Euroqol-5D), número de patologías crónicas.

Finalmente, y para comparar el efecto de la intervención sobre la puntuación total de la variable aislamiento social en ambos grupos (el grupo experimental y el grupo control) al final del seguimiento (end-point), se hizo un análisis estadístico por protocolo y por intención de tratar (en éste, los datos de la última observación llevada a cabo fueron imputados a los abandonos). Para ello se usó el test de ANOVA para medidas repetidas.

El análisis se llevó a cabo con el paquete estadístico SPSS v.22.

6.1.8. Validez, fiabilidad y rigor.

Previamente a la intervención, se distribuyó entre los participantes una Guía del proceso general para una visita y se llevó a cabo un plan formativo y de entrenamiento de 4 horas de duración entre los agentes de intervención del grupo experimental. Además, se contemplaron sesiones de asesoría a demanda (de estos agentes) con profesionales de referencia. El seguimiento y la mecanización y el procesamiento de los datos fue llevado a cabo por una sola persona, encargada de la monitorización del estudio.

6.1.9. Limitaciones.

En primer lugar, es necesario señalar las limitaciones derivadas de la propia intervención propuesta, ya que pretendía mejorar el aislamiento social, pero no estaba diseñada específicamente para situaciones de soledad no deseada ni para la calidad de vida.

En segundo lugar, hay que señalar que la intervención ha sido realizada finalmente por estudiantes de enfermería y personal voluntario en lugar de por profesionales sanitarios que realizan su práctica asistencial en el sistema de atención primaria. Por tanto,

se desconoce el efecto que hubiera tenido la intervención inicialmente diseñada (realizada por profesionales sanitarios).

En tercer lugar, el tamaño muestral alcanzado fue inferior al establecido inicialmente debido al porcentaje de sujetos que no completaron el estudio, especialmente en el brazo experimental, lo que probablemente provocó un sesgo diferencial y un problema de potencia estadística suficiente. Los análisis realizados identificaron diferencias en todos los resultados para un nivel de significación del 90%, lo que sugiere la existencia de diferencias con tamaños de muestra mayores.

Además, es de esperar que exista un "efecto Hawthorne", aunque parece no haber afectado significativamente a los resultados obtenidos. Podemos realizar esta afirmación en base a que, si en los primeros momentos del estudio es esperable la aparición de este efecto, el mismo tiende a neutralizarse y desaparecer con el tiempo (Gale, 2004). De esta forma, en un estudio prolongado como el que aquí se presenta el "efecto Hawthorne" tendería a equiparar grupo control y experimental, así como a mejorar el rendimiento de ambos, pero tendería a desaparecer en el momento de las mediciones (McCarney et al, 2007).

La limitación asociada al tamaño muestral es compartida con el estudio en el que se aplica la versión original del CARELINK (Nicholson y Shellman, 2013), lo que demuestra la dificultad manifiesta para llevar a cabo este tipo de trabajos. Esta limitación, vinculada al hecho de que al disminuir el nivel de significación (tal y como se ha puesto de manifiesto anteriormente) es posible intuir diferencias significativas entre el grupo control y experimental, consideramos necesario, al igual que el estudio de Nicholson y Shellman (2013) seguir estudiando estos fenómenos con tamaños muestrales mayores, así como establecer, además, intervenciones específicas y diferenciadas para cada uno de los fenómenos estudiados, e intentar, en la medida de lo posible, situarlos en el ámbito de la práctica de los profesionales sanitarios. Consideramos que asumir estas cuestiones permitiría discriminar de forma concluyente el carácter eficaz de la intervención.

6.1.10. Consideraciones éticas.

El estudio se llevó a cabo siguiendo los principios éticos de la Declaración de Helsinki (Krleza-Jeric y Lemmens, 2009) y contó con el permiso del Comité Ético para la provincia de Córdoba.

Antes de llevarse a cabo la recogida de información, así como la intervención, los participantes fueron informados de todos los aspectos relativos al trabajo, y dieron su consentimiento informado de forma documental.

En todo momento, se garantizó el anonimato de la persona. Para ello, se han codificado los cuadernos de recogida de datos (CRD) mediante un sistema alfanumérico.

Los datos personales obtenidos han sido tratados de acuerdo con el Reglamento UE/2016/679, de 27 de abril de 2016, General de Protección de Datos, y la Ley Orgánica 3/2018, de 5 de diciembre, de Protección de Datos Personales y garantía de los derechos digitales.

6.2. RESULTADOS Y DISCUSIÓN.

6.2.1. Resultados

a) Caracterización de la muestra con respecto a variables basales, dependientes e independientes.

Una vez llevada a cabo un análisis comparativo de los grupos componentes de la muestra, con la finalidad de caracterizar a los participantes en el estudio, los principales resultados encontrados son los que se reflejan en la siguiente tabla (Tabla 3).

Tabla 3. Comparación entre los grupos de control y de intervención en la línea de base (según las características sociodemográficas).

VARIABLES	Grupo		Total (N=119) Media±SD (range)
	Control (N=56) Media±SD	Experimental (N=63) Media±SD	
Edad (años):	82.91±6.86	80.79±5.38	81.79±6.27 (66-94)

	N	%	N	%	N	%
Sexo:						
Varón	13	23.2	15	23.8	28	23.5
Mujer	43	76.8	48	76.2	91	76.5
Estado Civil:						
Casado	6	10.7	14	22.2	20	16.8
Separado	4	7.1	5	7.9	9	7.6
Soltero	6	10.7	4	6.3	10	8.4
Viudo	40	71.4	40	63.5	80	67.2
Situación de cohabitación:						
Cónyuge o pareja de hecho	6	10.7	11	17.5	17	14.3
Sin pareja, pero forma núcleo doméstico con hijos/as u otra familia.	4	7.1	5	7.9	9	7.6
Vive solo	46	82.1	46	73.0	92	77.3
Convivencia con personas no parientes	0	0.0	1	1.6	1	0.8
Nivel de estudios:						
Sin estudios	24	42.9	23	36.5	47	39.5
Estudios obligatorios incompletos	17	30.4	24	38.1	41	34.5
Estudios primarios completos	10	17.9	16	25.4	26	21.8
Secondary school	5	8.9	0	0.0	5	4.2
Ocupación laboral:						
Externa	35	62.5	45	71.4	80	67.2
Interna	20	35.7	18	28.6	38	31.9
NS/NC	1	1.8	0	0.0	1	0.8
Situación económica (dificultades):						
Raras veces o casi nunca	32	57.1	34	54.0	66	55.5
De vez en cuando	12	21.4	14	22.2	26	21.8
A menudo	8	14.3	6	9.5	14	11.8
Muchas veces	4	7.1	9	14.3	13	10.9
Receive ayuda económica:						
Si	15	26.8	23	36.5	38	31.9
No	41	73.2	40	63.5	81	68.1
Él / ella dispone de personas que le ayuden						
Si	38	71,7	39	66,1	77	68,8
No	15	28,3	20	33,9	35	31,3
Las relaciones con familias / amigos cumplen las expectativas						
Si	28	53,9	19	32,2	47	42,3
No	24	46,2	40	67,8	64	57,7

Fuente: elaboración propia.

En lo que refiere a las variables sociodemográficas, nos encontramos con que la edad media de los sujetos participantes fue de 81.79±6.27 –SD- (límites: 66-94 años), si bien ésta fue ligeramente superior en el grupo control (82,91 años) que en el grupo experimental (80,79±6.78; p= 0,062). Con respecto al sexo, nos encontramos con que el sexo predominante en ambos grupos es el femenino, con un 76,5% de la muestra.

En lo relativo al estado civil, el predominante en ambos grupos es el de viudedad, estando presente en un 67,2 % de ambos grupos. El segundo estado más representado en

ambos casos es el de casado/a, oscilando entre el 10,7% del grupo control y el 16,8% del grupo experimental.

La forma más frecuente de residencia entre los sujetos participantes es la de vivir solo (77,3%) aunque el grupo control ofrece cifras ligeramente superiores (el 82,1%). La siguiente forma más habitual de residencia es con el / la cónyuge o pareja de hecho, en el que el grupo experimental ofrece valores mayores (un 14,3% frente a un 10,7%).

Con lo que respecta al nivel de educación, nos encontramos que los mayores valores los ocupan los sujetos que no tienen estudios (39,5%) y los que tienen estudios primarios incompletos en segundo lugar (34,5%). Si prestamos atención a la ocupación laboral, prevalecen aquellos sujetos que han desarrollado actividades productivas fuera del entorno doméstico (67,2%).

En ambos grupos se aprecian valores parecidos de dificultad económica, siendo un 55,5%, aquellos sujetos que manifiestan no tener dificultades económicas o muy raramente, y destacando además los que no perciben ayuda económica externa de ningún tipo (68,1%).

Es preciso poner de manifiesto que, en el análisis de las condiciones basales de la muestra estudiada no se detectan diferencias entre los grupos experimental y control en relación con las variables sociodemográficas.

Las variables independientes analizadas relativas al nivel de salud tampoco difieren cuando se comparan ambos grupos a nivel basal. En lo que refiere a los diagnósticos de movilidad, nos encontramos con valores similares en ambos grupos (en torno al 3,78) lo que supone un nivel de compromiso entre medio y leve. Así mismo, ambos grupos presentan valores similares en la Escala de Barthel, moviéndose entre los niveles leves (66,1%) y moderados (27,7%). En la Escala de Comorbilidad de Charlson, el 100% de los participantes presente unos niveles altos, con independencia de la adscripción del grupo.

En el NOC relativo a depresión, ambos grupos presentan niveles medios y leves, con valores entre moderado y leve (puntuación media de 3,53 para ambos grupos).

Resultados similares encontramos en torno al NOC de afrontamiento, con una puntuación media de 3,36.

La frecuentación de los recursos sociosanitarios es muy similar en ambos grupos (tabla 4) aunque cabe la pena destacar que el grupo control hace un leve mayor uso de la consulta de enfermería mientras que el experimental lo hace de la consulta del profesional de medicina.

Table 4. Comparación entre los grupos de control y de intervención en el momento basal (según la demanda de **atención**, las variables clínicas y la capacidad cognitiva y funcional de los sujetos del estudio).

VARIABLES	Grupo		
	Control (N=51) Media±SD	**Experimental** (N=55) Media±SD	**Total** (N=106) Media±SD (rango)
Demanda asistencial:			
Consultas al médico de atención primaria	3.27±6.08	3.81±4.18	3.55±3.53 (0-18)
Consultas a la enfermera de atención primaria	4.18±6.68	3.56±6.08	3.85±6.39 (0-40)
Atención sanitaria domiciliaria	2.66±6.59	1.79±4.90	2.20±5.75 (0-36)
Parámetros clínicos:			
Peso (kg)	71.96±14.84	73.17±12.72	72.61±13.71 (44-106)
Talla (cm)	156.53±9.83	157.62±8.59	157.09±9.26 (138-188)
Índice de Masa Corporal (BMI)	29.27±4.70	29.19±4.32	29.23±4.48 (18.97-41.23)
Frecuencia cardiaca (latidos/minuto)	74.06±9.45	73.28±13.23	73.70±11.31 (48-120)
Tensión arterial sistólica (mm Hg)	132.15±16.97	131.17±14.90	131.70±15.96 (90-178)
Tensión arterial diastólica (mm Hg)	72.62±9.37	71.30±8.90	72.01±9.14 (50-95)
Patologías crónicas	3.09±2.11	2.98±2.57	2.98±2.35 (0-9)
Capacidad funcional y cognitiva:			
NOC nivel de movilidad	3.91±5.38	3.66±6.86	3.78±0.84 (1.33-5.00)
NOC depresión	3.51±0.70	3.54±0.71	3.53±0.69 (1.82-5.00)
NOC afrontamiento	3.30±0.82	3.41±0.72	3.36±0.77 (1.72-5.00)

Fuente: Elaboración propia.

Respecto a las medidas basales de las 3 variables de resultado tampoco se apreciaron diferencias estadísticamente significativas.

En lo que refiere a la primera de variable "Aislamiento social", nos encontramos con que ambos grupos presentan niveles de apoyo percibido escaso (con un valor medio

en torno a 24,77), que también se proyecta en su dimensión afectiva (11,27) y en su dimensión de apoyo confidencial (13,30) por separado.

Considerada la Variable "Soledad", los valores basales de ambos grupos se establecen muy próximos al valor medio de 8,82, lo que supone un nivel intenso de soledad percibido.

En último lugar, con respecto a la Variable "Calidad de Vida", nos entramos con que casi el 75% de los participantes tienen algún tipo de dificultad, lo que está acompañado de algunas dificultades para el autocuidado (46,9% de los participantes) y para desempeñar algunas tareas cotidianas (63,1% de la muestra). El 55% de los participantes presentan niveles moderados de dolor, frente a un 36 % que lo presentan en un nivel alto. En ambos grupos encontramos un volumen significativo de sujetos con niveles moderados de ansiedad o depresión, siendo especialmente representativo en el grupo experimental, con un 64,4% frente a un 48,1% del grupo control. La percepción subjetiva sobre el estado de calidad de vida es ligeramente superior en el grupo experimental frente al control, aunque en ambos casos con valores muy próximos a la media de 46,2 en una escala de 0 a 100.

Prestando atención a las posibles variables explicativas de las causas y forma de vivenciación de la situación del aislamiento y / soledades no deseadas **sí encontramos algunas diferencias significativas a nivel basal** entre los dos grupos estudiados.

En primer lugar, en cuanto a la disponibilidad de redes formales o informales de apoyo (p= 0,001) nos encontramos con que el 68,8% cuenta con personas que le ayudan si lo necesita, siendo el recurso más frecuente el servicio de ayuda a domicilio (36,1%), manifestando valores muy próximos ambos grupos. Sin embargo, el grupo experimental manifiesta disponer de más ayudas en teleasistencia, servicio de acompañamiento no remunerado y otros.

En relación con la cobertura de expectativas con respecto a familia y amistades (p=0,021), encontramos que el grupo experimental presenta mayores niveles de insatisfacción (un 67,8% frente al 46,2%).

b) Asociación entre variables sociodemográficas y aislamiento social, soledad no deseada y calidad de vida.

Si tenemos en cuenta la **relación bivariante** ente las variables independientes y las variables objeto de estudio en el presente trabajo se puede observar que, en el caso del aislamiento social, el nivel de escolarización tiene valores significativos para dos de los tres momentos de medición (en el momento basal y a dos meses de la intervención con p=0,014 y p=0,015 respectivamente), vinculándose especialmente a la dimensión de apoyo confidencial (anexos 3 a 5).

La edad también se presenta como significativa, e igualmente vinculada a la dimensión de apoyo confidencial (p=0,036 y p=0,014 respectivamente), pero en los dos últimos momentos de mediación, tomando especial relevancia en el último momento, en el que se identifica una correlación significativa con el apoyo total y las dos dimensiones en las que se desagrega (p=0,036; p=0,032 y p=0,014).

La necesidad de acceder a soporte económico aparece como significativa (p=0,023) una vez transcurridos dos meses de la intervención y vinculada a la dimensión de apoyo afectivo de esta variable.

En lo que refiere a la variable soledad no deseada, nos encontramos con que en el momento basal está significativamente relacionada con el estado civil y la presencia de dificultades económicas, especialmente en lo que respecta a la dimensión de soledad real y a la puntuación total en esta variable. Sin embargo, tanto el estado civil como la presencia de dificultades económicas pierden su significación en las siguientes mediciones, (T2 y T3) en favor del nivel de escolarización (en la T2 y vinculándose exclusivamente a la dimensión de soledad real) y de desempeño de actividades laborales fuera del ámbito doméstico (en la T3 y relacionada a la dimensión de apoyo emocional y a la de apoyo total) tal y como se puede ver en los anexos 6 a 8.

Por su parte, la variable de Calidad de Vida sólo va a presentar niveles de significación, en su EVA, con el hecho de que el sujeto viva solo o no en T1 y cercanos a la significación estadística en T2, perdiendo significación en el resto de los momentos de medición (anexos 9 a 11).

En cualquier caso, resulta difícil explicar estas asociaciones, sobre todo si las observamos desde la labilidad temporal que presentan.

En lo que respecta al análisis multivariante, realizado con la variable dependiente "apoyo social", podemos construir un modelo máximo y un modelo final de regresión logística binaria ajustados según el grupo de comparación, arrojando valores en el Test de Hosmer-Lemeshow de 0.373 para el modelo máximo y de 0.856 para el modelo final, con un intervalo de confianza del 95%.

Respecto a las variables que permanecen en el modelo final más parsimonioso, encontramos el contar con personas que le ayudan (OR=4.92; 95% CI=1.15-20.98) y la movilidad (OR=3.70; 95% CI=1.54-8.91), sin que se hallasen diferencias significativas entre los grupos experimental y control (Tabla 5).

Table 5. Determinantes en la mejora del aislamiento social.

	MODELO MÁXIMO				**MODELO FINAL**			
			95% CI de la OR				95% CI de la OR	
VARIABLES INDEPENDIENTES	p	OR	Límite inferior	Límite superior	p	OR	Límite inferior	Límite superior
Grupo (experimental vs. control)	0.240	3.33	0.45	240.78	0.911	1.08	0.28	4.13
Edad (años)	0.194	1.13	0.938	10.372				
Sexo (hombre vs. mujer)	0.076	0.05	0.002	10.346				
Estado civil: (categoría de referencia: viudo)								
-Casado	0.221	30.21	0.12	7097.37				
-Separado	0.816	0.66	0.02	21.15				
-Soltero	0.770	1.59	0.07	36.77				
Nivel de escolarización: (categoría de referencia: estudios secundarios)								
-Sin estudios	0.085	39.96	0.60	2664.68				
-Primarios incompletos	0.212	14.26	0.22	929.19				
-Primarios completos	0.084	69.87	0.57	8617.74				
Dificultades económicas (sí vs. no)	0.095	4,12	0.78	21.77				
Recibe ayuda económica (sí vs. no)	0.414	2,32	0.31	17.50				
Atención médica (nº)	0.601	0.92	0.69	1.24				
Atención enfermera (nº)	0.540	0.94	0.77	1.14				
Asistencia sanitaria domiciliaria (nº)	0.834	1.02	0.83	1.26				
Vive sólo (sí vs. no)	0.897	0.92	0.28	3.08				
Cuenta con personas que la ayudan (sí vs. no)	0.106	10.64	0.60	187.41	0.031	4.92	1.15	20.98
Movilidad NOC	0.006	13.9	2.14	90.35	0.004	3.70	1.54	8.91
Depresión NOC	0.383	0.31	0.02	4.18				

	MODELO MÁXIMO				MODELO FINAL			
			95% CI de la OR				95% CI de la OR	
VARIABLES INDEPENDIENTES	p	OR	Límite inferior	Límite superior	p	OR	Límite inferior	Límite superior
Grupo (experimental vs. control)	0.240	3.33	0.45	240.78	0.911	1.08	0.28	4.13
Edad (años)	0.194	1.13	0.938	10.372				
Sexo (hombre vs. mujer)	0.076	0.05	0.002	10.346				
Estado civil: (categoría de referencia: viudo)								
-Casado	0.221	30.21	0.12	7097.37				
-Separado	0.816	0.66	0.02	21.15				
-Soltero	0.770	1.59	0.07	36.77				
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-Sin estudios	0.085	39.96	0.60	2664.68				
-Primarios incompletos	0.212	14.26	0.22	929.19				
-Primarios completos	0.084	69.87	0.57	8617.74				
Dificultades económicas (sí vs. no)	0.095	4,12	0.78	21.77				
Recibe ayuda económica (sí vs. no)	0.414	2,32	0.31	17.50				
Atención médica (nº)	0.601	0.92	0.69	1.24				
Atención enfermera (nº)	0.540	0.94	0.77	1.14				
Asistencia sanitaria domiciliaria (nº)	0.834	1.02	0.83	1.26				
Vive sólo (sí vs. no)	0.897	0.92	0.28	3.08				
Afrontamiento NOC	0.798	1.30	0.17	10.07				
Apoyo social (basal: sí vs. no)	0.002	222.8	7.56	6568.41	0.001	35.49	4.60	273.55
Sentimiento de soledad (basal)	0.126	1,40	0.91	2.17				
Estado de salud (Euroqol-5D)	0.038	0.94	0.89	0.99				
Patologías crónicas (nº)	0.244	0.77	0.50	1.95				
Variable dependiente: Apoyo social (sí/no). Test de Hosmer-Lemeshow del modelo máximo: 0.373. Test de Hosmer-Lemeshow del modelo final: 0.856. OR: Odds Ratio. 95% CI: 95% Intervalo de Confianza								

Fuente: Elaboración propia.

Por último, se hizo un análisis multivariado para estudiar qué variables independientes se encontraban asociadas a la soledad, no hallándose ninguna que resultase estadísticamente significativa.

c) Efectos de la intervención.

Respecto al efecto de la intervención, no se halló ninguna diferencia estadísticamente significativa en la puntuación total de la variable aislamiento social al comparar ambos grupos al final del seguimiento.

Solo en el análisis por protocolo de las dimensiones específicas de esta variable encontramos una diferencia estadística entre la medición basal y la final de las puntuaciones medias del apoyo confidencial entre ambos grupos. En este caso, la puntuación media en el grupo control, fue de 1.07 en el instante inicial y de 1,14 en el final, mientras que en el grupo experimental la puntuación media pasó de 1,14 a 1.30, respectivamente (p=0.008).

En el caso del análisis por intención de tratar (Tabla 6), esta significación fue menor, aunque muy cercana al nivel de significación estadística (p=0,058). Además, al analizar los datos desagregados por grupo, en el experimental se encontraron diferencias significativas entre los resultados obtenidos al inicio (T1) y al final del estudio (T2) en todas las dimensiones, mientras que en el grupo de control no se encontraron diferencias en este sentido.

Tabla 6. Aislamiento social. Comparación de grupos entre los momentos de inicio y finalización.

Dimensión	Momento basal Media±SD		Momento final Media±SD		p*	p**	p***
	Control N=56	Experimental N=63	Control N=56	Experimental N=63			
Total media	2.26±0.59	2.26±0.56	2.34±0.70	2.43±0.57	0.565	0.005	0.122
Apoyo afectivo	1.07±0.26	1.03±0.18	1.12±0.33	1.11±0.32	0.679	0.003	0.096
Apoyo confidencial	1.07±0.26	1.02±0.13	1.13±0.33	1.19±0.40	0.058	0.001	0.180
Apoyo total	24.41±6.56	24.90±6.15	25.75±7.78	26.78±7.16	0.565	0.005	0.122

SD: Desviación estándar; * Análisis Global; ANOVA test para medidas repetidas; ** Análisis entre el momento basal y la medida final en el grupo experimental; Test Wilcoxon; *** Análisis entre el momento basal y la medida final en el grupo control; Test de Wilcoxon;

Fuente: Elaboración propia.

En cuanto a la comparación de medias asociadas a la variable soledad, no se encontraron diferencias estadísticamente significativas entre ambos grupos para ninguna de las puntuaciones (total, emocional y real) al analizarlas en T1 y en T2 (Tabla 7).

Tabla 7. Sentimiento de soledad. Comparación de grupos entre momentos de inicio y finalización.

Dimension	Momento Basal Media±SD		Momento final Media±SD		p*	p**	p***
	Control N=56	Experimental N=63	Control N=56	Experimental N=63			

Soledad emocional	3.95±1.38	2.86±1.73	3.91±1.21	3.02±1.86	0.355	0.331	0.987
Soledad real	4.39±1.59	3.63±2.16	4.27±1.70	3.51±2.06	0.992	0.183	0.477
Soledad total	8.38±2.49	6.51±3.62	8.19±2.32	6.50±3.50	0.588	0.650	0.551

SD: Desviación estandar; * Análisis global entre medidas basales y finales; ANOVA test para medidas repetidas; ** Análisis entre la medida basal y final en el grupo experimental; Test de Wilcoxon; *** Análisis entre la medida basal y la medida final en el grupo control; test de Wilcoxon;

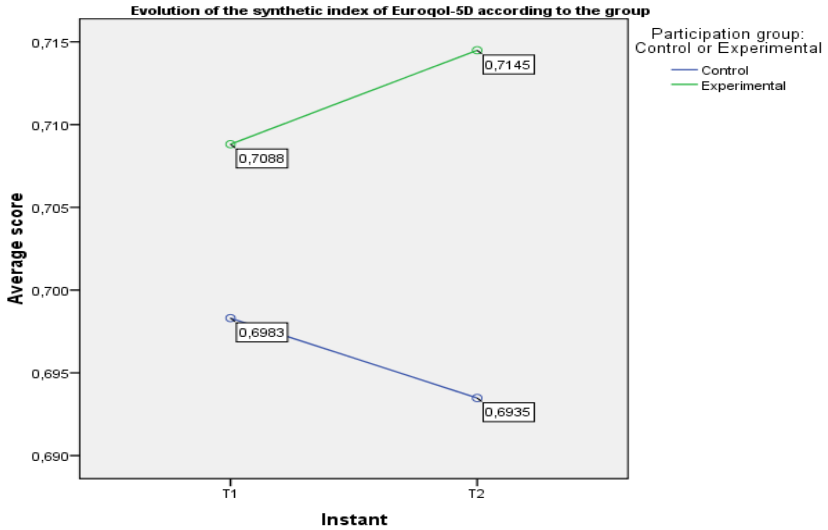
Fuente: Elaboración propia.

Sin embargo, si comparamos las medias emparejadas en el grupo experimental, se encontró una mejora en las puntuaciones de soledad emocional entre T2 y T3 (p=0,012).

En lo que respecta a la CVRS, la comparación de medias tanto de los índices sintéticos como de la valoración del estado de salud en ambos grupos, control y experimental tampoco ofreció diferencias estadísticamente significativas.

No obstante, si analizamos la evolución en el tiempo de las puntuaciones tanto del índice sintético como de la Escala Visual Analógica nos encontramos con que el grupo experimental presenta mejores resultados que el grupo control (Figura 3 y 4).

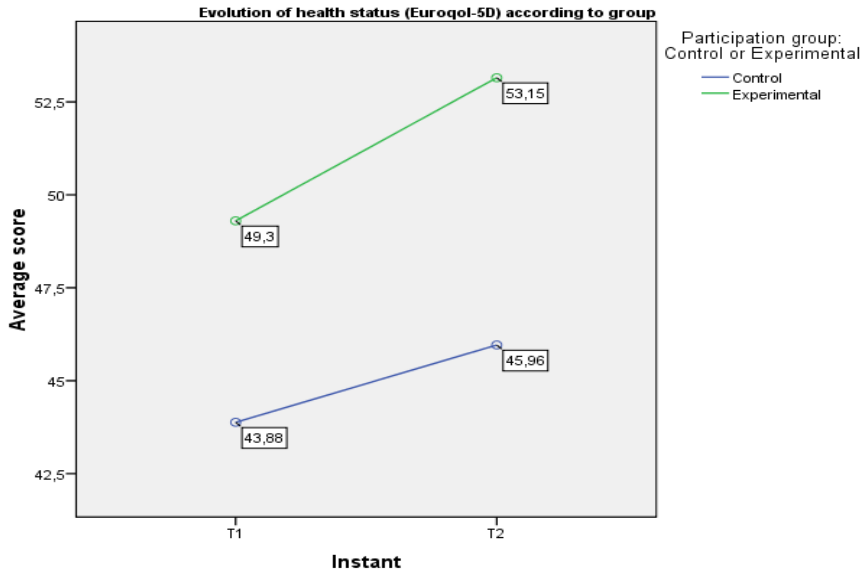
Figura 3: Evolución de Índice Sintético Euroqol-50 en modo comparado entre grupos.



ANOVA para medidas repetidas; p=0.950

Fuente: Elaboración propia.

Figura 4: Evolución de la Escala Visual Analógica en modo comparado entre grupos.



ANOVA para medidas repetidas; p=0.580

Fuente: Elaboración propia.

6.2.2. Discusión.

a) Discusión con respecto a los determinantes del aislamiento social y la soledad no deseadas.

La revisión de la literatura nos permite determinar una serie de indicadores que, sin poder establecer relaciones de causalidad, manifiestan una fuerte vinculación predictora de la aparición del aislamiento social y la soledad en mayores no institucionalizados. Los resultados de las investigaciones no permiten establecer una causalidad entre la concurrencia de uno de estos factores y la aparición del sentimiento de soledad y el aislamiento social, sino que se identifican como de carácter multifactorial en los que cada una de las variables tienen un carácter aditivo (Cheung et al., 2019)

En diferentes revisiones sobre el aislamiento social en las que se trató de elaborar un perfil de la persona que podía estar aislada para facilitar su detección, se identificaron factores de riesgo físicos, psicológicos, sociodemográficos y sociales (Freedman y Nicolle, 2020; Victor et al., 2000).

Si tenemos en cuenta la relación bivariante entre las variables independientes y las variables objeto de estudio en el presente trabajo, se puede observar que el aislamiento social presenta una asociación significativa con el nivel de escolarización para dos de los tres momentos de medición (vinculándose especialmente a la dimensión de apoyo confidencial), la edad (igualmente vinculada a la dimensión de apoyo confidencial, pero en los dos últimos momentos de mediación) y la necesidad de acceder a soporte económico (vinculada, en este caso, a la dimensión de apoyo afectivo, una vez transcurridos dos meses de la intervención). Estos datos coinciden con estudios anteriores que relaciona el aislamiento con un menor nivel de escolarización y las condiciones económicas precarias (García-González et al., 2021; Gené – Badía et al., 2019; Rocha – Viera et al., 2019), el aumento de la edad (García-González et al., 2021; Gené – Badía et al, 2019; Rocha – Viera et al, 2019) y la disponibilidad de redes de apoyo (Kemperman et al., 2019),

En lo que refiere a la variable soledad no deseada, nuestro estudio observa una asociación significativa con el estado civil y la presencia de dificultades económicas en el momento basal, especialmente en lo que respecta a la dimensión de soledad real y a la puntuación total en esta variable. Sin embargo, tanto el estado civil como la presencia de dificultades económicas pierden su significación en las siguientes mediciones, (T2 y T3). En cambio, en la T2 se asocia con el nivel de escolarización (vinculándose exclusivamente a la dimensión de soledad real); y en la T3, con el desempeño de actividades laborales fuera del ámbito doméstico (en la dimensión de apoyo emocional y a la de apoyo total).

Respecto a la relación entre la edad y la presencia de la soledad, la bibliografía disponible plantea que es de carácter procesual, de tal forma que adquiere una forma de U, es decir, que la soledad se experimenta más intensamente previo a los 60 años, y posterior a los 80 (Pinquart y Sorensen, 2001), que como se puede comprobar es el grupo más numeroso de la muestra del presente estudio.

En lo que refiere a la variable soledad no deseada y su relación con el estado civil y la presencia de dificultades económicas, estos mismos estudios justifican su relación. Precisamente las personas cuyo estado civil es no casado/a (soltero/a, viudo/a,

divorciado/a) muestran mayores niveles de soledad (Chung et al., 2019). Por su parte, un menor estatus socioeconómico también se relaciona con un mayor sentimiento de soledad (Chung et al, 2019; Pinquart y Sorensen, 2001). Sin embargo, no ha sido posible identificar en la bibliografía argumentos explicativos de la relación entre soledad y el desempeño de actividades laborales fuera del ámbito doméstico.

Por último, y en lo que respecta a la variable de Calidad de Vida nuestros resultados solo encuentran niveles de significación, y referidos a la EVA, con el hecho de que el sujeto viva solo o no en T1 (y cercanos a la significación estadística en T2), una relación que es recientemente señalada por Gonzalez et al. (2018).

En cualquier caso, y como indicábamos en el apartado de resultados, es difícil explicar estas asociaciones, sobre todo si las observamos desde la labilidad temporal que presentan.

Finalmente, y en lo que respecta a los resultados del análisis multivariante de los factores asociados a la mejora del aislamiento social, los resultados del presente estudio identifican la influencia de contar con personas que le ayudan y movilidad que poseen.

Con respecto a la primera de las variables identificadas, hay una clara correspondencia con los resultados de otros estudios. Disponer de una red suficiente de apoyo reduce el riesgo de aislamiento social en múltiples estudios (Böger y Huxhold, 2018; Donovan et al., 2017; Dykstra et al., 2005; Pijartova et al., 2016)

Con respecto a la influencia de la movilidad, los resultados identificados en la bibliografía no son concluyentes. Mientras que es posible identificar una asociación positiva en el aislamiento social a nivel bivariante no lo es a nivel multivariante, (Dahlberg et al., 2015) como sí ha ocurrido en nuestro estudio.

Tanto un elemento como otro se explican por el hecho de ser condiciones necesarias, junto con la capacidad de comunicación, para disfrutar de una dinámica de interacción social adecuada y satisfactoria (Dykstra, 1995; López y Clemente, 2019; Pinquart y Sörensen, 2001; Savikko et al., 2005; Schrempft et al., 2019).

b) Discusión con respecto a la efectividad de la intervención.

Los resultados del presente trabajo no permiten afirmar que el Programa Carelink modificado resulte efectivo en términos generales, aunque sí lo sería en lo que respecta a la dimensión "Apoyo confidencial" del Aislamiento Social, poseyendo, además, la capacidad de mantener sus efectos positivos transcurrido un periodo de dos meses tras la intervención.

Estos resultados son inconsistentes con los obtenidos por Nicholson y Shellman (2013), que informaron de una mejora significativa en el aislamiento social de las personas mayores. La falta de eficacia global encontrada en los resultados de nuestro estudio puede deberse a tres cuestiones. En primer lugar, la gravedad tanto del aislamiento social como de la soledad de la población estudiada. En cuanto al aislamiento social, encontramos que ambos grupos tienen bajos niveles de apoyo percibido, con un valor medio en torno a 24,77; que también se refleja en su dimensión afectiva y en su dimensión de apoyo confidencial por separado, con valores de 11,27 y 13,30, respectivamente. En cuanto a la soledad, los valores de partida de ambos grupos se establecen muy cerca del valor medio de 8,82, lo que implica un nivel intenso de soledad percibida. El carácter severo de ambas variables podría implicar una mayor dificultad para alcanzar cambios significativos. En segundo lugar, se ha utilizado una versión modificada de CARELINK, que fue reducida para hacerla factible en la práctica profesional en Atención Primaria en nuestro entorno. En tercer lugar, los estudiantes participantes realizaron la intervención como voluntarios y no como parte de su programa de formación (a diferencia de los del estudio de Nicholson y Shellman, 2013). Junto a estas razones, la existencia de diferencias culturales entre ambos entornos podría ser otro motivo a investigar.

A pesar de ello, los resultados del estudio sugieren un incremento del apoyo confidencial, que además continúa mejorando incluso después de que haya finalizado el programa. Las razones para ello pueden tener que ver con el tiempo que cada sujeto necesita para adquirir las competencias trabajadas (dinamizar la capacidad comunicativa y vinculativa del sujeto), pues retomar los procesos de interacción con la red social disponible a su alrededor o crear nuevos vínculos resulta, muchas veces, difícil y requiere períodos de tiempo mayores (Chiang et al., 2010; Winningham y Pike, 2007).

En lo que respecta a la variable soledad, no encontramos diferencias entre el grupo experimental y el grupo control. No obstante, sí se observa un efecto positivo sobre las puntuaciones del grupo experimental (aunque mucho menor a lo esperado). Además, esta mejora se mantiene a lo largo del tiempo. e incluso se incrementa pasados dos meses.

Es decir, lo primero que se produce tras finalizar la intervención es un empeoramiento de la soledad real, comprensible si tenemos en cuenta el efecto de la finalización de la relación agente-sujeto sobre la percepción de la soledad de dicho sujeto. No debemos olvidar, que en este tipo de intervención parte de la premisa necesaria de generar un vínculo afectivo y de reconocimiento mutuo entre los diferentes individuos participantes (Nicholson y Shellman, 2013), por lo que la finalización de la actividad puede generar la vivenciación de un duelo por parte del adulto mayor.

No obstante, tras este empeoramiento inicial (tras la finalización de la intervención), se produce una mejora tardía en la dimensión de soledad emocional que compensa el empeoramiento de la soledad real que se produce tras finalizar la intervención. Esta mejora significativa en la dimensión de soledad emocional, podría deberse al hecho de que el mayor haya aprendido a sentirse satisfecho con los contactos que tiene (recordemos que la insatisfacción de expectativas con respecto a familia y amistades era una característica basal diferencial en los sujetos experimentales). Este efecto ya aparece recogido en estudios previos (Castro, 2015; Savikko et al., 2005; Cosco et al., 2013; Nicolaisen y Thorsen, 2017)

En cualquier caso, la ausencia de diferencias estadísticamente significativas entre el grupo experimental y el grupo control entra dentro de los resultados esperables, pues el modelo de intervención Carelink se planteó para intervenir sobre situaciones de aislamiento social, pero no se había comprobado su eficacia en situaciones de soledad (Nicholas et al., 2013). Estos resultados constatan la premisa de que el aislamiento social y la soledad son dos fenómenos de carácter multidimensional que comparten elementos pero que, a la misma vez, presentan peculiaridades significativas (Leigh-Hunt et al., 2019; Palmer, 2019) que hacen preciso proponer intervenciones objetivamente diferenciadas para cada uno de estos fenómenos (Menec et al., 2019) de tal forma que, para el aislamiento social, serían más deseables aquellas intervenciones que posibilitaran las

interacciones sociales, y en el caso de la soledad serían más adecuadas intervenciones de reorientación psicológica (Gené-Badia et al., 2018). Así mismo, la bibliografía demuestra que, para el caso de la soledad, las intervenciones de carácter grupal resultan más eficaces que las llevadas a cabo individualmente (Cattan et al., 2005; Findlay et al, 2003; Hagan et al., 2014).

Respecto a los resultados relativos a calidad de vida, aunque los datos de nuestro estudio no señalan diferencias entre grupos (control y experimental) sí identifican una mejora en el grupo experimental que, además, se mantiene tras la intervención. Esta mejora parece que ocurre en la medida en la que mejoran los parámetros asociados al aislamiento social y la soledad, como ya indicaban Kobayashi y Steptoe (2018). No obstante, pese a que hay múltiples revisiones sistemáticas que identifican una relación significativa entre aislamiento social, soledad y calidad de vida (Courtin et al., 2017), la dirección de dicha relación se presenta contradictoria en la bibliografía (Weller y Wagner, 2017).

CAPÍTULO 7. ESTUDIO 3: CONDICIONANTES PARA EL ABORDAJE DEL AISLAMIENTO SOCIAL Y LA SOLEDAD DE ADULTOS MAYORES NO INSTITUCIONALIZADOS DESDE ATENCIÓN PRIMARIA DE SALUD[1].

7.1. METODOLOGÍA.

7.1.1. Diseño.

Estudio de Teoría Fundamentada Dimensional (TGD) con enfoque narrativo de tópico. La Teoría Fundamentada Dimensional (TGD) (Schatzman, 1991) es una propuesta metodológica que supone una revisión de la Teoría Fundamentada clásica, cuya principal particularidad es que, frente a la pretensión de establecer una teoría sustantiva o formal, presta más atención a explicar el proceso de selección y organización de las dimensiones que se utilizan en la definición de situaciones o en la construcción de significados. Para el diseño se siguieron las Normas para la presentación de informes de investigación cualitativa (SRQR).

7.1.2. Ámbito.

El estudio se ha desarrollado en trece centros de Atención Primaria del distrito sanitario de Córdoba y Guadalquivir, que abarcan tanto zonas urbanas como rurales, con pluralidad de condiciones de carácter socioeconómico y sanitario.

En estos centros se llevó a cabo el estudio experimental "Efectividad de una intervención no farmacológica multi-componente para reducir el aislamiento social y la soledad de mayores residentes en su domicilio", financiado por la Consejería de Salud de la Junta de Andalucía, del que forma parte este primer análisis.

[1] Resultados parciales de este trabajo se encuentran publicados en Hernández-Ascanio, J., Perula-de Torres, LA., Rich-Ruiz, M., Roldán-Villalobos, AM., Perula-de Torres, C., Ventura Puertos, PE, Collaborative Group Asys Proyect (2021), Condicionantes para el abordaje del aislamiento social y la soledad de adultos mayores no institucionalizados desde atención primaria de salud en Atención Primaria, Volume 54, Issue 2, https://doi.org/10.1016/j.aprim.2021.102218

7.1.3. Sujetos.

Para la selección de los informantes se integraron los siguientes tipos de diseños muestrales:

- Un muestreo intencional (basado en una evaluación cuidadosa y detallada de las posibilidades de los sujetos de proporcionar información profunda y detallada sobre el objetivo de la investigación para aquellos agentes que completaron la intervención en el estudio experimental). En consecuencia, se tuvieron en cuenta aquellos participantes que habían mostrado mayores niveles de participación y mejores habilidades comunicativas durante el desarrollo del proyecto, a juicio del equipo coordinador de este.

- Un muestreo de casos críticos (se incorporaron como informantes a agentes de intervención que abandonaron el estudio experimental, aunque cuantitativamente fueron un número marginal).

Participaron en el proyecto como agentes de intervención: 13 Estudiantes de enfermería (de los que abandonaron 2), 17 voluntarios de organizaciones sociales (de los que abandonaron 8) y 2 profesionales de la salud. Sin embargo, no se definió previamente el número de casos de estudio (grupos, entrevistas o recursos documentales).

La recogida de información continuó hasta que se produjo la saturación del discurso. Para confirmar el logro de los principios de saturación teórica y temática, se aplicaron las recomendaciones analíticas de esta versión crítica de la Teoría Fundamentada (Schatzman, 1991), consistentes en contrastar la aplicación del Método de Comparaciones Constantes a un Muestreo Teórico con la sensibilidad teórica de los investigadores y someter este contraste a una triangulación de investigadores. Tras la aplicación de estos criterios, el número final de informantes fue de 12.

Los participantes fueron reclutados entre los agentes de intervención del estudio experimental nombrado. Los miembros del equipo de investigación llevaron a cabo el reclutamiento.

7.1.4. Variables/ dimensiones.

Las categorías de los guiones utilizados fueron: 1) Caracterización de los participantes; 2) Opiniones y creencias previas sobre el aislamiento social/soledad; 3) Proceso de intervención: Fase previa, ejecución y evaluación de resultados; y 4) Valoración personal de la participación en el proyecto: Implicación emocional y formativa.

Las categorías iniciales utilizadas para la elaboración de los guiones de las entrevistas y los grupos focales son el resultado de un análisis emergente de los biogramas, los cuadernos de anécdotas y los diarios de campo que se realizó a los agentes con más de 6 casos asignados.

7.1.5. Recogida de datos.

Para la recogida de datos se utilizaron tres tipos diferentes de técnicas: a) Grupos focales, b) Entrevistas semiestructuradas, y c) Análisis de biogramas, anecdotarios y diarios de campo.

La aplicación de estas técnicas tuvo un carácter segmentado, de manera que

- El grupo de discusión se realizó con agentes que tenían una media de 2 a 4 casos de intervención asignados y que completaron con éxito el proyecto. Se realizaron dos grupos de discusión (de aproximadamente 2 horas de duración cada uno y con la participación de 9 sujetos), dirigidos conjuntamente por un miembro (MSc) del equipo de investigación y un observador independiente.

- La entrevista en profundidad se reservó para uno de los participantes que abandonó el proyecto antes de tiempo. La entrevista fue realizada por un miembro (MSc) del equipo de investigación.

- El análisis de los biogramas, los anecdotarios y los diarios de campo se realizó en los agentes con más de 6 casos asignados. En este caso, dos informantes participaron en esta técnica.

7.1.6. Análisis de los datos.

Para el análisis de los datos se ha utilizado el método de las comparaciones constantes (Glaser y Strauss, 1967) apoyado en la herramienta Weft-QDA. El análisis se dividió en las siguientes fases 1) Lectura de las entrevistas y elección de los temas de interés (códigos); 2) Discusión y acuerdo con el tutor de los temas de interés (códigos), 3) Relectura de las entrevistas y codificación (extracción de contenidos de interés clasificados por temas), 4) Análisis por temas/códigos, identificando regularidades y diferencias (comparación constante), y 5) Elaboración de un mapa conceptual para la síntesis de los hallazgos, a partir de la información encontrada en las entrevistas. Además, se elaboraron memorandos analíticos y teóricos para desarrollar y definir las categorías. El análisis textual se complementó con el análisis situacional de marcos (Goffman, 1986). El análisis fue realizado por dos de los investigadores de forma independiente.

7.1.7. Rigor.

Cada categoría resultante se comparó con las transcripciones originales para garantizar el rigor de las conclusiones. Además, durante las entrevistas o inmediatamente después de su finalización, se realizaron resúmenes de las aportaciones o se pidió confirmación a los informantes para verificar la información. Además, se han utilizado diferentes formas de obtener la información, se ha realizado la triangulación de los investigadores en el análisis, y se ha buscado la interacción y el diálogo continuo con los marcos teórico-conceptuales de los investigadores. Además, la reflexividad (el análisis continuado del papel indiscutible que han jugado los investigadores en la producción de los resultados) ha estado siempre presente en el estudio.

Por último, cabe destacar que se ha realizado una descripción rica y profunda del fenómeno estudiado para garantizar la transferibilidad, es decir, la posibilidad de extrapolar los hallazgos obtenidos a otro contexto cuyo significado sea similar al del contexto estudiado.

7.1.8. Limitaciones

Las limitaciones del estudio tienen que ver principalmente con la modificación del programa Carelink. El estudio no examina el Programa Carelink (Nicholson y

Shellman, 2013), sino una modificación realizada como consecuencia de las dificultades encontradas por los profesionales sanitarios para la factibilidad de la intervención en la Atención Primaria de nuestro entorno. Además, y puesto que la intervención modificada también resultó difícil de implementar por los profesionales sanitarios, finalmente, la intervención fue llevada a cabo por personal voluntario (estudiantes de enfermería e integrantes de ONGs).

Estos cambios impidieron identificar los principales factores condicionantes de la factibilidad de la intervención desde los servicios públicos de salud, según consta en el protocolo de investigación original (Hernández-Ascanio, J. et al., 2019). No obstante, este análisis de factibilidad fue realizado, como se señaló anteriormente, mediante un estudio cualitativo previo.

Además, es necesario reconocer un posible sesgo derivado de la selección muestral de los informantes, pues el acceso a casos críticos tales como agentes que abandonaron la intervención fueron limitada (sólo se pudo contactar con 1 de los 4 que abandonaron de forma precoz el proyecto).

También es posible identificar un posible sesgo de información derivada del uso de biogramas y anecdotarios: A pesar de que se facilitaron soportes estandarizados para la recogida y se indicó a los informantes la forma de recogida de información, la propia naturaleza abierta de estas herramientas complejiza su uso estandarizado. No obstante, para minimizar los sesgos derivados de la subjetiva cumplimentación de estos, se hizo una supervisión periódica de dichos materiales, que también sirvió para preparar el proceso de supervisión de la propia intervención.

7.1.9. Consideraciones éticas.

El estudio se llevó a cabo siguiendo los principios éticos de la Declaración de Helsinki (Krleza-Jeric y Lemmens 2009) y contó con el permiso del Comité Ético para la provincia de Córdoba.

Antes de llevarse a cabo las entrevistas y los grupos focales, los participantes fueron informados del trabajo, y dieron su consentimiento informado. En todo momento,

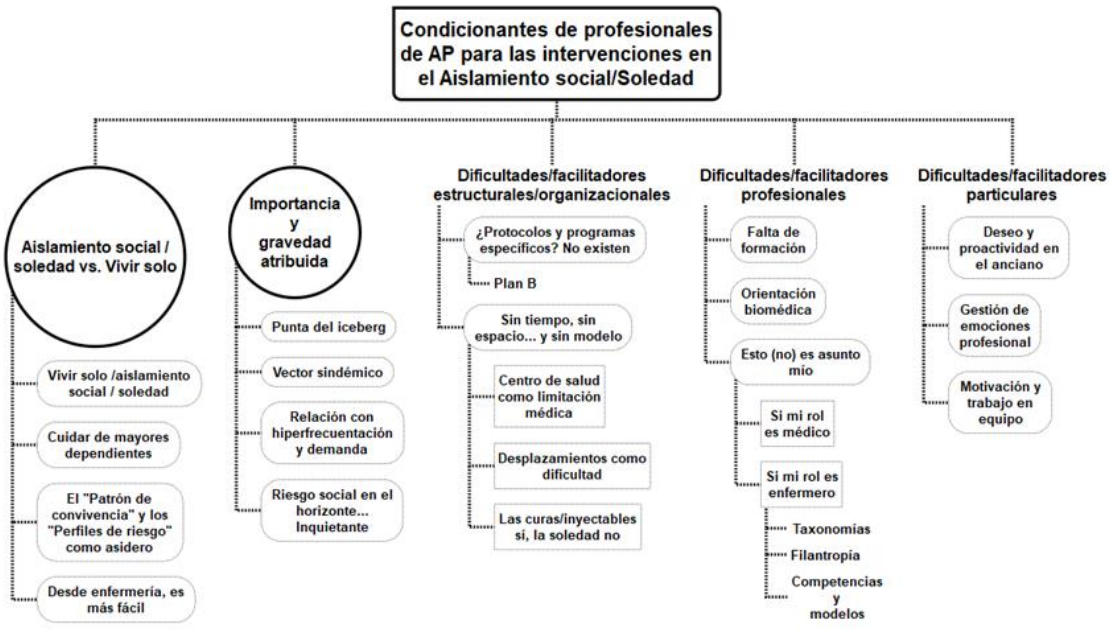
se garantizó el anonimato de la persona. Para ello, se han anonimizado las respuestas, usando pseudónimos. Los datos personales obtenidos han sido tratados de acuerdo con el Reglamento UE/2016/679, de 27 de abril de 2016, General de Protección de Datos, y la Ley Orgánica 3/2018, de 5 de diciembre, de Protección de Datos Personales y garantía de los derechos digitales.

7.2. HALLAZGOS Y DISCUSIÓN.

7.2.1. Hallazgos.

A continuación, se presentan los principales resultados obtenidos a partir de las categorías analíticas aplicadas. La Figura 2 representa el mapa categorial de resultados, mientras que la Tabla 1 ilustra categorías y subcategorías asociadas con citas del corpus textual del estudio.

Figura 5. Mapa categorial de condicionantes en la atención al Aislamiento social / Soledad



Fuente: Elaboración propia.

Los resultados obtenidos a partir de los discursos de los participantes se pueden agrupar en torno a las siguientes categorías: 1) Preconcepciones y descubrimientos de los participantes (agentes); 2) Valoración de la fase previa a la intervención; 3) Valoración

de la implementación; 4) Percepción de los resultados de la intervención; 5) Valoración personal de la participación en el proyecto; y 6) Propuestas para el cambio.

a) Preconcepciones y descubrimientos de los participantes (agentes).

La mayoría de los voluntarios creían que los sujetos que iban a encontrar eran mayores que vivían solos ("*que no tuvieran ni marido, ni mujer, que ya no tengan a ese alguien con quien solían vivir en casa*", I2G1); que presentasen alguna condición física, psicológica o social limitante ("*y obviamente teniendo ciertas limitaciones, que no pudieran hacer una vida más allá las cuatro paredes de su casa*", I8G1); sin redes sociales de apoyo ("*me esperaba personas que no tuvieran familia o que esta no pudiera hacerse cargo de ellos*", I8G1); o deseosos de compañía ("*Y que cuando nos abrieran la puerta la abrirían con una sonrisa. Como que yo iba a alegrarles bastante, que iba a ser un motivo de alegría.*", I1G1).

Algunas de estas ideas se confirmaron tras el primer contacto, pero otras emergieron. Algunas con fuerza. Entre ellas, destaca la vivencia reciente de una situación de duelo ("*el hombre estaba ahí en pleno duelo por la muerte de su pareja sentimental*", I5G1); o la existencia, en su pasado, de una serie de vivencias que condicionan su presente (*"el caso es que una de ellas se sentía muy abandonada por los hijos y las hermanas. Habían tenido varios desencuentros y en los últimos años ya no se hablaban. La mujer era muy orgullosa y prefería seguir así a reconocer que se había equivocado y dar el primer paso",* C1)

También refirieron descubrir la influencia en estas situaciones de: 1) las barreras arquitectónicas como la falta de ascensores o la no adaptación del domicilio ("*este hombre vivía en un quinto sin ascensor, tenía problemas en las piernas, no podía dar dos pasos*", I8G1; "*en su casa tenía que bajar escaleras y si no podía pues se quedaba en su casa y ya está*", I1E1); 2) los problemas económicos/ pertenencia a un barrio de transformación social ("*era de esos pisos, de ese barrio, lo tenía un poco más complicado*", I1E1); o 3) las relacionadas con cambios en la estructura familiar o distanciamiento de familiares cercanos ("*los hijos tienen su vida*", I4G1; "*con su hija antes era la relación mucho más cercana, pero como ahora tiene sus hijos, pues tiene que dejarle espacio*", I1E1).

La identificación de estas características comunes no impide, en cambio, que se llegue a la conclusión de que no existe un perfil tipo de mayor aislado.

b) Valoración de la fase previa a la intervención

Dentro de esta categoría, incluye 1) la valoración de la formación que recibieron los voluntarios; 2) la valoración del papel de los profesionales sanitarios como porteros/ facilitadores del proceso de intervención; y 3) la valoración de expectativas de los voluntarios.

En cuanto a la formación recibida, los informantes la consideran, de modo general, insuficiente. Se resalta la necesidad de una formación mayor y más completa en cuanto a diseño y gestión de procesos de intervención psicosocial ("*Entonces yo, a lo mejor hubiese hecho una sesión enfocada más a cómo abordar ese tipo de situaciones, con un role play, centrándose en cómo te comunicas con una persona*", I7G1). Sin embargo, se valoran muy positivamente las tutorías ("*Yo el hecho de que haya tutorías lo veo mejor, porque que como que te dan herramientas aplicadas a tu caso y no te limitan a la vez; porque si tú das unas directrices de haz esto y esto, nunca llegarás a hacer una intervención novedosa.*", I4G1).

Por otro lado, respecto al papel de los profesionales sanitarios como reclutadores y facilitadores de la intervención, los informantes destacan que no siempre se actuó de la forma más eficaz. En opinión de los informantes, los profesionales no supieron transmitir a los mayores los propósitos de la intervención ni explorar el interés/ aceptabilidad de la intervención ("*en alguno de los casos que me encontré, en la primera visita el mayor estaba algo confuso sobre lo que realmente íbamos a hacer. Su médico le había dicho vagamente que iba a ir una estudiante a hacerle compañía y a ayudarle a que no se sintiese tan solo*", C1).

Otro aspecto importante para entender la fase previa a la intervención es conocer cuáles eran las expectativas con la intervención. Pese a que en la formación previa en la que se incidió en los objetivos del proyecto, los voluntarios se mantenían en la falsa creencia de que la intervención solo consistía en acompañar al mayor ("*yo me creía que solamente iban a estar solitos y que nosotros íbamos a acompañarlos*", I2G1). Algunos

voluntarios incluso llegaron a concebir una imagen idílica del proyecto, visualizándose a sí mismos como héroes ("*Me visualizaba hasta con el chaleco de Cruz Roja, igual. Y que cuando nos abrieran la puerta la abrirían con una sonrisa. Como que yo iba a alegrarles bastante, que iba a ser un motivo de alegría*", I1G1).

Además, estas expectativas no diferían mucho de las que encontraron en los mayores cuando iniciaron la intervención. La mayoría de los mayores veía el proyecto como un tipo de ayuda a domicilio ("*El hombre era el cuidador de la mujer que era prácticamente dependiente. Entonces el hombre tenía la idea de que yo iba para estar con su mujer. Que yo iba solamente para ella. Y él mientras descansar un poquito, aunque él estaba allí siempre*", I3G1); o solo buscaban compañía ("*ellos se limitaban a que yo fuese allí a darle charla, y poquillo más*", I3G1).

Los participantes consideran que estas expectativas erróneas tienen que ver con el aspecto señalado anteriormente de los porteros, pues creen que no explicaron adecuadamente el propósito del proyecto a los mayores aislados ("*Yo pienso que si a lo mejor, ya hubiesen llegado con la idea de que…, pues mira, esto se trata de que poquito a poco vosotros por vosotros mismo seáis capaces se salir a la calle y tal, etc. Entonces yo creo que eso hubiese sido un buen incentivo, pero nada*", I3G1).

c) Valoración de la implementación

Situados ya en el proceso de intervención, un aspecto que emergió de forma importante en el análisis fue "el entorno de intervención". Los voluntarios coinciden en que se sintieron extraños en la casa del mayor, llegando incluso a sentirse vulnerables ("*A mí me choca mucho entrar en una casa de una persona que no conozco. En el hospital estás en tú zona, y ellos vienen a ti. De la otra forma, eres tú la que se mete en su entorno, entonces, estás completamente vulnerable*", I5G1).

Otro elemento especialmente conflictivo, en el que los voluntarios coinciden, es la visión que los mayores tenían del voluntario: veían al voluntario como un nieto/a, y no como a un profesional ("*yo sinceramente me veía en el rol de nieta*", I6G1), que venía a darles compañía y no a pedirles un esfuerzo de su parte ("*ellos estaban por el acompañamiento, pero no querían hacer nada más*", I2G1).

Otro aspecto que presentó un enorme reto para los voluntarios fue plantear unos objetivos individuales para cada mayor que permitieran alcanzar los objetivos del proyecto. En este sentido, los esfuerzos de los voluntarios se centraron, en primer lugar, en que el mayor reconociera su situación de aislamiento y buscara las causas de este hecho ("*sobre todo, es que reconociera su situación, que la reconocía a medias*", I1G1).

Una vez conseguido esto, los informantes se plantearon la definición de los objetivos. Por lo general, estos objetivos consistieron en: mejorar la comunicación con la familia ("*Entonces le propuse en lugar de llamarla una vez a la semana, llamarla todos los días*", I6G1); salir a la calle a pasear ("*Entonces, en base a eso, pensé que lo idóneo sería, sobre todo, salir por el barrio, porque en el barrio hay muchos bares, parques y demás*", I6G1); o buscar actividades colectivas que ofreciera la comunidad ("*le dije si había pensado en ir a un taller o algo, para relacionase por las tardes con más gente de su edad*", I5G1) para que el mayor socializara con otros mayores de su comunidad.

No obstante, la mayor dificultad referida por los participantes fue el afrontamiento de los procesos primarios que generan la soledad. Según los informantes, escapaba a su campo de competencia ("*ella lo que necesitaba era un psicólogo imagino, y eso no se lo podíamos brindar nosotros*", I5G1)

Respecto a las dificultades relacionadas con los distintos formatos en los que se realizaba la intervención, presencial y telefónica, es importante señalar diferencias.

En cuanto a las visitas, los voluntarios coinciden en que resultaron más útiles que las llamadas, pero que fueron más extensas de lo establecido ("*yo iba a su casa y se tiraba hablando horas y horas conmigo*", I5G1). No obstante, también se ha observado el extremo opuesto, con evasivas/ falta de disponibilidad de los mayores para las visitas ("*muchas veces no le apetecía*", I3G1; "*Y me decía que estaba en la tuna. Le llamaba al día siguiente y estaba haciendo otra cosa. Luego durante la semana igual. Unos días no podía ir, porque iba a un cursillo al que estaba apuntado con su mujer*", I5G1).

Respecto a las llamadas, resultaron menos útiles a vista de los informantes, al menos no como espacio de intervención. Realmente, sirvieron para el recordatorio entre visitas de los acuerdos tomados ("*Están bien las llamadas para recordarles entre visita*

y visita, si habíamos acordado algo", I5G1). Además, se recalca la falta de fluidez en las mismas ("*duraban 5 minutos y si acaso*", I3G1).

d) Percepción de los resultados de la intervención

Con independencia de los resultados de la intervención, los informantes centran su discurso en el abandono como un resultado. Creen que los mayores que abandonaron tenían otras expectativas ("*ellos tenían unas expectativas, y han pensado que era una cosa, se han encontrado otra*", I5G1) y realmente no deseaban la intervención ("*si no hubieran dicho: te ha salido en el cuestionario esto, vienes; yo creo que ninguno lo hubiera hecho por motivación propia*", I2G1). Muchos de ellos "*estaban por el acompañamiento, pero no querían hacer nada más*" (I2G1). Además, creen que la persona mayor no veía beneficios a corto plazo ("*Beneficios como tal no ven, entonces, si tú ves que estás metido en algo y no te da beneficios, pues lo normal es que digas que no te está sirviendo para nada*", I4G1).

Esta sensación también ha sido compartida por los voluntarios, ("*No sé si estoy aquí perdiendo el tiempo, o estoy verdaderamente consiguiendo algo, algún resultado*", I5G1), percibiendo algo parecido a lo que describen de los mayores.

Tanto en un caso como en otro, se coincide en que los beneficios potenciales de la intervención quedan condicionados por estos elementos ("*tal vez si los mayores captados hubieran tenido mayor claridad acerca de las expectativas reales que podían considerar, cuáles eran las exigencias que se esperaba con respecto a ellos a nivel de implicación y de compromisos, los resultados hubieran sido diferentes porque hubieran estado mucho más motivados con el proyecto y hubiesen planteado menos resistencias*", C1)

e) Valoración personal de la participación en el proyecto.

Como primera valoración, todos sienten que este proyecto le ha brindado experiencia a la hora de abordar nuevos casos de componente social ("*me va a ayudar bastante, y bueno, a nivel de habilidades comunicativas y de abordar problemas*", I4G1).

No obstante, muchos se vieron superados por la situación, que consideran inabordable por voluntarios ("*me veía muy pequeña para ayudarles en ese sentido*", I6G1; "*no sabes cómo abordar esos temas tan turbios*", I6G1). Además, creen que les faltó la autoridad moral que los mayores otorgan a los profesionales sanitarios ("*yo estaba incentivándola durante todo el proyecto a que saliera, y en el momento en que su enfermera le dijo que por la diabetes tenía que andar, todos los días estaba en la calle*", I4G1).

Pero, sin duda, el aspecto que más ha marcado su participación es la idea de abandono al final de la intervención. Muchos sintieron que "abandonaban" al mayor ("*parece como si los estuviéramos abandonando nosotros*", I2G1; "*He estado X tiempo yendo a ver a esta señora, esta señora me ha contado sus cosas y tal, y ahora yo cojo y me voy. Yo no me sentía bien, la verdad*", I5G1). Los informantes dicen que la despedida fue demasiado abierta y que la última visita no se entendió como el final de la intervención ("*Yo creo que fue muy abierta y bueno, él pensaba que volveríamos a vernos*", I2G1; "*Es que me dijeron que cuando estuviera en mi pueblo los llamara que iban a venir a verme en coche. Yo pensé que a ver cuando me avisaban*", I3G1). Incluso temieron que la intervención tuviera un efecto rebote, ya que muchos mayores nunca sintieron que estaban trabajando su autonomía, sino que estaban en compañía ("*Yo creo que puede haber efecto rebote, por eso, por el simple hecho de que no tenían claros los objetivos*", I4G1).

f) Propuestas para el cambio.

Para finalizar, los voluntarios apuntan una serie de posibles factores que permitirían mejorar la efectividad del proyecto. Estos son:

- Ofrecer un programa formativo a los voluntarios basado en el aprendizaje a través de los casos particulares y durante la intervención ("*Dependiendo de las necesidades de cada uno, que fueran más individual, quiero decir, porque no es lo mismo, o sea, si yo he tenido tres, pues no he conseguido lo mismo con uno que con otro*.", I5G1), y para ello, los informantes creen que el elemento clave es un proceso de mentorización personalizado.

- Ofrecer a los mayores una información completa y clara acerca de la intervención y comprobar que estos lo han comprendido ("*O sea, no solo el explicárselo en sí, sino asegurarse de que esas personas lo hayan comprendido*", I8G1).
- Favorecer, en todo momento, la activación del mayor. Hacerles ver que son ellos los que tiene la solución / recursos ("*Ellos son: me mandas esto, dame; pero ellos esperan como que tú los salves, cuando se tienen que salvar ellos a ellos mismos, cogiendo los recursos*", I4G1). Consideran que esta colaboración activa es fundamental para conseguir resultados con este tipo de intervención ("*Yo creo que al ser una intervención que se basa en la cooperación, si es verdad que los participantes deben de tener una actitud, cierto interés y sobre todo que mantengan una actitud, en la medida que les sea posible, un poco proactiva*", I7G1).
- En caso de no conseguir esta actitud colaborativa, creen que deben considerarse otras intervenciones diferentes ("*Entonces, es algo con mucha ambición, entonces, tú tienes que estar motivado para eso, en el momento en el que no estás motivado, no sé qué otra intervención, pero esta no*", I4G1).
- Flexibilizar el cronograma inicial resulta esencial si se pretende adaptar la intervención a las necesidades de cada mayor ("*Creo que la intervención no debería ser de aquí hasta aquí, sino dependiendo de las necesidades de las personas, que fuera más individual*", I5G1). La valoración constante del mayor aislado es fundamental para conocer si la intervención ha logrado sus objetivos y, por tanto, finalizado. Si al llegar a la última visita estipulada los objetivos no se hubieran cumplido, debería considerarse alargar la intervención ("*si ves que una persona pues tiene más dificultad, o tiene menos recursos, pues ampliarlo un poco más*", I5G1).
- Creen que es necesario incluir estos programas dentro de la cartera de servicios de los profesionales de la salud, pues son ellos los que tienen la competencia que ellos no creen tener ("*Me veía súper pequeña para ayudarles en ese sentido*", I6G1), y la autoridad que los mayores les otorgan ("*yo estaba incentivándola durante todo el proyecto a que saliera, y en el momento en que ella le dijo que por la diabetes tenía que andar, todos los días estaba en la calle*", I4G1).
- Los participantes expresan que, de llevarse a cabo esta intervención como programa de salud dentro del sistema sanitario, el profesional de enfermería debería asumir el liderazgo, ya que se le reconoce una mayor cualificación para ello ("*el liderazgo lo*

debería llevar el personal de enfermería, que tenemos la formación necesaria", I7G1) y, además, tienen la oportunidad de realizar más visitas domiciliarias que otros profesionales ("*En cuanto a la intervención en sí, lo que he vivido en cuanto a funciones de la enfermera en atención primaria y respecto a las visitas domiciliarias, el papel más destacado y mayoritario sería el de enfermería*", I1G1).

7.2.2. Discusión.

En primer lugar, los resultados confirman la reiterada dificultad para identificar y diferenciar aislamiento social, soledad y vivir solo (Tzouvara et al., 2015). Antes de llevar a cabo la intervención, los voluntarios suponían que "mayor aislado" era sinónimo de "mayor que vive solo" y "mayor en situación de soledad". Tras conocer la realidad a través de la experiencia, se reconoció que, si bien vivir solo puede estar asociado con una mayor probabilidad de desarrollar aislamiento social, no siempre el mayor aislado vive solo (Gale et al., 2018). Por lo tanto, se entendió que existen otras situaciones que contribuyen a este aislamiento y que tienen más peso, como la pérdida de un cónyuge o la emancipación de los hijos (Ausín et al., 2017; Klinenberg, 2016). Estos resultados guardan relación con lo que Evans et al. (2019) sostienen en su estudio, quienes señalan que vivir solo y estar aislado pueden estar relacionados, pero la segunda situación no es consecuencia directa de la primera. De hecho, el estudio insiste en que los mayores que viven solos y están más aislados en términos de déficit de redes familiares, a menudo compensan esta carencia con las relaciones de apoyo que establecen fuera del hogar (Evans, et al. 2019), lo que hasta cierto punto contradice las percepciones iniciales de los informantes.

Respecto a las dificultades observadas previamente y durante la intervención, encontramos escasas referencias a intervenciones llevadas a cabo por estudiantes en el domicilio de mayores aislados, pero sí que se observa la existencia de algunas que han tenido lugar en residencias de mayores. Annear et al. (2017) analizaron la eficacia de una intervención llevada a cabo por estudiantes en instituciones residenciales de cuidado de mayores. La investigación concluyó que la "juventud" de los voluntarios fue un factor positivo que contribuyó al alcance de los objetivos. La mayoría de mayores residentes mencionaron que los estudiantes trajeron el "mundo exterior" y vitalidad a las

instalaciones (Annear et al., 2017). Asimismo, el estudio de Santini et al. (2018) muestra que las prácticas intergeneracionales pueden integrarse de manera efectiva en las intervenciones sobre la población mayor (Santini et al., 2018). Sin embargo, en el presente estudio, la cuestión de la juventud pareció actuar de forma adversa, al restar credibilidad y autoridad moral a los estudiantes que actuaron como agentes de intervención, como se verá más adelante.

En lo que respecta al diseño de la intervención, quizás, una de las mayores debilidades identificadas por los informantes en la fase previa a la intervención ha sido la escasa implicación de los profesionales-porteros encargados del reclutamiento de los mayores participantes. Este es un factor importante que deberemos tener en cuenta en la evaluación de los resultados/ eficacia, pues, como informa Santos-Olmos (2016), la selección, entrenamiento y apoyo por parte de los facilitadores va a estar directamente relacionada con la eficacia de las intervenciones.

Y ligado a esto (a los procesos de reclutamiento de los sujetos de intervención), Santos-Olmos (2016) también informa de la importante influencia que va a tener la motivación de los potenciales usuarios en la eficacia de la intervención, en la medida en la que cuanto más motivados e involucrados se encuentran los sujetos en la intervención, los resultados de esta se presentan como más eficaces (un aspecto que, también aparece como una debilidad en nuestro estudio).

En lo que respecta a la valoración de la intervención, la influencia del entorno de intervención identificada por los informantes es respaldada por estudios previos (Cattan y White, 1998; Findlay, 2003; Cattan, et al., 2005; Dickens et al., 2011; Due et al., 2017; Paque et al., 2018) que señalan esta variable como un gran factor diferenciador. A la hora de prevenir el aislamiento social, está probada la mayor la efectividad de las actividades grupales llevadas a cabo en centros de mayores comunitarios (O'Rourke et al., 2018). Sin embargo, esto no siempre es posible (en mayores que difícilmente acuden a un centro de manera voluntaria) y es entonces cuando, como en nuestro estudio, se hacen necesarias intervenciones más individualizadas, con abordaje domiciliario, que procuren el enganche entre la persona mayor y la red de recursos sociosanitarios normalizada.

No obstante, en nuestro estudio, el contexto de intervención aparece ligado a un elemento diferenciador, el rol autopercibido por los agentes de intervención. Los informantes describieron haberse sentido vulnerables en la casa del mayor. No encontramos estudios que apoyen esta precepción. No obstante, esta vulnerabilidad no aparece en los estudios realizados con estudiantes como agentes de intervención en residencias (O'Rourke et al., 2018).

En lo que respecta a la autopercepción de falta de competencia y autoridad de los estudiantes y la influencia que estos ven en la eficacia de la intervención también coincide con lo informado por Santos-Olmos (2016) que señala una relación directa entre la eficacia de la intervención y el hecho de ser llevada a cabo con profesionales altamente formados, motivados y alineados con los objetivos de intervención.

Respecto a la influencia de las expectativas de los mayores (estar acompañado), frente al deseo de llevar un rol activo en la intervención, en los resultados, aparece respaldada también por estudios previos (Constantino, 1988; Rosen y Rosen, 1982; Schulz, 1976). La participación y la corresponsabilidad son factores determinantes en la eficacia de la intervención.

La revisión de Gardiner et al. (2018) señala que las intervenciones en las que se despliega una participación activa y productiva del mayor resultan más útiles para aliviar el aislamiento social que aquellas que implican actividades pasivas o que no tienen metas específicas (Gardiner et al., 2017).

A pesar de que el programa pretendía la participación activa del mayor, los informantes señalan una clara pasividad por parte de éste. Las razones de dicha postura podrían ser: que nadie explicó claramente los objetivos del proyecto al mayor ("o que no supieron/ quisieron entenderlos"), que era difícil reconducir unas expectativas erróneas durante la intervención ("si solo esperaban compañía") o que, realmente, los mayores no jugaron un papel activo en la definición de los objetivos (una cuestión fundamental, según Drentea et al., 2006), sino que la mayoría de los objetivos individuales que se plantearon fueron más producto de la sugerencia de los agentes de intervención que de los propios usuarios.

Respecto al contenido de estos objetivos, además, a pesar de que se consiguió, en algunos casos, mejorar la comunicación con la familia, que el mayor saliera a la calle o, incluso que participara en actividades colectivas, en ningún caso se llegó a plantear una actividad grupal que pusiera en contacto a los mayores aislados que participaron en el proyecto, pese a la eficacia demostrada de este tipo de actividades (Haslam et al., 2019).

Con respecto a la idoneidad de los diferentes formatos de intervención, los resultados obtenidos en nuestro estudio van en consonancia con los expuestos en el trabajo de Santos-Olmos (2016), que da preminencia al contacto directo presencial frente al telefónico, al que se le relegaría a la función de seguimiento y soporte logístico.

En lo que respecta a la valoración personal sobre el proyecto, los informantes de nuestro estudio destacan el "trabajo emocional" que ha supuesto este tipo de experiencia, que a veces ha sido identificado como una sobrecarga y un exceso de sentimiento de responsabilidad con respecto al proceso del adulto mayor. Estos sentimientos también son referenciados en estudios previos como los de Franck et al. (2016), Cotterell et al. (2018), y Gardiner et al. (2018), quienes confirman que el vínculo emocional creado entre el estudiante y el usuario podía convertirse en una experiencia emocional negativa para el primero al enfrentarse a contextos de frustración por no avanzar en metas propuestas, por la excesiva demanda y dependencia de los usuarios y elementos similares al "estar quemado" profesional.

En cuanto a los posibles factores que permitirían mejorar la efectividad del proyecto, se identificaron una mejora de las competencias y habilidades de los agentes de intervención, la adaptabilidad, la flexibilidad y la participación activa del mayor, entre otros (Tzouvara et al., 2015).

Respecto a la mejora de las competencias y habilidades de los agentes de intervención, los informantes señalan la necesidad de programas más completos y mentorizados. En este sentido, el trabajo de Dickens et al. (2011) recomienda la existencia de figuras de coordinación de servicios como estrategia para minimizar los efectos negativos del carácter complejo de la mayoría de las intervenciones conocidas sobre la temática. El trabajo de estos autores pone de manifiesto una mayor eficacia cuando existe

la figura de un coordinador de caso. A pesar de la existencia de tutorías durante el trabajo de campo, nuestro estudio ha carecido de la designación formal de esta figura.

Además, esta revisión señala la procedencia de adaptar las intervenciones a las necesidades específicas de cada mayor, y la importancia de la flexibilidad si se pretende satisfacer esas necesidades individuales (Gardiner et al., 2018).

En lo que respecta a la flexibilidad relativa a la hora plantear el cronograma de las sesiones de intervención, la propuesta también coincide con lo propuesto por Drentea et al. (2006) que plantea que dicha medida facilitaría la adhesión del usuario al programa.

Respecto a la participación activa del mayor, es uno de los principales indicadores de eficacia y sostenibilidad de las intervenciones identificados por Santos-Olmos (2016). En su trabajo, esta autora confirma a través de un trabajo empírico, discutido a su vez en revisiones sistemáticas (Gardiner et al., 2018) que cuando el mayor manifiesta sentirse altamente implicado con la propuesta de intervención, y esta incluye una movilización de diferentes capacidades y destrezas del mayor, los resultados son significativamente mejores y más duraderos que otras intervenciones en los que el mayor adquiere roles más pasivos.

Por último, los informantes de nuestro estudio consideran adecuada (y necesaria) la transferencia del rol de agente de intervención de voluntarios (estudiantes) a profesionales sanitarios cualificados (como ya se expresa en los trabajos de Santos-Olmos, 2016). Esta sugerencia también es apuntada por Sundström et al. (2018) que reconocen que es el profesional sanitario quien reúne las características idóneas para aliviar el aislamiento social y la soledad de las personas mayores. Además, Gardiner et al. (2018) señalan al personal de enfermería comunitaria como el perfil profesional con mayor solvencia, quizás, como apunta Sundström et al. (2018) por su mayor capacidad para sostener un enfoque holístico

Por tanto, es necesario que la investigación aborde en el futuro las dudas que aquí se plantean, para poder sacar conclusiones y ponerlas en marcha en intervenciones futuras.

CHAPTER 8. CONCLUSIONS

8.1. STUDY 1: FEASIBILITY CONDITIONS OF A MULTICOMPONENT INTERVENTION TO REDUCE SOCIAL ISOLATION AND LONELINESS IN NON-INSTITUTIONALISED OLDER ADULTS.

The following conclusions can be drawn from the above results:

Firstly, the apparent conceptual clarity regarding the differentiation and relationship between the concepts of loneliness, social isolation and living alone that is reflected in the literature does not have a correlate in the cognitive frameworks of health professionals. In most cases, health professionals construct loneliness and isolation on the basis of objective markers such as "risk profiles" or "residence patterns", which do not always correspond to the real situations of this type of phenomena (for example, in cases of accompanied loneliness).

Secondly, the participants' discourses highlight the importance of these often hidden phenomena and their even greater consequences, both on the health of the elderly and on the (over)use of health services.

With regard to the elements that can act both as facilitators and disruptors, the main structural and organisational disruptor is the lack of specific programmes aimed at identifying them. Alongside this, the lack of time and resources (conditioned by the hegemony of the biomedical model, which displaces, and even makes attention to this type of problem disappear) stands out.

Among the professional elements, there is an accumulation of facilitators that fall on the figure of the nurse, as they recognise these interventions as their own function, are better trained than the doctor, are more dedicated to home visits and have a closer and more trusting professional-patient relationship model.

Finally, among the particular elements we found, as the main disruptors, the low availability and proactivity of the affected subjects and the emotional overload and frustration of the professionals; while the high levels of motivation (individual and

collective) with respect to the problem appear as the greatest facilitator of these programmes.

The expert panel methodology made it possible to design an adaptation of the Carelink intervention programme (Nicholson and Shellman, 2013), taking into account the conditions of feasibility of application and sustainability for the case of Primary Health Care services, both from the point of view of the future intervention agents and the contexts of implementation and execution of the intervention.

8.2. STUDY 2: EFFECTIVENESS OF A MULTICOMPONENT NON-PHARMACOLOGICAL INTERVENTION TO REDUCE SOCIAL ISOLATION AND LONELINESS IN COMMUNITY-DWELLING ELDERLY: A RANDOMISED CLINICAL TRIAL.

The results of the study do not allow us to affirm that the modified Carelink programme is effective, analysed as a whole, in reducing social isolation or loneliness or in improving HRQOL. However, differences were found in some of the dimensions of these phenomena. The results of the study suggest an improvement in the "confidential support" of older people intervened through the modified Carelink programme; and, in the same sense, an improvement in emotional loneliness scores 2 months after the end of the intervention.

About the factors associated with the improvement of the intervention, the possibility of having helpers and a greater degree of mobility have been identified as factors that favour the reduction of social isolation.

8.3. STUDY 3: CONDITIONING FACTORS FOR ADDRESSING SOCIAL ISOLATION AND LONELINESS IN NON-INSTITUTIONALISED OLDER ADULTS IN PRIMARY HEALTH CARE.

The results of this study have revealed significant elements that can act as conditioning factors for the effectiveness and sustainability of interventions in the field of social isolation and loneliness with non-institutionalised older adults.

Firstly, we see how these phenomena continue to be linked to well-known situations such as the presence of some limiting physical, psychological or social condition, or the condition of living alone, but also to less well-known situations such as the experience of mourning processes or unresolved traumas. The aetiology of situations of social isolation and loneliness is seen as plural and complex, requiring comprehensive approaches.

In relation to the latter, the need for prior training, and during the intervention, in psychosocial intervention skills and competences is highlighted, which would condition a professionalised/specialised intervention agent profile (or, at least, mentoring/coordinated work). In this case, it is confirmed that the most appropriate profile would be that of a community nurse, as opposed to other profiles such as volunteers or others. The choice of this intervention agent profile has to do with their ability to access the home environment (home visits) and their professional competences and skills.

Secondly, it is necessary to adapt the process of recruiting potential users, clarifying expectations (in terms of the objectives of the intervention and the contents of the meetings) and commitments for effective participation (which translates into the need for an active role of the elderly), as well as logistical aspects of the type of intervention space (the home of the elderly) and temporality (interval between meetings and duration of the same, duration of the intervention itself, etc.), also making explicit the duration/temporality for the end of the intervention.

Thirdly, it is necessary to take into account the emotional work involved in this type of intervention, which derives in part from the tension between the high initial motivation of the intervention agents, the frustration of not having initial expectations met, and the (sometimes ineffective) management of the agents' attachment and grief at the end of the intervention.

Finally, it should be pointed out in relation to the suggestions for improving the intervention, that they go in the direction of strengthening some of the evidence already identified in the bibliography and which act as conditioning factors for the effectiveness of interventions of this type.

The need to establish personalised intervention itineraries implies not only adapting aspects related to time and content, but also providing the intervention agents with more and better competence resources, who must be advised by other professionals. Although it is true that the intervention agents are identified with a very clear profile (and the idea is reinforced that the choice of one profile or another has effects both in terms of their significance and their ability to create dynamics with the most or the knowledge, skills and competences they have), the intervention itself is situated in a context of a multidisciplinary approach and anchored to the normalised dynamics of primary care services. This personalised itinerary also has to do with an appropriate choice of candidates to participate in the programme, since it requires some prior knowledge (in the sense of motivations, but also cognitive and competence resources).

On the other hand, it is recognised as fundamental that the intervention process should be framed within a dynamic of empowerment of the target of the intervention, in such a way that by assuming an increasingly active role, they become a resource for themselves and act on an equal footing together with the intervention agents, which helps to guarantee more lasting and sustainable effects of the intervention.

Together with this, it is necessary to establish the intervention from a gradual point of view, where the different milestones and objectives to be achieved are negotiated and evaluated with the elderly, in such a way that they are established according to their particular conditions.

In spite of presenting a series of aspects about the conditioning factors on the effectiveness and sustainability of an intervention on social isolation and loneliness in non-institutionalised older adults, the need for further research in this field is also evident.

BIBLIOGRAPHY.

Abellán García A, Aceituno Nieto P, Pérez Díaz J, Ramiro Fariñas D, Ayala García A, Pujol Rodríguez R. (2019). *A profile of older people in Spain. Basic statistical indicators*. Envejecimiento en red reports no. 22; Madrid. [accessed 07/11/2019]. Available from: http://envejecimiento.csic.es/documentos/documentos/enredindicadoresbasicos2019.pdf 16.

Adams, J.M., White, M. (2004), Biological ageing. A fundamental, biological link between socio-economic status and health?. *European Journal of Public Health.* (14), 331-334.

Alaviani M., Khosravan S., Alami A., and Moshki, M. (2015). The effect of a multi-strategy program on developing social behaviours based on pender's health promotion model to prevent loneliness of old women referred to gone bad urban health centers. *International journal ofcommunity-basedd nursing and midwifery*, *3*(2), 132.

Alpass F. M., and Neville S. (2003). Loneliness, health and depression in older males. *Ageing and mental health*, *7*(3), 212-216.

Andersson L. (1998). Loneliness research and interventions: a review of the literature. *Aging and Mental Health*, (2), 264-74.

Annear M, Elliott KE, Tierney L, Lea E and Robinson A (2017). Bringing the outside world in: Enriching social connection through health student placements in a teaching aged care facility. *Health Expectations*, (20), 1154-1162.

Antonucci T, Akiyama H. and Takahashi K. (2005), Attachment and close relationships across the life span *Attachment & Human Development,* (6), 353-70.

Arslantas H, Adana F, Abacigil Ergin F, Kayar D and Acar G. (2015), Loneliness in elderly people, associated factors and its correlation with the quality of life: a field study from western Turkey in *Iran. Journal of Public Health,* 44(1), 43-50.

Arruebarrena, A. V. and Cabaco, A. S. (2020). Loneliness and social isolation in the elderly. *Studia Zamorensia*, (19), 15-32.

Ausín B, Muñoz M, and Castellanos MA. (2017), Loneliness, Sociodemographic and Mental Health Variables in Spanish Adults over 65 Years Old. *The Spanish Journal of Psychology*, (20).

Ayala A. et al., (2012), Psychometric properties of the Functional Social Support Questionnaire and the Loneliness Scale in non-institutionalized older adults in Spain. *Gazeta Sanitaria*, 26 (4), 317 - 324

Badia X, Roset M, Monserrat S, Herdman M, Segura A. (1999), The Spanish version of the EuroQol: description and applications in *Clinical Medicine*, (Suppl 1), 79:86.

Banks, M.R. and Banks, W.A. (2002), The effects of animal-assisted therapy on loneliness in an elderly population in long-term care facilities, *The journals of gerontology. Series A, Biological sciences and medical sciences,* 57(7), 428-432.

Baumeister, RF , Allen, KA., Gray, DL, *et* al (2022). The need to belong: a deep dive into the origins, implications and future of a fundamental construct, *Journal of Educational Psychology, 34***,** 1133-1156. https://doi.org/10.1007/s10648-021-09633-6

Beal C. (2006), Loneliness in older women: a review of the literature in *Issues Mental Health Nursing,* 27(7),795-813.

Beller, J. and Wagner, A. (2017). Disentangling Loneliness: Differential Effects of Subjective Loneliness, Network Quality, Network Size, and Living Alone on Physical, Mental, and Cognitive Health. *Journal of Aging and Health*, 30(4), 521-539.

Bellón JA. et al., (1996). Validity and reliability of the Duke-UNC-11 functional social support questionnaire. *Atención Primaria*, (18), 153-163.

Bennett S, and Thomas AJ. (2014), Depression and dementia: cause, consequence or coincidence? *Maturitas*, 79(2), 184-90.

Berg, J. H., and Peplau, L. A. (1982). Loneliness: The relationship of self-disclosure and androgyny. *Personality and Social Psychology Bulletin, 8*(4), 624-630.

Bermeja A. and Ausín B. (2017), Programs to combat loneliness in the institutionalised elderly: A review of the scientific literature. *Revista Española de Geriatría y Gerontología*, 53(3), 55-164. doi: 10.1016/j.regg.2017.05.006.

Beridze G, Ayala A, Ribeiro O, Fernández Mayoralas G, Rodríguez-Blázquez C, and Rodríguez-Rodríguez C. (2020), Are Loneliness and Social Isolation Associated with Quality of Life in Older Adults? Insights from Northern and Southern Europe. *International Journal of Environmental Research and Public Health*, (17), 8637.

Beutel ME, Klein EM, Brähler E, Reiner I, Jünger C, Michal M, et al., (2017), Loneliness in the general population: Prevalence, determinants and relations to mental health. *BMC Psychiatry*, 17(1). https://doi.org/10.1186/s12888-017-1262-x

Bosma, H., Jansen, M. and Schefman, S. (2015). Lonely at the bottom: a cross-sectional study on being ill, poor, and lonely. *Public Health*, (129), 185-187.

Böger, A. and Huxhold, O. (2018) Do the antecedents and consequences of loneliness change from maturity to old age? *Developmental Psychology, 54* (1), 181 - 197. DOI: https://doi.org/10.1037/dev0000453

Botelho, M.A., (2000). Autonomia Funcional em Idosos. Caracterizac¸a˜o multidimensional em idosos utentes de um centro de sau' de urbano. (Doctoral thesis), New University of Lisbon.

Bowling A. (1995), The most important things in life. *International Journal of Health Sciences, (*5): 169-75.

Brown, V.M., Allen, A.C., Dwozan, M, Mercer, I., and Warren, K. (2004). Indoor gardening and older adults: Effects on socialization, activities of daily living and loneliness. *Journal of Gerontological Nursing*, (30), 34-42.

Buffel T. Buffel, T., Handler, S. and Phillipson, C. (2018) Introduction: Developing age-friendly cities and communities. A global perspective. In Buffel, T., Handler, S. and Phillipson, C. (eds) *Age-friendly cities and communities: A global perspective.* Policy Press.

Buz J and Prieto G. (2013), Analysis of the De Jong Gierveld Loneliness Scale Using the Rasch Model. *Universitas Psychological, (*12), 971-81.

Cacioppo JT and Cacioppo S. (2014). Social Relationships and Health: The Toxic Effects of Perceived Social Isolation. *Social and Personality Psychology Compass*. 8(2):58-72.

Cacioppo, J.T. and Cacioppo S. (2018). The growing problem of loneliness. *Lancet*, 391 - 426. https://doi.org/10.1016/S0140-6736(18)30142-9.

Cacioppo, S., Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: Clinical import and interventions. *Perspectives on Psychological Science*, *10*(2), 238-249.

Cacioppo JT and Hawkley LC. (2009), Loneliness. In: *Handbook of individual differences in social behaviour*. New York, NY, US: The Guilford Press; 227-240.

Cacioppo JT, Hawkley LC, and Thisted RA. (2010) Perceived social isolation makes mesad: 5-year cross-lagged analyses of loneliness and depressive symptomatology in the Chicago Health, Aging, and Social Relations Study. *Psychol Aging*, (25), 453-63.

Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: cross-sectional and longitudinal analyses. *Psychology and aging*, *21*(1), 140.

Castro, M. P. (2015). *The feeling of loneliness in the elderly and its relationship with causal attribution and coping*. (Doctoral Thesis). The University of Deusto.

Cattan, M., and White, M. (1998). Developing evidence-based health promotion for older people: a systematic review and survey of health promotion interventions targeting social isolation and loneliness among older people. *Internet Journal of Health Promotion,* (13), 1-9.

Cattan, M., White, M., Bond, J. and Learmouth, A. (2005) Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. *Ageing and Society*, (25), 41-67.

Cloutier-Fisher, D., Kobayashi, K., & Smith, A. (2011). The subjective dimension of social isolation: A qualitative investigation of older adults' experiences in small social support networks. *Journal of aging studies*, *25*(4), 407-414.

Cohen-Mansfield J, Hazan H, Lerman Y, and Shalom V. (2016), Correlates and predictors of loneliness in older-adults: a review of quantitative results informed by qualitative insights. *International Psychogeriatrics,*28(4), 557-76.

Cohen-Mansfield, J. and Parpura-Gill ,A. (2007). Loneliness in older persons: a theoretical model and empirical findings. *International Psychogeriatrics*, 19, 279-294.

Coleman, J. S. (1987). Families and schools. *Educational researcher*, *16*(6), 32-38.

Coleman P. G. (1987). Dimensions of subjective wellbeing in the elderly: conclusions from Dutch and English studies. *Comprehensive Gerontology, Section B, Behavioural Social and Applied Sciences*, (1), 8-12.

Coll de Tuero G, Garre-Olmo J, Lòpez-Pousa S, Vilalta J, Limon E, Caja C. Perception, (2011), Attitudes and needs of primary care professionals in relation to the patient with dementia. *Atención Primaria*, 43(11), 585-94. https://doi.org/10.1016/j.aprim.2010.11.015

Collins, A. B., and Wrigley, J. (2014). Can a neighbourhood approach to loneliness contribute to people's well-being. *York: Joseph Rowntree Foundation*.

Constantine RE. (1988). Comparison of two group interventions for the bereaved Image. *Journal of Nursing Scholarship*, 20(2), 83-87.

Cosco, T. D., Prina, A. M., Perales, J., Stephan, B. C. M., & Brayne, C. (2014). Operational definitions of successful aging: A systematic review. *International Psychogeriatrics, 26*(3), 1-9. https://doi.org/10.1017/S1041610213002287

Cotterell N, Buffel T and Phillipson C (2018). Preventing social isolation in older people. *Maturitas*, (113), 80-4. https://doi.org/10.1016/j.maturitas.2018.04.014

Courtin, E. and Knapp, M. (2017). Social isolation, loneliness and health in old age: A scoping review. *Health and Social Care in the Community*, 25(3), 799-812.

Creswell JD, Irwin MR, Burklund LJ, Lieberman MD, Arevalo JMG, Ma J, et al., (2012). Mindfulness-Based Stress Reduction training reduces loneliness and pro-inflammatory gene expression in older adults: a small randomized controlled trial. *Brain Behavior and Immunity*, 26(7),1095-101.

Cuadrado P. (2019). Recent evolution of population projections in Spain. *Economic bulletin 1 of 2019*. Madrid: Banco de España. Eurosystem; 2019. [accessed 10/11/2019] Available from: https://www.bde.es/bde/es/secciones/informes/boletines/Boletin_economic/

Czaja SJ, Sharit j, Boot WR, Charness NH and Rogers Wa (2017). The role of technology in supporting social engagement and social support among older adults. *Innovation in aging*, 1(suppl 1), 1026-7.

Chan A, Prassana R, Ma S and Malhotra R. (2015). Loneliness and all-cause mortality in community- dwelling elderly Singaporeans. *Demographic Research*, (32), 1361-82.

Chen, YM and Ji, JY. (2015). Effects of horticultural therapy on psychosocial health in older nursing home residents: A preliminary study**.** *Journal of Nursing Research*, (23), 167-171.

Chiang KJ, Chu H, Chang HJ, Chung MH, Chen CH, Chiou HY and Chou KR. (2010). The effects of reminiscence therapy on psychological well-being, depression, and loneliness among the institutionalized aged. *International Journal of Geriatric Psychiatry*, (25), 380-8.

Chipps J, Jarvis MA and Ramlall S (2017). The effectiveness of e-Interventions on reducing social isolation in older persons: A systematic review of systematic reviews. *Journal of Telemedicine and Telecare*, 23(10), 817-827. DOI: 10.1177/1357633X17733773.

Chopik WJ. (2016). The Benefits of Social Technology Use Among Older Adults Are Mediated by Reduced Loneliness. *Cyberpsychology Behavior and Social Networking*, 19(9), 551-6.

Chopik WJ. (2017). Associations among relational values, support, health, and well-being across the adult lifespan. *Pers Relatsh*, 24(2), 408-22.

Christensen, K., Doblhammer, G., Rau, R., and Vaupel, J.W., (2009). Ageing populations: the challenges ahead. *Lancet*. (374) 1196-1208.

Christensen AV, Juel K, Ekholm O, Thrysøe L, Thorup CB, Borregaard B, et al., (2020). Significantly increased risk of all-cause mortality among cardiac patients feeling lonely. *Heart*, 106(2), 140-6.

Christiansen, J., Larsen, F.B. and Lasgaard, M. (2016). Do stress, health behavior, and sleep mediate the association between loneliness and adverse health conditions among older people? *Social Science and Medicine,* (152), 80-86.

Dahlberg L, Agahi N and Lennartsson C (2018). Lonelier tan ever? Loneliness of older people over two decades. *Archives of Gerontology and Geriatrics, (*75), 96-103.

Dahlberg L, Andersson L, McKee KJ and Lennartsson C. (2015). Predictors of loneliness among older women and men in Sweden: A national longitudinal study. *Aging Mental Health*, 19(5), 409-17.

Dahlberg L, McKee KJ . (2014). Correlates of social and emotional loneliness in older people: evidence from an English community study. *Aging Mental Health*, 18(4), 504-14.

Davies K, Maharani A, Chandola T, Todd C, and Pendleton N. (2021). The longitudinal relationship between loneliness, social isolation, and frailty in older adults in England: a prospective analysis. *Lancet Healthy Longevity*, 2(2), 70-77.

Dickens, A. P., Richards, S. H., Greaves, C. J., & Campbell, J. L. (2011). Interventions targeting social isolation in older people: a systematic review. *BMC public health*, *11*(1), 1-22.

Dickens AP, Richards SH, Hawton A, Taylor RS, Greaves CJ, Green C, Edwards R, Campbell JL. (2011). An evaluation of the effectiveness of a community mentoring service for socially isolated older people: a controlled trial. *BMC Public Health*, (11), 218.

Doblas, JL, and Conde, MDPD. (2018). The feeling of loneliness in old age. *International journal of sociology*, *76*(1).

Doblas JL and Conde M DPD. (2019). The social modernization of old age in Spain. *International Journal of Sociology*. 71(1), 65-89.

Donaldson, J. M., and Watson, R. (1996). Loneliness in elderly people: an important area for nursing research. *Journal of advanced nursing*, *24*(5), 952-959.

Donio Bellegarde Nunes M. (2017). The loneliness of older women living alone. [cited 4 February 2021]; Available from: https://roderic.uv.es/handle/10550/58362

Donovan NJ, Okereke OI, Vannini P, Amariglio RE, Rentz DM, Marshall GA, et al., (2016). Association of higher cortical amyloid burden with loneliness in cognitively normal older adults. *JAMA Psychiatry*, 73(12), 1230-7.

Donovan NJ, Wu Q, Rentz DM, Sperling RA, Marshall GA and Glymour MM. (2017). Loneliness, depression and cognitive function in older U.S. adults. *International Journal of Geriatric Psychiatry*, 32(5), 564-73.

Drentea P et al., (2006). Predictors of improvement in social support: Five-year effects of a structured intervention for caregivers of spouses with Alzheimer's disease. *Social Science and Medicine,* 63(4), 957-67. DOI: 10.1016/j.socscimed.2006.02.020

Due TD, Sandholdt H and Waldorff FB. (2017). Social relations and loneliness among older patients consulting their general practitioner. *Danish Medical Journal,* 64(3). https://ugeskriftet.dk/files/scientific_article_files/2018-08/a5342.pdf

Dykstra, P. A. (1995). Loneliness among the never and formerly married: The importance of supportive friendships and a desire for independence. *Journal of Gerontology, Social Sciences, 50B*, S321-329.

Dykstra PA, van Tilburg TG, and de Jong Gierveld J (2005). Changes in older adult loneliness results from a seven-year longitudinal study. *Research on Aging,* 27(6), 725-747. Doi: 10.1177/0164027505279712

Elston J, Gradinger F, Asthana S, Lilley-Woolnough C, Wroe S, Harman H, et al., (2019). Does a social prescribing 'holistic' link-worker for older people with complex, multimorbidity improve well-being and frailty and reduce health and social care use and costs? A 12-month before-and-after evaluation. *Primary Health Care Research and Development,* 24 (20):e135. DOI: 10.1017/S1463423619000598.

Emerson KG and Jayawardhana J (2016). Risk factors for loneliness in elderly adults. *Journal of the American Geriatrics Society,* 64(4), 886-87.

Eurostat [22 July 2020]. Ageing Europe - looking at the lives of older people in the EU'. https://ec.europa.eu/eurostat/en/web/products-statistical-books/-/KS-02-19-681

Expósito, F., and Moya, M. (1999). Loneliness and social support. *Revista de Psicología Social*, *14*(2-3), 297-316.

Evans I, Llewellynb D, Matthewscd F, Woodse R, Braynef C and Clareagh L. (2019). Living alone and cognitive function in later life. *Archives of Gerontology and Geriatrics*, (81), 222-233. https://doi.org/10.1016/j.archger.2018.12.014

Farquhar M. (1995). Elderly people's definitions of quality of life. *Social Science and Medicine*, (41), 1439-46.

Fatemi NL, Moonaghi HK, and Heydari A. (2019). Perceived challenges faced by nurses in home health care setting: A qualitative study. *International Journal of Community Based Nursing and Midwifery*, 7(2), 118-27, https://doi.org/10.30476/ijcbnm.2019.44883

Fakoya, OA., McCorry, NK., and Donnelly, M. (2020). Loneliness and social isolation interventions for older adults: a scoping review of reviews. *BMC public health*, *20*(1), 1-14.

Fernandes S, Davidson JGS and Guthrie DM. (2018). Changes in social engagement and depression predict incident loneliness among seriously ill home care clients. *Palliat Support Care*, 116(2), 170-9.

Ferrari, V. (2015). *Loneliness in old age: the elderly and their social environment as agents of change*. (Doctoral thesis). University of Montevideo.

Ferreira-Alves J, Magalhães P, Viola L and Simoes R. (2014). Loneliness in middle and old age: demographics, perceived health, and social satisfaction as predictors. *Archives of Gerontology and Geriatrics*, 59(3), 613-23.

Findlay, R.A. (2003), Interventions to reduce social isolation amongst older people: where is the evidence? *Ageing Society*, (23), 647-658.

Findlay R and Cartwright C. (2002). *Social isolation and older people: A literature review*. Ministerial Advisory Council on Older People.

Finlay JM, Kobayashi LC. (2018). Social isolation and loneliness in later life: A parallel convergent mixed-methods case study of older adults and their residential contexts in the Minneapolis metropolitan area, USA. *Social Science and Medicine, (*208), 25-33. https://doi.org/10.1016/j.socscimed.2018.05.010

Forbes A. (1990). Caring for older people: loneliness. *BMJ*. 313: 352-54.

Franck L, Molyneux N and Parkinson L (2016). Systematic review of interventions addressing social isolation and depression in aged care clients. *Quality of Life Research,* 25(6), 1395-407. DOI: 10.1007/s11136-015-1197.

Freedman, V.A., Grafova, I.B., Schoeni, R.F. and Rogowski, J., (2008). Neighborhoods and disability in later life. *Social. Science and. Medicine, (*66), 2253-2267.

Gale EAM. (2004). The Hawthorne studies - a fable for our times?. *QJM: An International Journal of Medicine, (*97), 439-49.

Gale CR, Westbury L, Cooper C. (2018). Social isolation and loneliness as risk factors for the progression of frailty: the English Longitudinal Study of Ageing. *Age Ageing*. 47(3):392-7.

Gallo Estrada, J. and Molina Mula, J. (2015). Factors affecting residential loneliness in older people living alone. *Gerokomos, 26* (1), 3-9. https://dx.doi.org/10.4321/S1134-928X2015000100002

García González, JM (2020). Study on unwanted loneliness in people aged 55+ in Andalusia. Junta de Andalucia. Sevilla.

Gardiner C, Geldenhuys, G. and Gott M. (2018). Interventions to reduce social isolation and loneliness among older people: an integrative review. *Health and Social Care in the Community*, 6(2):147-157.doi: 10.1111/hsc.12367. 2018; Epub 2016 Jul 13.

Gardner, W. L., Pickett, C. L., Jefferis, V., & Knowles, M. (2005). On the outside looking in: Loneliness and social monitoring. *Personality and Social Psychology Bulletin*, *31*(11), 1549-1560.

Gené-Badia, J. , Comice, P., Belchín, A., Erdozain, MA., Cáliz, L., Torres, S., Rodríguez, R. (2020) Profiles of loneliness and social isolation in an urban population, *Atención Primaria*, 52 (4): 224-232. https://doi.org/10.1016/j.aprim.2018.09.012

Gené-Badia J, Ruiz-Sánchez M, Obiols-Masó N and Lagarda Jiménez E. (2016). Social isolation and loneliness: What can we do as Primary Care teams? *Atención Primaria*, 48(9), 604-9.

Gerino E, Rollè L, Sechi C and Brustia P. (2017). Loneliness, resilience, mental health, and quality of life in old age: a structural equation model. Frontiers in Psychology, (8), 2003.

Gerst-Emerson K, Jayawardhana J. (2015). Loneliness as a public health issue: the impact of loneliness on health care utilization among older adults. *American Journal of Public Health*, 105(5), 1013-9.

Glaser BG and Strauss A. (1967). The discovery of grounded theory: strategies for qualitative research. Chicago: Aldine.

Goffman E. Frame Analysis. (2006). The frames of experience. Spain: Centro de Investigaciones Sociológicas. Siglo XXI.

Golden, J., Conroy, R. M., Bruce, I., Denihan, A., Greene, E., Kirby, M., & Lawlor, B. A. (2009). Loneliness, social support networks, mood and wellbeing in community-dwelling elderly. *International Journal of Geriatric Psychiatry: A Journal of the psychiatry of late life and allied sciences*, *24*(7), 694-700.

Golant, S.M., (2003). The urban-rural distinction in gerontology: an update of research. In: Wahl, H.W., Scheidt, R.J., Windley, P.G., (Eds.), Annual Review of Gerontology and Geriatrics, Aging in Context. (Eds.), *Annual Review of*

Gerontology and Geriatrics, Aging in Context: Socio-Physical Environments. vol. 23. Springer, New York, pp. 280-312.

Greaves, CJ and Farbus, L. (2006). Effects of creative and social activity on the health and well-being of socially isolated older people: results from a multi-method observational study. *Journal of the Royal Society for Health Promotion*, 126 (3), 134-142. https://doi.org/10.1177/1466424006064303

Green LR, Richardson DS, Lago T and Schatten-Jones EC. (2001). Network correlates of social and emotional loneliness in young and older adults. *Personality and Social Psychology Bulletin*, 27(3), 281-8.

Greenfield E and Mauldin R (2017). Participation in community activities through Naturally Occurring Retirement Community (NORC). *Supportive Service Programs. Ageing and Society*, 37(10), 1987-2011. doi:10.1017/S0144686X16000702

Greenwood N, Pound C, Smith R and Brearley S. (2019). Experiences and support needs of older carers: A focus group study of perceptions from the voluntary and statutory sectors. *Maturitas*, (123), 40-4. https://doi.org/10.1016/j.maturitas.2019.02.003

Hackett RA, Hamer M, Endrighi R, Brydon L ,and Steptoe A. (2012). Loneliness and stress-related inflammatory and neuroendocrine responses in older men and women. *Psychoneuroendocrinology*, 37(11), 1801-9.

Hagan, R. Manktelow,R.,Taylor,B.J. and Mallett,J.(2014). Reducing loneliness amongst older people: a systematic search and narrative review. *Aging and Mental Health*, 18(6), 683- 93.DOIi: 10.1080/13607863.2013.875122. Epub 2014 Jan 17.

Haslam C, Cruwys T, Chang MX, Bentley SV, Haslam SA, Dingle GA, and Jetten J. GROUPS 4 HEALTH (2019). Reduces loneliness and social anxiety in adults with psychological distress: Findings from a randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 87(9), 787-801. DOI: 10.1037/ccp0000427.

Hand C, McColl MA, Birtwhistle R, Kotecha JA, Batchelor, Bar- ber KH. (2014) Social isolation in older adults who are frequent users of primary care services. *Canadian Family Physician*, 60(e322), e324---9.

Hawkley LC and Cacioppo JT. (2010). Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms. *Annals of Behavioral Medicine,* 40(2), 218-27.

Hawkley, LC., Hughes, M. E., Waite, L. J., Masi, C. M., Thisted, R. A., & Cacioppo, J. T. (2008). From social structural factors to perceptions of relationship quality and loneliness: the Chicago health, aging, and social relations study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *63*(6), S375-S384.

Hawkley, L. C., Thisted, R. A., Masi, C. M., & Cacioppo, J. T. (2010). Loneliness predicts increased blood pressure: 5-year cross-lagged analyses in middle-aged and older adults. *Psychology and aging*, *25*(1), 132.

Hernán Montalbán, M.J. and Rodríguez Moreno, S.I. (2017), *La soledad no deseada en la ciudad de Madrid. Informe de resultados***.** Madrid Salud, Comunidad de Madrid, Madrid.

Hernández-Ascanio J, Pérula-de Torres, LA, Roldán-Villalobos A, Pérula-de Torres JC, Rich-Ruiz M; Collaborative Group Asys Project (2020), Effectiveness of a multicomponent intervention to reduce social isolation and loneliness in community-dwelling elders: A randomized clinical trial. Study protocol. *Journal of Advanced Nursing, (*76), 337-346. HTTPS ://doi.org/10.1111/jan.14230

Hernández-Ascanio, J., Perula-de Torres, LA., Rich-Ruiz, M., Roldán-Villalobos, AM., Perula-de Torres, C., Ventura Puertos, PE, Collaborative Group Asys Project (2021), Condicionantes para el abordaje del aislamiento social y la soledad de adultos mayores no institucionalizados desde atención primaria de salud en Atención Primaria, 54 (2), https://doi.org/10.1016/j.aprim.2021.102218

Holding E, Thompson J, Foster A and Haywood A. (2020). Connecting communities: A qualitative investigation of the challenges in delivering a national social prescribing service to reduce loneliness. *Health and Social Care in the Community*, 28(5), 1535-43.

Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science,* (10), 227-237.

Holt-Lunstad J and Smith TB. (2016). Loneliness and social isolation as risk factors for CVD: implications for evidence-based patient care and scientific inquiry. *Heart*. 102(13), 987-9.

Holt-Lunstad J, Smith TB and Layton JB. (2010). Social Relationships and Mortality Risk: A Meta-analytic Review. *PLOS Medicine,* 7(7), e1000316.

Holwerda TJ, Deeg DJH, Beekman ATF, van Tilburg TG, Stek ML, Jonker C, et al., (2014). Feelings of loneliness, but not social isolation, predict dementia onset: results from the Amsterdam Study of the Elderly (AMSTEL). *Journal of Neurology, Neurosurgery a,nd Psychiatry*, 85(2), 135-42. https://doi.org/10.1136/jnnp-2012-302755

Hughes, M. E., Waite, L. J., Hawkley, L. C., & Cacioppo, J. T. (2004). A short scale for measuring loneliness in large surveys: Results from two population-based studies. *Research on aging*, *26*(6), 655-672.

National Institute of Statistics. Population projections 2016-2066. Madrid: National Institute of Statistics; 2016 [accessed 150/5/2017]. Available from: http://www.ine.es/prensa/np1016.htm

National Institute of Statistics. Population projections 2018. Madrid: National Institute of Statistics; 2018. [accessed 10/11/2019]. Available from: https://www.ine.es/prensa/pp_2018_2068.pdf

Jacobs JM, Cohen A, Hammerman-Rozenberg R. and Stessman J. (2006). Global Sleep Satisfaction of Older People: The Jerusalem Cohort Study. *Journal of the American Geriatrics Society*, 54(2), 325-9.

de Jong-Gierveld, J., and Kamphuls, F. (1985). The development of a Rasch-type loneliness scale. *Applied psychological measurement*, *9*(3), 289-299.

de Jong Gierveld J and Van Tilburg T. (2010). The De Jong Gierveld short scales for emotional and social loneliness: tested on data from 7 countries in the UN generations and gender surveys. *European Journal of Ageing*, 7(2), 121-30.

Kadowaki L, Wister AV and Chappell NL. (2015). Influence of home care on life satisfaction, loneliness, and perceived life stress. *Canadian Journal on Aging*, 34(1), 75-89.

Kevin, K. and Velkoff, V.A., (2001). U.S. Census Bureau, Series P95/01-1, An Aging World: 2001. U.S. Government Printing Office, Washington, D.C.

Kime, N., Cattan, M. and Bagnall, A.M. (2012). The delivery and management of telephone befriending services. Wneeds are being met? *Quality in Ageing and Older Adults*, 13 (3), 231-240. https://doi.org/10.1108/14717791211264278

Klinenberg E. (2016). Social Isolation, Loneliness, and Living Alone: Identifying the Risks for Public Health. *American Journal Public Health*. 106(5):786-7. DOI: 10.2105/AJPH.2016.303166.

Kobayashi, LC and Steptoe, A. (2018). Social Isolation, Loneliness, and Health Behaviors at Older Ages: Longitudinal Cohort Study. *Annals of Behavioral Medicine*, 52 (7), 582-593.

Krleza-Jeric K and Lemmens T. (2009). 7th Revision of the Declaration of Helsinki: Good News for the Transparency of Clinical Trials. *Croatian Medical Journal*, (50), 105-10.

Laghi, F., Schneider, B. H., Vitoroulis, I., Coplan, R. J., Baiocco, R., Amichai-Hamburger, Y., ... and Flament, M. (2013). Knowing when not to use the Internet: Shyness and adolescents' online and off-line interactions with friends. *Computers in Human Behavior*, *29*(1), 51-57.

Larson, R., Zuzanek, J., & Mannell, R. (1985). Being alone versus being with people: Disengagement in the daily experience of older adults. *Journal of Gerontology*, *40*(3), 375-381.

Lasgaard, M., Friis, K. and Shevlin, M. (2016). Where are all the lonely people?" A population-based study of high-risk groups across the life span**.** *Social Psychiatry and Psychiatric Epidemiology, (*51), 1373-1384.

Leigh-Hunt N, Bagguley D, and Bash K, et al., (2017). An overview of systematic reviewson thee public health consequences of social isolation and loneliness. *Public Health*, (152), 157-71.

Lezaun J, Sarasola A, Chamorro S, Pinazo-Hernandis S, Canals S and Talavera C. (2018). The challenge of loneliness in old age. *ZERBITZUAN*. January 1, 2018;61-75.

Liliane, R., (2005). The well-being of aging people living in their own homes. *Journal of Environmental Psychology, (*25), 231-243.

Lim MH, Eres R and Vasan S . Understanding loneliness in the twenty-first century: an update on correlates, risk factors, and potential solutions. Social Psychiatry and Psychiatric Epidemiology, 55(7), 793-810.

Lin, SH. and Huang, YC. (2012). Investigating the relationships between loneliness and learning burnout. *Active Learning in Higher Education*, *13*(3), 231-243.

Litwin, H., (2003). The association of disability, sociodemographic background, and social network type in later life. *Journal of Aging and Health*, (15), 391-408.

Llobet MP, Canut MTL and Ávila NR. (2009). Nursing assessment: Detection of loneliness and social isolation in old people in risk. *Gerokomos*. 20(1):9-14. https://scielo.isciii.es/pdf/geroko/v20n1/09rincon.pdf

López, E. R., and Clemente, C. C. (2019). Loneliness and isolation, barriers and conditioning factors in the field of older people in Spain. *Ehquidad*, (12), 127-154.

López Doblas J. (2005). *Older people living alone: autonomy as a rising value*. Madrid: IMSERSO.

Lopez Suarez, A. B., Mora Mora, L. L., Ortega, C. A., & Sepulveda Niño, G. (2019). *Loneliness in the older adult*. University of Bucamaranga. Bucamranga.

Losada A, Márquez-González M, García-Ortiz L, Gómez-Marcos MA, Fernández-Fernández V and Rodríguez-Sánchez E. (2012). Loneliness and Mental Health in a Representative Sample of Community-Dwelling Spanish Older Adults. *Journal of Psycholpgy*. 46(3), 277-92.

Luanaigh CO and Lawlor BA. (2008). Loneliness and the health of older people. *International Journal of Geriatric Psychiatry*, 23(12), 1213-21.

Lubben, J., and Gironda, M. (2003). Centrality of social ties to the health and well-being of older adults. *Social work and health care in an aging world*, 319-350.

Lucchetti, M., Corsonello, A., and Gattaceca, R. (2008). Environmental and social determinants of aging perception in metropolitan and rural areas of Southern Italy. *Archives of Gerontology and Geriatrics*, (46), 349-357.

Luhmann M. and Hawkley L. (2016). Age Differences in Loneliness From Late Adolescence to Oldest Old Age. *Developmental Psychology, (*50), 943-59.

Luo Y, Hawkley LC, Waite LJ and Cacioppo JT. (2012). Loneliness, health, and mortality in old age: a national longitudinal study. *Social Sciences and Medicine,* 74(6), 907-14.

Luo Y. and Waite LJ. (2014). Loneliness and mortality among older adults in China. *Journals of Gerontology. Series B, Psychological Sciences and Social Sciences,* 69(4), 6333-45.

Ma R, Mann F, Wang J, Lloyd-Evans B, Terhune J, Al-Shihabi A, et al., (2020). The effectiveness of interventions for reducing subjective and objective social isolation among people with mental health problems: a systematic review. *Social Psychiatry and Psychiatric Epidemiology,* 55(7), 839-76. https://doi.org/10.1007/s00127-019-01800-z

Machielse A. (2015). The heterogeneity of socially isolated older adults: a social isolation typology. *Journal of Gerontological Social Work*, 58(4), 338-56.

Mann F, Bone JK, Lloyd-Evans B, Frerichs J, Pinfold V, Ma R, et al., (2017). A life less lonely: the state of the art in interventions to reduce loneliness in people with mental health problems. *Social Psychiatry and Psychiatric Epidemiology,* 52(6), 627-38.

Mansfield PL, Kay PT, Daykin N, Lane MJ, Duffy LG, Alan P, et al., (2018). *The effectiveness of interventions to address loneliness at all stages of the life course*. The UniversityTamperepere. Tampere.

Marcellini, F., Mollenkopf, H., Spazzafumo, L. and Ruoppila, I. (2000). Acceptance and use of technological solutions by the elderly in the outdoor environment: findings from a European survey. Zeitschrift für Gerontologie und Geriatrie, (33), 169-177.

Marcellini, F., Giuli, C., Gagliardi, C. and Papa, R., (2007). Aging in Italy: urban-rural differences. *Archives of. Gerontolpgy and. Geriatrics*. (44), 243-260.

Martín Lesende I, Gorroñogoitia Iturbe A, Gómez Pavón J, Baztán Cortés JJ and Abizanda Soler P. (2010). The frail elderly. Detection and treatment in PC. *Aten Primaria,* 42(7):388-93.

Martínez RL. Loneliness in old age: analysis and evaluation of an intervention programme for older people living alone [Internet]

[http://purl.org/dc/dcmitype/Text]. Miguel Hernández University; 2017 [cited 21 Jan. 2021]. Available from: https://dialnet.unirioja.es/servlet/tesis?codigo=123014

Martínez de la Iglesia J, Duenas Herrero R, Onis Vilches MC, Aguado Taberne C, Albert Colomer C, Luque Luque R. (2001). Adaptación y validación al castellano del cuestionario de Pfeiffer (SPMSQ) para detectar la existenciaica de deterioro cognitivo en personas mayores de 65 años. *Medicina Clinica* (Barc). Jun 30;117(4):129-34.

Masi CM, Chen HY, Hawkley LC and Cacioppo JT. (2011). A meta-analysis of interventions to reduce loneliness. Personality and Social Psychology Review, (15), 219-66.

Matthews T, Danese A, Caspi A, Fisher HL, Goldman-Mellor S, Kepa A, et al., (2019). Lonely young adults in modern Britain: findings from an epidemiological cohort study. *Psychological Medicine*, 49(2), 268-77.

McCarney R, Warner J, Iliffe S, Van Haselen R, Griffin M and Fisher P (2007). The Hawthorne effect: a randomized, controlled trial. *BMC Medical Research Methodology*. 1471-2288.

Mertens, D. (2005). *Research and evaluation in Education and Psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks. Sage.

Mills, S. (2017). Loneliness: Do Interventions Help? *Rural Theology*, *15*(2), 113-123.

Mirkin, B. and Weinberg, M.B., (2001). The demography of population ageing. In: United Nations: Living Arrangements of Older Persons: Critical Issues and Policy Responses, *Population Bulletin of the UN*, New York, 37-53.

Miyawaki CE. (2015). Association of social isolation and health across different racial and ethnic groups of older Americans. *Ageing and Society*, 35(10), 2201-28.

Newall N, McArthur J and Menec VH. (2015). A longitudinal examination of social participation, loneliness, and use of physician and hospital services. *Journal of Aging and Health,* 27(3), 500- 18.

Newall, N and Menec, V. (2019). Loneliness and social isolation of older adults: Why it is important to examine these social aspects together. *Journal of Social and Personal Relationships*. 36. 026540751774904. 10.1177/0265407517749045.

Nicholson, NR. (2012). A review of social isolation: an important but underassessed condition in older adults. *The journal of primary prevention*, *33*(2-3), 137-152.

Nicholson NR Jr, and Shellman J. (2013). Decreasing social isolation in older adults: effects of an empowerment intervention offered through the CARELINK program. Res Gerontological Nursing, (6), 89-97.

Nicolaisen M and Thorsen K. (2014a). Who are lonely? Loneliness in different age groups (18-81 years old), using two measures of loneliness. *International Journal of Aging and Human Development, (*78), 229-57.

Nicolaisen M and Thorsen K. (2014b). Loneliness among men and women--a five-year follow-up study. *Aging and Mental Health*, 18(2), 194-206.

Nicolaisen, M. and Thorsen K. (2017). What are friends for? Friendships and loneliness over the lifespan-form 18 to 79 years. *International Journal of Aging and Human Development*. 84(2), 126-158. DOI:/10.1177/0091415016655166

Niemi T and Johansson U. (2013). The lived experience of engaging in everyday occupations in persons with mild to moderate aphasia. *Disability and Rehabilitation,* 35(21), 1828-34. https://doi.org/10.3109/09638288.2012.759628

Nummela, O., Seppänen, M., and Uutela, A. (2011). The effect of loneliness and change in loneliness on self-rated health (SRH): A longitudinal study among aging people. *Archives of gerontology and geriatrics*, *53*(2), 163-167.

Nyqvist F , Victor CR, Forsman AK, and Cattan M. (2016). The association between social capital and loneliness in different age groups: a population-based study in Western Finland. *BMC Public Health*, 16(1), 542.

Ong AD, Uchino BN, and Wethington E (2016). Loneliness and health in older adults: a mini-review and synthesis. *Gerontology*. 62(4), 443-9.

O'Brien B.C. et al (2014). Standards for reporting qualitative research: a synthesis of recommendations. *Academic Medicine.* Sep;89(9), 1245-51. DOI: 10.1097/ACM.0000000000000000388. PubMed PMID: 24979285.

WHO. (2008), *Age-friendly global cities: A guide*. Geneva: WHO.

O'Rourke, HM., Collins, L. and Sidani, S. (2018). Interventions to address social connectedness and loneliness for older adults: a scoping review. *BMC Geriatric*. Sep 15;18(1), 214. DOI: 10.1186/s12877-018-0897-x.

Paque K, Bastiaens H, Van Bogaert P and Dilles T. (2018). Living in a nursing home: A phenomenological study exploring residents' loneliness and other feelings. *Scandinavian Journal of Caring Sciences*, (32). 1477-1484. https://doi.org/10.1111/scs.12599.

Park C, Majeed A, Gill H, Tamura J, Ho RC, Mansur RB and McIntyre RS. (2020). The Effect of Loneliness on Distinct Health Outcomes: A Comprehensive Review and Meta-Analysis. *Psychiatry Research*, 294, 113514. https://doi.org/10.1016/j.psychres.2020.113514

Palmer, B. W. (2019). The effects of loneliness and social isolation on cognitive functioning in older adults: A need for nuanced assessments. *International Psychogeriatrics*, 31, (4), 447-449.

Perissinotto, C. M., and Covinsky, K. E. (2014). Living alone, socially isolated or lonely-What are we measuring?. *Journal of General Internal Medicine*, 29(11), 1429-1431.

Pitchot W. (2014). Suicide in the elderly. *Revue Medicale de Liege*. 69(5-6), 390-4.

Pikhartova, J., Bowling, A., & Victor, C. (2016). Is loneliness in later life a self-fulfilling prophecy? *Aging Ment Health*. 543-549

Pinazo Hernandis S, and Donio Bellegarde M. (2018). *Loneliness in older people: conceptualisation, assessment and intervention*. Madrid: Fundación Pilares para la Autonomía Personal.

Pinquart, M. (2001). Correlates of subjective health in older adults: a meta-analysis. *Psychology and aging*, *16*(3), 414.

Pinquart M. (2003). Loneliness in Married, Widowed, Divorced, and Never-Married Older Adults. Journal of Social and Personal Relationships, (20), 31-53.

Pinquart, M., and Sorensen, S. (2001). Influences on Loneliness in Older Adults: A Meta-Analysis. *Basic and Applied Social Psychology*, 23(4), 245-266. DOI:/10.1207/S15324834BASP2304_2

Pinquart M and Sörensen S. (20039. Risk factors for loneliness in adulthood and old age: A meta-analysis. *Advances in Psychology Review, (*19). 111-43.

Pinson MW. (2010). Effect of Loneliness on Older Adults' Death Anxiety [Internet]. UNT Digital Library. The University of North Texas; [cited 2010 Feb 9, 2021]. Available from: https://digital.library.unt.edu/ark:/67531/metadc30501/m1/1/

Platt L. (2009). Social activity, social isolation, and ethnicity. *Sociological Review*, 57(4), 670-702.

Poscia, A., Stojanovic, J., La Milia, D. I., Duplaga, M., Grysztar, M., Moscato, U., ... and Magnavita, N. (2018). Interventions targeting loneliness and social isolation among the older people: An update systematic review. *Experimental gerontology*, (*102)*, 133-144.

Prieto-Flores M, Forjaz MJ, Fernández-Mayoralas G, Rojo-Pérez F and Martínez-Martin P. (2011). Factors associated with loneliness of noninstitutionalized and institutionalized older adults. *Journal of Aging and Health*, 23(1), 177-94.

Pynnönen, K. (2017). Social engagement, mood, and mortality in old age. *Studies in sport, physical education, and health*, (259).

Quintero-Echeverri, Á., Villamil-Gallego, M. M., Henao-Villa, E., & Cardona-Jiménez, J. L. (2018). Differences in feelings of loneliness between institutionalized and non-institutionalized adults. *Revista Facultad Nacional de Salud Pública*, *36*(2), 49-57.

de la Revilla Ahumada L, Bailón E, de Dios Luna J, Delgado A, Prados MA and Fleitas L. (1991). Validation of a functional social support scale for use in the family doctor's office [Validación de una escala de apoyo social funcional para su uso en la consulta del médico de familia]. *Atencion Primaria*. Oct;8(9):688-92. Spanish. PMID: 16989055.

Ribeiro, V. E. D. S. (1989). *Loneliness in the institutionalized elderly: A descriptive/exploratory study* (Doctoral dissertation, Boston University).

Rodríguez López, E., and Castro Clemente, C. (2019). Loneliness and isolation, barriers and conditioning factors in the field of the elderly in Spain. *EHQUIDAD. International Journal of Welfare Policy and Social Work*, (12), 127-154. https://doi.org/10.15257/ehquidad.2019.0012

Rohr, M.K. and Lang, F.R., (2009). Aging well together: a mini-review. *Gerontology*, (55), 333- 343.

Roncero, U. M., and González-Rábago, Y. (2021). Unwanted loneliness, health, and social inequalities throughout the life cycle. *Gaceta Sanitaria*, *35*(5), 432-437.

Rosen CE and Rosen S. (1982). Evaluating an intervention program for the elderly. *Community Mental Health Journal.* 18(1): 21-33.

Rook, K. S. (1984). Promoting social bonding: Strategies for helping the lonely and socially isolated. *American Psychologist*, *39*(12), 1389.

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of personality assessment*, *66*(1), 20-40.

Sabir M, Wethington E, Breckman R, Meador R, Reid MC and Pillemer K. (2009). A community-based participatory critique of social isolation intervention research for community-dwelling older adults. *Journal of Applied Gerontology*. 28(2), 218-34. https://doi.org/10.1177/0733464808326004

Saito T, Kai I and Takizawa A. (2012). Effects of a program to prevent social isolation on loneliness, depression, and subjective well-being of older adults: a randomized trial among older migrants in Japan. *Archives of Gerontology and Geriatrics*, 55(3), 539-47.

Santini S, Tombolesi V, Baschiera B and Lamura G. (2018). Intergenerational Programs Involving Adolescents, Institutionalized Elderly, and Older Volunteers: Results from a Pilot Research-Action in Italy. *BioMed Research International*. 1-14. 10.1155/2018/4360305.

Sanchez Morales, MR (2021). Tendencias de envejecimiento en España en el contexto europeo e impactos sociales, in Romeo Casabona, CM (Coord). Tratado de derecho y envejecimiento. Madrid; Wolters Kluwer.

Santos - Olmos Sánchez AB. (2016). *Older people in social isolation: design and effectiveness of a psychological support service*. Madrid; Complutense University of Madrid.

Savikko, N., Routasalo, P., Tilvis, RS., Strandberg, TE., and Pitkälä, KH. (2005). Predictors and subjective causes of loneliness in an aged population. *Archives of Gerontology and Geriatrics, (41)*, 223-233. DOI: 10.1016/j.archger.2005.03.002

SCIE: At a glance 60: Preventing loneliness and social isolation among older people [Internet]. [cited 10 Feb. 2021]. Available from: https://www.scie.org.uk/publications/ataglance/ataglance60.asp

Schatzman L. (1991). Dimensional analysis: Notes on an alternative approach to the grounding of theory in qualitative research, in Maines D. (Coord). *Social organization and social process: Essays in Honor of Anselm Strauss*, New York: Aldine de Gruyter. 303-314.

Schrempft S, Jackowska M, Hamer M and Steptoe A. (2019). Associations between social isolation, loneliness, and objective physical activity in older men and women. *BMC Public Health*, 19(1), 74.

Schultz NR and Moore D. (1984). Loneliness: Correlates, Attributions, and Coping among Older Adults. *Personality and Social Psychology Bulletin*. 10(1):67-77. DOI:/10.1177/0146167284101007

Shalev, S. (1988). On loneliness and alienation. *The Israel journal of psychiatry and related sciences*, *25*(3-4), 236-245.

Shankar A, Hamer M, McMunn A, and Steptoe A. (2013). Social isolation and loneliness: relationships with cognitive function during 4 years of follow-up in the English Longitudinal Study of Ageing. *Psychosomatic Medicine*, 75(2), 161-70.

Shankar, A., McMunn, A., Demakakos, P., Hamer, M., & Steptoe, A. (2017). Social isolation and loneliness: Prospective associations with functional status in older adults. *Health psychology*, *36*(2), 179.

Siette J, Cassidy M and Priebe S. (2017). Effectiveness of befriending interventions: a systematic review and meta-analysis. *BMJ Open*.7(4):e014304.

Sołtys A and Tyburski E. (2020). Predictors of mental health problems in formal and informal caregivers of patients with Alzheimer's disease. *BMC Psychiatry*. **20:** 435 https://doi.org/10.1186/s12888-020-02822-7

Stolz E, Fux B, Mayerl H, Rásky É and Freidl W. (2016). Passive Suicide Ideation Among Older Adults in Europe: A Multilevel Regression Analysis of Individual and

Societal Determinants in 12 Countries (SHARE). *Journals of Gerontology. Series B Psychological Sciences and Social Sciences,* 71(5):947-58.

Stojanovic J, Collamati A, La Milia D, Borghini A, Duplaga M, Rodzinka M, et al., (2016). Targeting loneliness and social isolation among the elderly: an updated systematic review: Jovana Stojanovic. *European Journal of Public Health*, (26).

Sundström, G., Fransson, E., Malmberg, B., & Davey, A. (2009). Loneliness among older Europeans. *European journal of ageing*, *6*(4), 267-275.

Sundström M, Edberg AK, Rämgård M and Blomqvist K. (2018). Encountering existential loneliness among older people: perspectives of health care professionals. *International Journal of Qualitative Studies on Health and Well-Being*. 13(1):1474673 DOI: 10.1080/17482631.2018.1474673

Swindells, R. et al., (2013). Eudaimonic well-being and community arts participation, *Perspectives in Public Health,* 133 (1), 60-65.

Thierry X, (1999). Risques de mortalité et de surmortalité au cours des dix première années de veuvege, *Population*, 54(2), 177-204.

Thurston RC, and Kubzansky LD. (2009). Women, loneliness, and incident coronary heart disease. *Psychosomatic Medicine,* 71(8):836-42.

Tilvis RS, Laitala V, Routasalo PE, and Pitkälä KH. (2011). Suffering from Loneliness Indicates Significant Mortality Risk of Older People. *Journal of Aging Research, [*Internet]. February 22, 2011 [cited 2011 Feb 9, 2021];2011. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3056243/

Tomaka, J., Thompson, S. and Palacios, R. (2006). The relation of social isolation, loneliness, and social support to disease outcomes among the elderly. *Journal of Aging and Health*, (18), 359-384.

Tomstad S, Dale B, Sundsli K, Saevareid HI, and Söderhamm U. (2017). Who often feels lonely? A cross-sectional study about loneliness and its related factors among

older home-dwelling people. *International Journal of Older People Nursing*, 12(4), 1-10.

Townsend, A. A. R. (1980). *The structure of the turbulent shear flow*. Cambridge university press.

Townsend P. (1968). Isolation and loneliness. In: Shanas E, Townsend P, Wedderburn D, et al., (eds.) *Old people in three industrial societies.* London. Routledge and Kegan Paul. 258-88.

Tse, M.M.Y., Tang, S.X., Wan, V.T and Wong, S.K. (2014). The effectiveness of physicalexercisee training in pain, mobility, and psychological well-being of older persons living in nursing homes. *Pain Management Nursing*, (15), 778-788.

Tzang RF, Yang AC, Yeh HL, Liu M-E and Tasai S-J. (2015). Association of depression and loneliness with specific cognitive performance in non-demented elderly males. *Medical Science Monitor, (*21), 100-4.

Tzouvara V, Papadopoulos C and Randhawa G. (2015). A narrative review of the theoretical foundations of loneliness. *British Journal of Community Nursing*. 20(7): 329-334. DOI: /10.12968/bjcn.2015.20.7.329

Uchino BN and Rook, KS. (2020). Emotions, relationships, health and illness into old age, *Maturitas*, 139: 42-48, https://doi.org/10.1016/j.maturitas.2020.05.014.

United Nations. World Population Prospects. Key findings and advanced tables. 2017 revision. New York: United Nations; 2017. [accessed 10/09/2019]. Available from: https://www.un.org/development/desa/publications/world-population-prospects-the-2017- revision.html

Valtorta, N. and Hanratty, B. (2012). Loneliness, isolation, and health in older adults: do we need a new research agenda. *Journal of the Royal Society of Medicine*, *105* (12), 518-522. https://doi.org/10.1258/jrsm.2012.120128

Valtorta, N. K., Kanaan, M., Gilbody, S., Ronzi, S., & Hanratty, B. (2016). Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and meta-analysis of longitudinal observational studies. *Heart*, *102*(13), 1009-1016.

Valtorta NK, Kanaan M, Gilbody S, Hanratty B. (2016). Loneliness, social isolation, and social relationships: what are we measuring? A novel framework for classifying and comparing tools. *BMJ Open*. 6(4):e010799.DOIi: 10.1136BMJ openn-2015-010799.

Victor, C., Scambler, S., Bond, J., & Bowling, A. (2000). Being alone in later life: loneliness, social isolation, and living alone. *Reviews in Clinical Gerontology*, *10*(4), 407-417.

Victor CR, Scambler S, Bowling A, Bond J (2005). The prevalence of and risk factors for, loneliness in later life: a survey of older people in Great Britain. *Ageing and Society*. 25(6):357-75

Victor CR, Yang K. (2012). The Prevalence of Loneliness Among Adults: A Case Study of the United Kingdom. *Journal of Psychology*. 146(1-2):85-104.

Villalobos Córdova, E. V. (2015). *Social support in older adults in a health centre in José Leonardo Ortiz, Chiclayo*. Universidad Católica Santo Toribio de Mogrovejo.

Vogelpoel, N., & Jarrold, K. (2014). Social prescription and the role of participatory arts programmes for older people with sensory impairments. *Journal of Integrated Care*.

Vrbanac, Z. *et al.*, (2013). Animal assisted therapy and perception of loneliness in geriatric nursing home residents. *Collegium Antropologicum,* 37, 973-976.

Walton, R. E., and McKersie, R. B. (1991). *A behavioral theory of labor negotiations: An analysis of a social interaction system*. Cornell University Press.

Walton, C. G., Shultz, C. M., Beck, C. M., & Walls, R. C. (1991). Psychological correlates of loneliness in the older adult. *Archives of psychiatric nursing*, *5*(3), 165-170.

Wang J, Mann F, Lloyd-Evans B, Ma R, Johnson S. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: a systematic review. BMC Psychiatry. 8:156.

Weeks, D. J. (1994). A review of loneliness concepts, with particular reference to old age. *International Journal of Geriatric Psychiatry*.

Weldrick R and Grenier A. (2018). Social isolation in later life: Extending the conversation. *Canadian Journal on Aging.* 37(1):76-83. https://doi.org/10.1017/S071498081700054X

Wenger GC, and Burholt V. (2004). Changes in levels of social isolation and loneliness among older people in a rural area: a twenty-year longitudinal study. *Canadian Journal on Aging*, 23(2):115-27.

Wenger, G. C., Davies, R., Shahtahmasebi, S., & Scott, A. (1996). Social isolation and loneliness in old age: review and model refinement. *Ageing and Society*, *16*(3), 333-358.

Whisman MA. (2010). Loneliness and the metabolic syndrome in a population-based sample of middle-aged and older adults. *Health Psychol*. 29(5):550-4.

Wigfield A, Alden SD and Kispeter E. (2015). Age UK's fit for the future 'Social Prescribing' extension project Evaluation report [Internet]. 2015 [cited 10 Feb 2021]. Disponible en: /paper/Understanding-loneliness-in-the-twenty-first-an-on-Lim-Eres/6b2d74885b4547fb09b897360d126f512568a50a

Wilson RS, Krueger KR, Arnold SE, Schneider JA, Kelly JF, Barnes LL, et al., (2007). Loneliness and risk of Alzheimer disease. *Archives of General Psychiatry*. 64(2), 234-40.

Windle K, Francis J, and Coomber C. (2011). Preventing loneliness and social isolation: interventions and outcomes. *Soc Care Inst Excell Res Brief*. 39.

Winningham, R.G. and Pike, N.L. (2007). A cognitive intervention to enhance institutionalized older adults' social support networks and decrease loneliness. *Aging Mental Health*, 11, 716-721.

Yang EV and Glaser R. (2000). Stress-induced immunomodulation: impact on immune defenses against infectious disease. *Biomed Pharmacother*.54(5):245-50.

Yanguas, J., Cilveti, A., Hernández, S., Pinazo, S., Roig, S., & Segura, C. (2018). The challenge of loneliness in old age. *Zerbitzuan*, *66*, 61-75.

Yanguas J, Pinazo-Henandis S and Tarazona-Santabalbina FJ. (2019). The complexity of loneliness. *Acta Biomedica*, 7;89(2):302-314. doi: 10.23750/abm.v89i2.7404.

Younga, A.F., Russellb, A. and Jennifer, R., (2004). The sense of belonging to a neighbourhood: can it be measured and is it related to health and well being in older women? *Social Science and Medicine, (*59), 2627-2637.

Zebhauser A , Baumert , Emeny RT, Ronel J, Peters A, Ladwig KH. (2015). What prevents old people living alone from feeling lonely? Findings from the KORA-Age-study. *Aging Ment Health*. 19(9):773-80.

Zebhauser, A., Hofmann-Xu, L., Baumert, J., Häfner, S., Lacruz, M. E., Emeny, R. T., ... and Ladwig, K. H. (2014). How much does it hurt to be lonely? Mental and physical differences between older men and women in the KORA-Age Study. *International journal of geriatric psychiatry*, *29*(3), 245-252.

Zhang J, Xu L, Li J, Sun S, Ding G, Qin W, et al., (2018). Loneliness and health service utilization among the rural elderly in Shandong, China: a cross-sectional study. *Int J Environ Public Health*. 15(7).

Zhong BL, Chen SL and Conwell Y. (2016). Effects of transient versus chronic loneliness on cognitive function in older adults: findings from the Chinese longitudinal

healthy longevity survey. *American Journal of Geriatry and Psychiatry*. 24(5):389-98.

Zhong BL, Chen SL, Tu X and Conwell Y. (2017). Loneliness and cognitive function in older adults: findings from the Chinese longitudinal healthy longevity survey. *Journal of Gerontology. Series B Psychological Sciencies and Social Sciences*, 72(1), 120-8.

SCIENTIFIC PRODUCTION DERIVED FROM THE THESIS PROJECT.

11.1.Publications.

- Hernández-Ascanio J, Pérula-de Torres, LA, Roldán-Villalobos A, Pérula-de Torres JC, Rich-Ruiz M; Collaborative Group Asys Proyect (2020), Effectiveness of a multicomponent intervention to reduce social isolation and loneliness in community-dwelling elders: A randomized clinical trial. Study protocol. J Adv Nurs;76:337–346. https ://doi.org/10.1111/jan.14230

  Indicio de Calidad:

  Ranking 2020: Q1 (9/124)

  Factor de Impacto 2020: 3.187

- Hernández-Ascanio, J., Perula-de Torres, LA., Rich-Ruiz, M., Roldán-Villalobos, AM., Perula-de Torres, C., Ventura Puertos, PE, Collaborative Group Asys Proyect (2021), Condicionantes para el abordaje del aislamiento social y la soledad de adultos mayores no institucionalizados desde atención primaria de salud en Atención Primaria, Volume 54, Issue 2, https://doi.org/10.1016/j.aprim.2021.102218

  Indicio de Calidad:

  Ranking2020: Q4 (130/167)

  Factor de Impacto 2020: 1.137

11.1 Conferences and congresses.

- Pérula Torres, Luis Ángel; Rich Ruiz, Manuel; Hernández – Ascanio, José; Romero Pérez, Javier, Morales del Pozo, María del Carmen y Equipo Colaborativo Estudio ASyS. "Actitud de los profesionales sanitarios de atención primaria ante el aislamiento social y soledad en mayores no institucionalizados" en el XXIX Congreso Nacional de Comunicación y Salud "El camino es comunicarte", Santiago de Compostela, 10 al 13 de Octubre de 2018.

- Hernández-Ascanio, J.; Rich-Ruiz, M. y Perula, L.A. "Efectividad de una intervención no farmacológica multicomponente para reducir el aislamiento social y la soledad de mayores residentes en su domicilio: estudio ASyS ("Proyecto estamos contigo") en XVIII Jornadas científicas de Medicina Familiar y Comunitaria de Córdoba, Córdoba, 12 y 13 de Abril de 2018.
- Rich Ruiz, M; Hernandez – Ascanio, J.; Morales del Pozo, MD; Romero Perez, J; Luna Morales, S; Pastor López, A. "Abordar el aislamiento social y soledad en mayores desde atención primaria. Propuesta y condicionantes de sostenibilidad" en XXII Encuentro Internacional de Investigación en Cuidados. Córdoba, 14 a 16 de Noviembre de 2018.
- Rich-Ruiz M, Roldán-Villalobos AM, Pérula-De Torres LA, Hernández-Ascanio J, Pérula-De Torres C, Grupo Colaborativo Estudio ASyS. "Efectividad de una intervención no farmacológica multicomponente para reducir el aislamiento social y la soledad de los mayores residentes en su domicilio" en XXX Congreso Comunicación y Salud. V Foro de Investigación y VIII Reunión RICYS (Red de Investigación en Comunicación y Salud). Santander, 3-5 de octubre de 2019

11.2. Collaboration in TFG - Degree in Nursing.

- 2018 – Alumno: Javier Romero Pérez; "Intervención en aislamiento social y soledad: actitudes de profesionales".
- 2018 – Alumna: María del Carmen Morales del Pozo: "Intervención sobre el aislamiento social y la soledad en personas mayores que viven en su domicilio"
- 2020 – Alumna: Rodríguez Aguilera, Laura, "Eficacia de una intervención sobre el aislamiento social de mayores residentes en su domicilio: perspectiva de los agentes"

11.3.Research stays.

Centro en Red de Investigación en Antropología – CRIA (Polo de Lisboa) - Universidad Nova de Lisboa; Periodo: 01/07/2018 a 01/10/2018

ANNEXES.

Annex 1.

Servicio Andaluz de Salud
CONSEJERÍA DE SALUD

Hospital Universitario Reina Sofía

Ref. 3424

ACEPTACIÓN DE MODIFICACIONES AL PROYECTO DE INVESTIGACIÓN YA APROBADO POR EL COMITÉ DE ÉTICA DE LA INVESTIGACIÓN DE CÓRDOBA

M.ª Mercedes Gil Campos, Secretaria en funciones del Comité de Ética de la Investigación de Córdoba, comité constituido a tenor de lo establecido en el Decreto 439/2010, de 14 de diciembre, por el que se regulan los órganos de ética asistencial y de la investigación biomédica de Andalucía (BOJA núm. 251 de 27 de diciembre) del que es Presidenta Inmaculada Concepción Herrera Arroyo

CERTIFICA

Que este Comité ha evaluado a propuesta del Investigador Principal D. Carlos Pérula de Torres, adscrita al Servicio/UGC Atención Primaria. Distrito Sanitario Córdoba Guadalquivir, la modificación/Enmienda versión protocolo 2 – 14/01/2019 , la cual ha sido aprobada en fecha 29/01/2019, (Acta nº 284) del proyecto de investigación, con Código de Protocolo ASSO130, titulado: "EFECTIVIDAD DE UNA INTERVENCIÓN NO FARMACOLÓGICA MULTICOMPONENTE PARA REDUCIR EL AISLAMIENTO SOCIAL Y LA SOLEDAD DE MAYORES RESIDENTES EN SU DOMICILIO (ESTUDIO ASYS-V2)".

Y considera que tales modificaciones no cambian ni el objetivo ni ningún aspecto ético respecto al presentado con anterioridad

Por lo cual, este Comité Ético de la Investigación, da su **APROBACIÓN** a dichas modificaciones.

En Córdoba, a 30 de enero de 2019

LA SECRETARIA

LA PRESIDENTA

COMITÉ DE ÉTICA DE LA INVESTIGACIÓN DE CÓRDOBA
CONSEJERÍA DE SALUD
CÓRDOBA

Fdo. Mª Mercedes Gil Campos, secretaria en funciones

Fdo. Inmaculada Concepción Herrera Arroyo

Avda. Menéndez Pidal, s/n. 14004 Córdoba
Tel. 957 010 000 www.hospitalreinasofia.org

Servicio Andaluz de Salud
CONSEJERÍA DE SALUD

Hospital Universitario Reina Sofía

M.ª Mercedes Gil Campos, Secretaria en funciones del Comité de Ética de la Investigación de Córdoba, comité constituido a tenor de lo establecido en el Decreto 439/2010, de 14 de diciembre, por el que se regulan los órganos de ética asistencial y de la investigación biomédica de Andalucía (BOJA núm. 251 de 27 de diciembre) del que es Presidenta Inmaculada Concepción Herrera Arroyo

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El Comité de Ética de la Investigación de Córdoba está constituido por los siguientes vocales:

PRESIDENTA
Dña. Inmaculada Concepción Herrera Arroyo. Jefe de Servicio Hematología del HURS
VICEPRESIDENTE
D. José Luis Barranco Quintana. FEA Medicina Preventiva del HURS
SECRETARIA
Dña. María Mercedes Gil Campos. FEA Pediatría del HURS, secretaria en funciones.
VOCALES
D. Gregorio Jurado Céliz. Técnico de Función Administrativa. Licenciado en Derecho del HURS
D. Juan Manuel Parras Rejano. Medico de Familia EBAP, Área Sanitaria Norte de Córdoba
D. Eduardo Morán Fernández. FEA Medicina Intensiva H Infanta Margarita de Cabra
D. Javier Caballero Villarraso, FEA Bioquímica Clínica del HURS
Dña. Beatriz García Rebredo. Farmacéutica de Atención Primaria del Área Sanitaria Norte
D. Rafael Segura Saint-Gerons. Odontólogo C.S. La Carlota. Distrito Sanitario Guadalquivir
D. Carlos José Pérula de Torres. Enfermero de Familia de Atención Primaria. Distrito Sanitario Córdoba
Dña. Esther Pacheco Rodríguez. FEA Farmacología HURS
D. Pedro José Rodríguez Fernández. FEA Traumatología HURS
Dña. Inés Carmen Rodríguez García. Enfermera del HURS
Dña. Sonia García Cabezas. FEA Oncología Radioterápica del HURS
D. Antonio Díaz Valenzuela. Enfermero de la Agencia Pública Empresarial Sanitaria Hospital Alto Guadalquivir. CHARE Puente Genil.
Dña. Eva Mª Rojas Calvo. Auxiliar Administrativo HURS. Licenciada en Derecho
D. Miguel Ángel Romero Moreno. FEA Cardiología del HURS
D. Manuel Jesús Cárdenas Aranzana. Farmacéutico Hospitalario del HURS
D. Félix Igea Arisqueta. Médico de Familia Área Sanitaria Norte de Córdoba
Dña. María Pleguezuelo Navarro. FEA Digestivo del HURS

Que dicho Comité está constituido y actúa de acuerdo con la normativa vigente y las directrices de la Conferencia Internacional de Buena Práctica Clínica.

En Córdoba, a 30 de enero de 2019

LA SECRETARIA — LA PRESIDENTA

COMITÉ DE ÉTICA DE LA INVESTIGACIÓN DE CÓRDOBA
CONSEJERÍA DE SALUD
CÓRDOBA

Fdo. Mª Mercedes Gil Campos, secretaria en funciones — Fdo. Inmaculada Concepción Herrera Arroyo

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Annex 2

PATIENT INFORMATION AND INFORMED CONSENT FORM

PROJECT INFORMATION

RESEARCH PROJECT TITLE: "Effectiveness of a non-pharmacological multi-component intervention to reduce social isolation and loneliness in elderly people living at home: ASyS study (Financed by the Consejería de Salud de la Junta de Andalucía, Expte. AP-0079-2016)

PRINCIPAL RESEARCHER: Carlos Pérula de Torres

INTRODUCTION

We are writing to inform you about a research project in the field of primary care for which we are seeking your collaboration.
The study is designed to test the efficacy of a non-pharmacological intervention aimed at reducing social isolation and/or loneliness in older adults living at home. It has been approved by the Research Ethics Committee of the Andalusian Regional Government, in accordance with current legislation, Law 14/2007, of 3 July, on Biomedical Research.
In this document you will find clear and sufficient information to enable you to evaluate and judge whether or not you agree to participate in the study. To do so, please read this information sheet carefully. We will clarify any doubts you may have after reading it and if you have any doubts later, you can ask me or any member of the team. You do not have to decide today whether or not to take part in the study, you can consult with the people you consider appropriate before deciding.

VOLUNTARY PARTICIPATION

Your participation in this study is completely voluntary and you may choose not to participate or to withdraw from the study at any time, without explanation. Whether you choose to participate or not, you will continue to receive all of the services you receive at this health centre and nothing will change.
If you decide to withdraw your consent to participate in this study once it has started, no new data will be added to the database, and you can demand the destruction of the stored data to prevent further analysis.

SELECTION OF PARTICIPANTS

This study aims to test the efficacy of a non-pharmacological intervention to reduce social isolation and/or loneliness in older adults living at home.
Participants will be recruited by means of direct information from the health professional who usually attends them when they go to the different consultations at their health centre. In order to be selected, you must be over 65, not live in a residence, and preferably be a user of a tele-assistance service (although this is not an essential criterion). There are a series of criteria for not being able to participate in this study that can be consulted with the health professional who is informing you.
Participation in the control or experimental group will be randomly determined. Outcomes will be assessed 4 and 8 months after inclusion in the study.

GENERAL DESCRIPTION OF THE STUDY.

It is increasingly common to find in our immediate environment older adults who, for different reasons and causes, experience situations of social isolation or loneliness, which has a negative impact on their state of health, causing them to lose quality of life and well-being.
There are scientific studies that show that certain non-pharmacological interventions can be effective in reversing these situations or reducing their negative consequences. The Carelink Adapted Programme has been designed with this intention in mind and, through the present study, its efficacy is to be studied.

Accredited health professionals, specifically trained in this type of intervention, will interact with you over four months, through home visits and scheduled phone calls. The areas of intervention will be: social interaction and contact, participation in social activities, and feelings of competence and personal control.

ETHICAL CONSIDERATIONS

General considerations: The study will be conducted in accordance with the standards of the Declaration of Helsinki (1964) and current regulations.

Informed consent: A written informed consent form will be obtained from all study participants. If any participant chooses to withdraw consent to participate in the study, no new data will be added and he/she may request the destruction of data already collected.

This project has a favourable report from the Research Ethics Committee (Protocol Code ASSO 130).

CONFIDENTIALITY

You are assured that personal data will only be collected if they are essential for the purposes of this study.

The data collected will be identified by a code and only the person responsible for the study will be able to relate this data to you.

The processing, communication and transfer of the personal data of all participants shall comply with the provisions of Organic Law 15/1999, of 13 December, on the protection of personal data. In accordance with the provisions of Organic Law 15/1999 of 13 December on the protection of personal data, you may at any time exercise your rights of access, rectification, cancellation and opposition of the personal data being handled in the study by contacting the Principal Investigator.

OTHER RELEVANT INFORMATION

Your participation in this research will be free of charge.

Based on the published literature, no adverse events related to the intervention are expected.

The results of this study will be published in open access scientific journals.

If you require further information, please contact Manuel Rich by phone: 649 661830 or by email: mrich@uco.es.

DECLARATION OF INFORMED CONSENT

CLINICAL TRIAL TITLE: Effectiveness of a multi-component non-pharmacological intervention to reduce social isolation and loneliness in elderly people living at home.

I (Name and Surname):.....

- I have read the information document accompanying this consent (Patient Information).
- I was able to ask questions about the study *Effectiveness of a multi-component non-pharmacological intervention to reduce social isolation and loneliness in elderly people living at home.*
- I have received sufficient information about the study *Effectiveness of a multi-component non-pharmacological intervention to reduce social isolation and loneliness in elderly people living at home.*
- I have spoken to the reporting health professional: .....
- I understand that my participation is voluntary and I am free to participate or not in the study.
- I have been informed that all data obtained in this study will be kept confidential and will be treated in accordance with the Organic Law on the Protection of Personal Data 15/99.
- I have been informed that the information obtained will only be used for the specific purposes of the study.

I understand that I can withdraw from the study:

- Whenever you want
- Without having to explain
- Without impacting on my medical care

I freely agree to participate in the *project entitled Effectiveness of a multi-component non-pharmacological intervention to reduce social isolation and loneliness in elderly people living at home.*

Signature of the patient	Signature of the informing health professional
First and last name: ..... Date:	First and last name: ..... Date: .....

Anexo 3. Asociación bivariante entre variables sociodemográficas y aislamiento social en el momento basal (T1) para total de la muestra.

		Índice de apoyo social de Duke (DSSI) (T1)		
		Apoyo Total	**Apoyo Afectivo**	**Apoyo Confidencial**
Edad	Correlación de Pearson	-0,05	-0,005	0,124
	Sig. (bilateral)	0,598	0,956	0,192
	N	113	113	113
Sexo	Correlación de Pearson	0,086	0,04	0,02
	Sig. (bilateral)	0,364	0,673	0,836
	N	113	113	113
Estado Civil	Correlación de Pearson	0,056	-0,086	0,1
	Sig. (bilateral)	0,558	0,365	0,291
	N	113	113	113
Con quien Convive	Correlación de Pearson	0,073	-0,156	0,105
	Sig. (bilateral)	0,443	0,099	0,27
	N	113	113	113
Nivel de escolarización	Correlación de Pearson	0,026	0,107	-,231*
	Sig. (bilateral)	0,786	0,26	**0,014**
	N	113	113	113
Ocupación Laboral	Correlación de Pearson	0,094	-0,017	-0,013
	Sig. (bilateral)	0,32	0,856	0,888
	N	113	113	113
Situación Económica (dificultades)	Correlación de Pearson	-0,156	-0,067	0,042
	Sig. (bilateral)	0,1	0,481	0,661
	N	113	113	113
Recibe Ayuda Económica	Correlación de Pearson	-0,086	0,069	-0,046
	Sig. (bilateral)	0,367	0,466	0,625
	N	113	113	113

Fuente: Elaboración propia.

Anexo 4. Asociación bivariante entre variables sociodemográficas y aislamiento social en el momento de finalización de la intervención (T2) para total de la muestra.

		Índice de apoyo social de Duke (DSSI) (T2)		
		Apoyo total	**Apoyo Afectivo**	**Apoyo Confidencial**
Edad	Correlación de Pearson	-0,075	-0,071	-,220*
	Sig. (bilateral)	0,481	0,504	**0,036**
	N	90	91	91
Sexo	Correlación de Pearson	0,123	-0,021	0,062
	Sig. (bilateral)	0,249	0,841	0,559
	N	90	91	91
Estado Civil	Correlación de Pearson	-0,012	-0,01	-0,037
	Sig. (bilateral)	0,912	0,924	0,727
	N	90	91	91
Con quien Convive	Correlación de Pearson	0,074	-0,109	0,116
	Sig. (bilateral)	0,487	0,304	0,272
	N	90	91	91
Nivel de escolarización	Correlación de Pearson	0,079	0,117	0,119
	Sig. (bilateral)	0,462	0,268	0,259
	N	90	91	91
Ocupación Laboral	Correlación de Pearson	0,036	-0,04	-0,049
	Sig. (bilateral)	0,734	0,703	0,644
	N	90	91	91
Situación Económica (dificultades)	Correlación de Pearson	-0,139	-0,139	-0,061
	Sig. (bilateral)	0,191	0,189	0,568
	N	90	91	91
Recibe Ayuda Económica	Correlación de Pearson	-0,022	0,01	-0,081
	Sig. (bilateral)	0,836	0,923	0,447
	N	90	91	91

Fuente: Elaboración propia.

Anexo 5. Asociación bivariante entre variables sociodemográficas y aislamiento social a dos meses de la finalización de la intervención (T3) para grupo experimental.

		Índice de apoyo social de Duke (DSSI) (T3)			
		TOTAL NUM MEDIA	**Apoyo Total**	**Apoyo Afectivo**	**Apoyo Confidencial**
Edad	Correlación de Pearson	-0,251	-,332*	-,340*	-,387*
	Sig. (bilateral)	0,118	**0,036**	**0,032**	**0,014**
	N	40	40	40	40
Sexo	Correlación de Pearson	0,138	-0,07	0,028	-0,07
	Sig. (bilateral)	0,396	0,666	0,864	0,666
	N	40	40	40	40
Estado Civil	Correlación de Pearson	0,028	-0,126	0,118	-0,126
	Sig. (bilateral)	0,865	0,439	0,469	0,439
	N	40	40	40	40
Con quien Convive	Correlación de Pearson	0,151	0,073	0,133	0,232
	Sig. (bilateral)	0,352	0,653	0,415	0,15
	N	40	40	40	40
Nivel de escolarización	Correlación de Pearson	0,167	,382*	0,228	,382*
	Sig. (bilateral)	0,302	**0,015**	0,157	**0,015**
	N	40	40	40	40
Ocupación Laboral	Correlación de Pearson	0,103	0,17	0,082	0,039
	Sig. (bilateral)	0,527	0,295	0,616	0,81
	N	40	40	40	40
Situación Económica (dificultades)	Correlación de Pearson	-0,131	-0,141	-0,102	0,043
	Sig. (bilateral)	0,42	0,387	0,531	0,793
	N	40	40	40	40
Recibe Ayuda Económica	Correlación de Pearson	-0,126	-0,107	-0,157	-,358*
	Sig. (bilateral)	0,437	0,512	0,333	**0,023**
	N	40	40	40	40

Fuente: Elaboración propia.

Anexo 6. Asociación bivariante entre variables sociodemográficas y soledad en el momento basal (T1) para total de la muestra.

		Escala de Soledad de Jong Gierveld (T1)		
		Soledad Total	**Soledad Emocional**	**Soledad Real**
Edad	Correlación de Pearson	-0,035	-0,002	-0,074
	Sig. (bilateral)	0,714	0,986	0,442
	N	110	110	110
Sexo	Correlación de Pearson	0,091	0,062	0,099
	Sig. (bilateral)	0,345	0,519	0,305
	N	110	110	110
Estado Civil	Correlación de Pearson	,199*	0,182	0,174
	Sig. (bilateral)	**0,037**	0,057	0,069
	N	110	110	110
Con quien Convive	Correlación de Pearson	0,157	0,064	,200*
	Sig. (bilateral)	0,102	0,504	0,036
	N	110	110	110
Nivel de escolarizaciÃ³n	Correlación de Pearson	-0,038	0,089	-0,14
	Sig. (bilateral)	0,694	0,353	0,143
	N	110	110	110
Ocupación Laboral	Correlación de Pearson	-0,039	-0,008	-0,058
	Sig. (bilateral)	0,686	0,933	0,547
	N	110	110	110
Situación Económica (dificultades)	Correlación de Pearson	,205*	0,111	,191*
	Sig. (bilateral)	**0,031**	0,246	**0,046**
	N	110	110	110
Recibe Ayuda Económica	Correlación de Pearson	0,025	0,018	-0,006
	Sig. (bilateral)	0,792	0,851	0,95
	N	110	110	110

Fuente: Elaboración propia.

Anexo 7. Asociación bivariante entre variables sociodemográficas y soledad en el momento de finalización de la intervención (T2) para total de la muestra.

		Escala de Soledad de Jong Gierveld (T2)		
		Soledad: Total	**Soledad Emocional**	**Soledad Real**
Grupo de participación: control o Experimental	Correlación de Pearson	0,057	0,006	0,144
	Sig. (bilateral)	0,588	0,952	0,173
	N	91	91	91
Edad	Correlación de Pearson	0,056	0,074	0,04
	Sig. (bilateral)	0,599	0,484	0,708
	N	91	91	91
Sexo	Correlación de Pearson	0,015	0,072	-0,008
	Sig. (bilateral)	0,886	0,5	0,941
	N	91	91	91
Estado Civil	Correlación de Pearson	0,045	-0,019	0,12
	Sig. (bilateral)	0,675	0,861	0,255
	N	91	91	91
Con quien Convive	Correlación de Pearson	-0,026	-0,076	0,053
	Sig. (bilateral)	0,809	0,476	0,615
	N	91	91	91
Nivel de escolarización	Correlación de Pearson	-0,131	0,106	-,226*
	Sig. (bilateral)	0,214	0,316	**0,031**
	N	91	91	91
Ocupación Laboral	Correlación de Pearson	-0,086	-0,094	-0,054
	Sig. (bilateral)	0,418	0,377	0,608
	N	91	91	91
Situación Económica (dificultades)	Correlación de Pearson	-0,018	-0,067	-0,009
	Sig. (bilateral)	0,868	0,526	0,934
	N	91	91	91
Recibe Ayuda Económica	Correlación de Pearson	-0,054	-0,081	0,026
	Sig. (bilateral)	0,609	0,443	0,807
	N	91	91	91

Fuente: Elaboración propia.

Anexo 8. Asociación bivariante entre variables sociodemográficas y soledad a dos meses de la finalización de la intervención (T3) para grupo experimental.

		Escala de Soledad de Jong Gierveld (T3)		
		Soledad total	**Soledad Emocional**	**Soledad real**
Edad	Correlación de Pearson	0,183	0,214	0,076
	Sig. (bilateral)	0,258	0,185	0,643
	N	40	40	40
Sexo	Correlación de Pearson	-0,11	-0,184	0,042
	Sig. (bilateral)	0,5	0,257	0,798
	N	40	40	40
Estado Civil	Correlación de Pearson	0,064	0,049	0,067
	Sig. (bilateral)	0,695	0,766	0,681
	N	40	40	40
Con quien Convive	Correlación de Pearson	-0,007	0,028	-0,061
	Sig. (bilateral)	0,964	0,863	0,71
	N	40	40	40
Nivel de escolarizaciÃ³n	Correlación de Pearson	-0,097	-0,032	-0,168
	Sig. (bilateral)	0,55	0,845	0,3
	N	40	40	40
Ocupación Laboral	Correlación de Pearson	-,458**	-,533**	-0,193
	Sig. (bilateral)	**0,003**	**0**	0,234
	N	40	40	40
Situación Económica (dificultades)	Correlación de Pearson	0,029	0,013	0,044
	Sig. (bilateral)	0,86	0,935	0,788
	N	40	40	40
Recibe Ayuda Económica	Correlación de Pearson	0,044	-0,029	0,145
	Sig. (bilateral)	0,785	0,86	0,373
	N	40	40	40

Fuente: Elaboración propia.

Anexo 9. Asociación bivariante entre variables sociodemográficas y calidad de vida en el momento basal (T1) para total de la muestra.

		EUROQUOL (T1)	
		Indice Sintético	**Escala Visual analógica**
Grupo de participación: control o Experimental	Correlación de Pearson	0,044	0,105
	Sig. (bilateral)	0,647	0,275
	N	111	110
Edad	Correlación de Pearson	-0,166	0,006
	Sig. (bilateral)	0,082	0,95
	N	111	110
Sexo	Correlación de Pearson	-0,093	0,046
	Sig. (bilateral)	0,33	0,631
	N	111	110
Estado Civil	Correlación de Pearson	-0,106	0,089
	Sig. (bilateral)	0,266	0,353
	N	111	110
Con quien Convive	Correlación de Pearson	-0,089	,229*
	Sig. (bilateral)	0,353	**0,016**
	N	111	110
Nivel de escolarizaciÃ³n	Correlación de Pearson	0,049	0,042
	Sig. (bilateral)	0,612	0,662
	N	111	110
Ocupación Laboral	Correlación de Pearson	0,147	0,074
	Sig. (bilateral)	0,125	0,44
	N	111	110
Situación Económica (dificultades)	Correlación de Pearson	0,001	-0,071
	Sig. (bilateral)	0,992	0,461
	N	111	110
Recibe Ayuda Económica	Correlación de Pearson	-0,031	0,049
	Sig. (bilateral)	0,746	0,615
	N	111	110

Fuente: Elaboración propia.

Anexo 10. Asociación bivariante entre variables sociodemográficas y calidad de vida en el momento de finalización de la intervención (T2) para el total de la muestra.

		EUROQUOL (T2)	
		Indice Sintético	**Escala Visual analógica**
Grupo de participación: control o Experimental	Correlación de Pearson	0,053	0,188
	Sig. (bilateral)	0,616	0,074
	N	91	91
Edad	Correlación de Pearson	-0,096	-0,051
	Sig. (bilateral)	0,365	0,633
	N	91	91
Sexo	Correlación de Pearson	-0,159	-0,045
	Sig. (bilateral)	0,133	0,673
	N	91	91
Estado Civil	Correlación de Pearson	0,051	0,008
	Sig. (bilateral)	0,631	0,942
	N	91	91
Con quien Convive	Correlación de Pearson	0,074	0,202
	Sig. (bilateral)	0,487	0,055
	N	91	91
Nivel de escolarización	Correlación de Pearson	0,014	0,04
	Sig. (bilateral)	0,897	0,707
	N	91	91
Ocupación Laboral	Correlación de Pearson	0,167	0,126
	Sig. (bilateral)	0,113	0,235
	N	91	91
Situación Económica (dificultades)	Correlación de Pearson	-0,103	-0,033
	Sig. (bilateral)	0,331	0,756
	N	91	91
Recibe Ayuda Económica	Correlación de Pearson	0,119	0,037
	Sig. (bilateral)	0,263	0,729
	N	91	91

Fuente: Elaboración propia.

Anexo 11. Asociación bivariante entre variables sociodemográficas y calidad de vida a dos meses de la finalización de la intervención (T3) para el grupo experimental.

		EUROQUOL (T3)	
		Índice Sintético	**Escala Visual analógica**
Edad	Correlación de Pearson	-0,05	-0,145
	Sig. (bilateral)	0,76	0,372
	N	40	40
Sexo	Correlación de Pearson	0,045	-0,007
	Sig. (bilateral)	0,784	0,966
	N	40	40
Estado Civil	Correlación de Pearson	-0,124	0,064
	Sig. (bilateral)	0,445	0,696
	N	40	40
Con quien Convive	Correlación de Pearson	-0,023	0,247
	Sig. (bilateral)	0,887	0,125
	N	40	40
Nivel de escolarización	Correlación de Pearson	0,083	0,168
	Sig. (bilateral)	0,61	0,3
	N	40	40
Ocupación Laboral	Correlación de Pearson	0,011	0,198
	Sig. (bilateral)	0,948	0,221
	N	40	40
Situación Económica (dificultades)	Correlación de Pearson	0,043	-0,067
	Sig. (bilateral)	0,794	0,683
	N	40	40
Recibe Ayuda Económica	Correlación de Pearson	-0,071	0,061
	Sig. (bilateral)	0,662	0,706
	N	40	40

Fuente: Elaboración propia.