

ADDRESSING SOCIAL ISOLATION AND LONELINESS IN OLDER ADULTS:
A PERSON-CENTERED APPROACH

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Research Proposal

The purpose of this project is to raise awareness on the subject of social disconnection, specifically in older adults, in hopes of creating better health and quality of life outcomes for that population. My goals in achieving this are to provide health care professionals and family members with the proper education and resources to know how to better support their patients and older adult loved ones. In doing this project, I will analyze previous research on the topic to better understand the subject and provide my own solutions to the issue. I will also create an infographic containing the findings of my project that could then be distributed to health care settings as well as older adults and their families.

The bulk of this project will be a research paper that is based on library references and sources. For my research, I'll start broadly by finding peer-reviewed scholarly articles that are related to the general topic of social disconnection in older adults. As I'm briefly reading through those texts, I'll make note of which aspects of those articles are of interest to me or which sections would be major themes on which I'll base my project outline. Then, I'll know more about what concepts, terms, and theories on which to do more research. After gathering those readings, I'll be able to produce a thorough literature review on each of them, compile my takeaways, and create the body of my project.

This project is incredibly significant, now more than ever. Older adults have been experiencing social isolation and loneliness for years and in a really unique way. Social disconnection is not necessarily something many of us have experienced prior to 2020, and it's a common belief that people care more about something when they understand the situation or if it has directly impacted them in some way. The COVID-19 global pandemic has led to social disconnection affecting everyone in some way, shape, or form. There has been a fair amount of

research done on social disconnection, but it's not until now that everyone can recognize the importance of the subject. Not many people may know of the research that has already been done, but more people can understand the underlying concepts of it and should be able to relate to the topic and care more about it. This project can provide more areas of interest for people to conduct research on so that there is more literature and information on the subject overall.

I am in the Social Services concentration through the Sociology major, and in my concentration, we learn how to best provide services and aid to the disadvantaged and the vulnerable. Those in the social services field take the information and resources that already exist, and sometimes they even create them, and find ways to connect these populations with such valuable resources. This project aims to help the older adult population, a population that is both disadvantaged and vulnerable, by providing them and the people who care for them with the information and resources necessary to improve their lives.

Various areas of social work include counseling, psychoeducation, advocacy, program planning and management, case management, policy work, etc. My hope is to be a geriatric social worker- I think that geriatrics is a field that not many aspire to be in, so the older adult population are often disregarded by society and the resources that they need are not provided nor accessible. I first thought of the idea for this project during an internship I had with the Santa Maria Wisdom Center this past Spring quarter. I provided telephone outreach to older adults during the COVID-19 pandemic and found that a common stressor was an increased sense of loneliness. The despair that these older adults were experiencing motivated me to do something that could help this population. I believe that my senior project will help me to see if this path of social work- of reviewing, consolidating, and creating resources- is an area in which I could excel, while also finding enjoyment and a sense of purpose.

Annotated Bibliography

Bonnefoy, J., Morgan, A., Kelly, M. P., Butt, J., & Bergman, V. (2007, November). *Constructing the evidence base on the social determinants of health: A guide*. https://www.who.int/social_determinants/knowledge_networks/add_documents/mekn_fin_al_guide_112007.pdf?ua=1

This article provides a thorough collection and review of information on the social determinants of health in hopes of creating a common understanding of the subject so that the difficulty in taking action policy-wise may be overcome. The sections of this guide that I'm utilizing focuses on four groups of theories that aim to explain inequalities in health: the materialist/structuralist theory, the psycho-social model, the social production of health model, and the eco-social theory. The authors of this guide reviewed already existing theories to analyze both the biological and social aspects that work to explain the social determinants of health and its effects on individuals' likelihood of developing illnesses. It's necessary for researchers and health care practitioners to take an intersectionality-based approach because of the different ways in which people from different populations in different societies will experience social determinants of health and react to potential solutions, all due to their unique and intersecting identities. The findings from this guide are going to be incredibly useful for my project because it highlights the reasons why policy making has not been successful in addressing this issue, and it outlines suggestions for overcoming this boundary. This article critiqued how in medicine, doctors try to work with the uncertainties of treatments for illnesses rather than finding solutions for them, but it doesn't provide any substantial suggestions for how to resolve said uncertainties. (229 words)

Comstock, D. L., Hammer, T. R., Strentzsch, J., Cannon, K., Parsons, J., & Salazar II, G. (2008). Relational-Cultural Theory: A framework for bridging relational, multicultural, and social justice competencies. *Journal of Counseling & Development*, 86, 279-287. <https://doi.org/10.1002/j.1556-6678.2008.tb00510.x>

The purpose of this article was to analyze the different traditional methods of counseling and to provide suggestions to enhance the models so that counselors may be more effective in working with all clients. This article described what's entailed in the Relational-Cultural Theory (RCT), which aims to expand traditional models of counseling so that counselors may be more culturally competent and empathetic to the unique experiences of their clients. A core aspect of this theory includes fostering meaningful relationships in which individuals gain confidence in their ability to contribute to various social networks. The authors drew from multiple theorists including Jean Baker Miller, the theorist who conceived the Relational-Cultural Theory, and Carl Rogers, who wrote on the concept of mutual empathy in counselors. Fostering healthy relationships with one's clients allows for collaboration between counselor and client in finding intervention practices that would be most effective in producing positive connections. The RCT brings attention to how traditional counseling practices don't recognize the various ways in which individuals from marginalized groups are deeply affected by societal and structural forms of oppression. This is an important concept for my project because it helps explain why certain interventions addressing social isolation

in older adults are not uniformly successful. This article could've been stronger if it provided mental health professionals with more information on how to interact with and help clients who've been oppressed by the dominant groups in their lives so that they may trust and successfully contribute to their social networks. (248 words)

Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among older adults. *Journal of Health and Social Behavior*, 50, 31-48.
<https://dx.doi.org/10.1177%2F002214650905000103>

The purpose of this study was to examine social disconnectedness and perceived isolation in tandem to better identify which aspect(s) of social isolation correspond with negative health effects. It was clear that the authors viewed social isolation as a health risk and their theoretical focus was centered around that. The authors utilized the data of 3,005 individuals from the National Social Life, Health, and Aging Project to analyze the multiple forms of social isolation in order to combine them into scales that would assess perceived isolation and social disconnectedness. They then drew conclusions on how the results from those scales are associated with levels of health among older adults. From this study, the authors found that independently, perceived isolation and social disconnectedness correlate to lower levels of physical health and that there's a strong relationship in how social disconnectedness and perceived isolation interact with mental health. This article made the distinction between social disconnectedness and perceived isolation which is going to be useful for my project because there are multiple facets to social isolation, and in order to get a complete picture of the issue as it relates to older adults, we need to study social isolation in its different forms as well as how they interact together. This article relied on self-reported levels of physical and mental health which made it difficult to objectively observe levels of social disconnectedness and perceived social isolation. (234 words)

Freedman, A., & Nicolle, J. (2020). Social isolation and loneliness: The new geriatric giants. *Canadian Family Physician*, 66(3), 176-182.
<https://www.cfp.ca/content/cfp/66/3/176.full.pdf>

The purpose of this article was to examine how social isolation and loneliness create problems for older adults so that the authors could assist primary care providers in intervening and selecting which programs would be most effective. Although there was no clear theoretical perspective addressed in this study, the authors took an intersectionality-based approach in analyzing the search results they had. For example, they made sure to address factors such as poverty, language and cultural barriers, and immigration status in their analyses. The authors searched PubMed and PsycINFO from 2008 to 2019 for articles and policy documents that included terms such as social isolation, loneliness, screening, aged, and interventions. The results of this research found that while there are several interventions that exist to target loneliness and social isolation, more research needs to be done to determine which interventions would be effective and for which populations. This is significant to my project because it highlights the need for primary care practitioners to better understand the effects of social isolation and loneliness on older adults, and it shows the importance of taking patient-centered approaches in selecting interventions since the unique identities of each individual will

determine which interventions would be effective. While utilizing articles and studies from three Canada, the US, and the UK allowed the authors to get a broader understanding of social isolation and loneliness in older adults, I think that refining the search to look at these nations' data individually would have made this study stronger. (248 words)

Gardiner, C., Geldenhuys, G., & Gott, M. (2016). Interventions to reduce social isolation and loneliness among older people: An integrative review. *Health and Social Care in the Community*, 26(2), 147-157. <https://doi.org/10.1111/hsc.12367>

The purpose of this study was to analyze interventions targeting social isolation and loneliness in older adults to understand why some interventions are successful and then which aspects determine their effectiveness. The authors referenced existential, cognitive, psychodynamic, and interactionist perspectives to illustrate the different ways in which this subject has been approached. The authors of this article utilized six electronic databases to search for literature from 2003-2016 regarding intervention practices; and of the 2420 studies identified, the authors found that only 39 studies fit their criteria in terms of quality, relevance, and appropriateness to the topic. The studies were then analyzed based on their purpose and intended outcomes. This article found that many individual studies reported interventions held in group settings to be most effective; however, there's a lot of variance between studies in terms of how they defined effectiveness, which scales they used to measure effectiveness, and whether or not they were able to isolate their independent variables. This is significant to my project because it shows the importance of taking a step back to look at studies all together in order to analyze whether the results came from similar or different variables. Looking at studies individually can lead to researchers missing out on major findings produced from looking at the whole picture. Of the 39 studies used in this article, there were inconsistencies in the ways in which each study defined and measured their variables which means that the findings of this study should be regarded with caution. (250 words)

National Institute on Aging. (2019, April 23). *Social isolation, loneliness in older people pose health risks*. States News Service. <https://www.nia.nih.gov/news/social-isolation-loneliness-older-people-pose-health-risks>

The research question in this article was looking at whether social isolation and loneliness are independent from each other, affecting health differently, or if loneliness creates a path for social isolation to pose health risks. This article focused on the Evolutionary Theory of Loneliness which predicts that loneliness naturally triggers biological and behavioral responses that contribute to the relationship between loneliness and premature death. This article drew heavily from the works of Dr. John T. Cacioppo, former director of the Center for Cognitive and Social Neuroscience at the University of Chicago, and Dr. Elena Portacolone, assistant professor of sociology at the University of California. While Dr. Cacioppo's studies were focused on the negative effects of loneliness, Dr. Portacolone's studies aimed to understand individuals' unique experiences so that culturally sensitive interventions could be designed. The conclusion of this research is that it's necessary to distinguish between social isolation and loneliness because there will likely be different approaches to intervening for both, and they cannot

be synonymous in reference or else the interventions could be ineffective. This research is significant to my project because health outcomes are typically viewed as a direct result of individual actions, but this study brings attention to how structural and societal factors impact the individual's health. Something that would've made this article stronger is if more doctors' and theorists' works were referenced. Since this article focused so heavily on Dr. Cacioppo and Dr. Portacolone's findings, the article was not as holistic as it could be. (248 words)

Naz Gul, S., Chishti, R., & Bano, M. (2018). Gender differences in social support, loneliness, and isolation among old age citizens. *Peshawar Journal of Psychology and Behavioral Sciences*, 4(1), 15-31. <https://doi.org/10.32879/picp.2018.4.1.15>

This article focuses on the gender aspect of older adults' identities and its impact on their levels of social support, loneliness, and social isolation. This study draws from Erikson's "Eight stages of Life" theory which observes a conflict of integrity vs despair in the stage of old age. The authors used this theory to observe the ways in which older adults analyze the lives they've lived and how their early life experiences can create different consequences for men and women in terms of their wellbeing. Research conducted in the Khyber Pakhtunkhwa province of Pakistan, the study involved data from 500 older adults from both urban and rural areas using 3 scales: the 1985 De Jong Gierveld Loneliness Scale, the Social Support Scale, and the 2006 Friendship Scale. The authors of this study found that while there were significant gender differences in levels of social support, there were no significant gender differences in levels of loneliness and isolation. While this research took place in Pakistan, it's still useful information for my project because the intersection of gender in this issue is an important area to study regardless of geographical differences. This study would've been stronger had the authors had a section that looked at how cultural differences interact with gender differences to create the unique results of this study. Due to culture, there are different gender norms and roles in Pakistan than in the US and results should be interpreted with such consideration. (242 words)

Naz Gul, S., Chishti, R., & Bano, M. (2018). Impact of educational qualification on social support, social isolation, and social and emotional loneliness: A study of elderly people. *Peshawar Journal of Psychology and Behavioral Sciences*, 4(2), 153-170. <https://doi.org/10.32879/picp.2018.4.2.153>

The purpose of this study is to examine the impact that educational attainment has on the levels of social support, loneliness, and social isolation experienced by older adults. The authors of this study focus on the Life Course Perspective by looking at how different changes during old age can put individuals at higher risk of loneliness and social isolation which in turn creates negative effects on their wellbeing. The study used data of 500 older adults from the urban and rural areas of Peshawar, Pakistan, and participants were categorized with regards to age, education level, and socio-economic status. The Social Support Scale, the 1985 De Jong Gierveld Loneliness Scale, and the Friendship Scale were all used to measure the subject variables. This study found that older adults with higher education levels have an easier time forming social connections and maintaining them, which makes coping with loneliness a much easier feat. This study is significant to

my project because it highlights the fact that separate aspects of one's identity impact how they experience the various stages of life. Social isolation and loneliness can be experienced by people in all walks of life, but it's a complex issue for older adults. The participants in this study all came from one province in Pakistan. In order for this study to be stronger, it could've expanded to survey people outside of that region so that geographical differences could be factored in as a possible reason for differences in social disconnectedness and isolation. (248 words)

Shaw, J. G., Farid, M., Noel-Miller, C., Joseph, N., Houser, A., Asch, S. M., Bhattacharya, J., & Flowers, L. (2017). Social isolation and Medicare spending: Among older adults, objective isolation increases expenditures while loneliness does not. *Journal of Aging and Health*, 29(7), 1119-1143. <https://doi.org/10.1177/0898264317703559>

Stemming from the well-established links between loneliness, isolation, and poor health outcomes, the purpose of this study was to examine the ways in which loneliness and objective isolation impact Medicare spending among older adults. While there was no clear ideological perspective identified in this study, the authors drew from the Andersen Behavioral Model which theorizes that there are three factors that influence an individual's use of health care: the need for care, predisposing factors, and enabling factors. The authors of this study analyzed data of 25,904 older adults from the nationally representative 2006, 2008, and 2010 reports of the University of Michigan Health and Retirement Study. These participants were then assessed based on their health and functional statuses. While loneliness predicted lower spending among older adults, objective isolation predicted greater spending, for hospitalization and institutionalization, along with a higher risk of death. The findings of this study are significant to my project because it highlights the importance of accounting for social isolation, and what resources can best prevent it, when creating policy solutions for health care initiatives. Only 5,938 of 25,904 participants' data was included in the analytic sample because spending data was unavailable for those enrolled in the newer Medicare Advantage program. Had the study not been limited to the participants only enrolled in Medicare's original Parts A or B, this study would've been stronger as they could've included more data making the sample more equally representative. (238 words)

Tomaka, J., Thompson, S., & Palacios, R. (2006). The relation of social isolation, loneliness, and social support to disease outcomes among the elderly. *Journal of Aging and Health*, 18(3), 359-384. <https://doi.org/10.1177/0898264305280993>

The purpose of this study was to observe how social isolation, loneliness, and social support relate to health outcomes in older adults. There was no clear theoretical perspective identified in this study, but there's a clear assumption that the authors figured the presence of social support would be a leading contributor to positive health outcomes through tangible, emotional, and biological manners. 755 Southern New Mexico older adult residents were selected at random to participate in this study. The researchers looked at demographics, objective and subjective social isolation, loneliness using the UCLA Loneliness Scale, family and belongingness social support using various scales, and disease diagnosis. The results of this study found that there was a positive association found in the relationship between belongingness support and health; moreover, loneliness

has a significant effect on health outcomes in the aging population, especially in aging Hispanics. The findings of this article are significant to my project because it looks at the various ways in which social aspects of one's life can create biological effects on the body. This study only included Hispanic and Caucasian participants, so diversifying the subject pool and including individuals from all races/ethnicities would've made this study much stronger. There could be cultural and structural differences that aren't accounted for by excluding so many populations. (214 words)

SOCIAL DISCONNECTEDNESS IN OLDER ADULTS

- I. INTRODUCTION
 - A. COVID-19 case example
 - B. Background information
 - C. Importance of the subject
- II. SOCIAL ISOLATION VS. LONELINESS
 - A. Definition of social isolation
 - B. Definition of loneliness
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- III. SOCIAL ISOLATION & LONELINESS IN OLDER ADULTS
 - A. Explanation of unique relationship between isolation/loneliness and older adults
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- V. SOCIAL DETERMINANTS OF HEALTH
 - A. Definition of social determinants of health
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- VI. INTERVENTIONS
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 - A. Summary of major takeaways and suggestions
 - B. Infographic of main takeaways/suggestions for health care workers and family members

Addressing Social Isolation and Loneliness in Older Adults: A Person-Centered Approach

Previously experienced by few, social isolation and loneliness have become common struggles for many this year as the Coronavirus has forced people inside and apart from each other. With lockdowns enforced, people around the world are facing new living conditions. People in quarantine can't leave when they want to anymore which limits their mobility and freedom to travel as they please. People can't do the leisurely things they're used to doing such as playing sports with others, going to the theater, or congregating at the beach. People are finding that they have fewer people to talk to and it's not as easy to meet up with others. These major lifestyle changes that people have been facing this year, related to social distancing, have given them insight into the experiences some older adults normally face with social isolation and loneliness as a part of aging; and hopefully, these experiences provide them with a sense of empathy and compassion towards older adults struggling with this important issue.

Throughout my research, I noticed an author who was frequently referenced in writings about social isolation and loneliness: John T. Cacioppo. In his pioneering article on this topic, "Lonely Hearts: Psychological Perspectives on Loneliness," Cacioppo first looked at the detrimental effects of loneliness on individuals (Ernst & Cacioppo, 1999). He then developed his findings between social isolation and loneliness by investigating the impact the two conditions have on one's physical and mental wellbeing (Cacioppo & Hawkley, 2003). In subsequent research, Cacioppo goes further to explore the relationship between social isolation, loneliness, and older adulthood (Hawkley et al., 2006; McDade et al., 2006; Wen, et al., 2006; Adam, et al., 2006).

According to the US Census Bureau, by the year 2034, older adults are projected to outnumber children for the first time in US history (Vespa, 2018). Additionally, 21% of the

American population will be 65 years and older by 2030 and then rise to nearly 25% in 2060 in which the number of individuals who are 85 years and older will triple (Vespa, 2018). These are alarming rates of aging demographics within the United States and a clear reason for why social isolation and loneliness in older adults is an issue that needs to be taken off the backburner now so that it can be addressed and solved sooner rather than later.

Issues that plague older adults are commonly regarded as issues to be dealt with later down the line because they're not problems that middle and younger adults experience themselves. While it may be true that the issues older adults face impact them most directly, they also have a grave impact on their family members, caregivers, and health care professionals. With the Baby Boomers currently reaching this age, we are already seeing a much greater demand of resources needed to provide for this rapidly growing population. If we are not prepared for this shift in demographics that's already taking place, then health care professionals will be understaffed and overworked more than they already are as they try to meet the needs of their expanding pool of patients. Additionally, the family members of older adults will be burdened by the need to provide the care that's not available through the government and health care institutions.

One benefit to researching this topic is that there is a large body of literature to explore. As a prominent research topic in the field of aging, many researchers have investigated various aspects of social isolation and loneliness. Throughout this paper, I will review and utilize literature from sociologists, educators, and health care professionals on this topic which allows for me to get a holistic view on the subject matter before presenting my own findings. One gap found in the existing literature on social isolation, loneliness, and aging, is that many studies don't look at the interaction of all three variables together. Another gap in this research, is the

lack of literature on why social isolation and loneliness should be considered as social determinants of health, especially in relation to older adults. This is particularly relevant for geriatric and medical social workers, as well as physicians, as such factors play an integral role in the health and wellbeing of older adults.

This lack of literature has guided my research focus and confirms that this is an important topic to investigate. There's a lot of background information on these topics, but there's not a lot of literature that ties these separate issues together—which is why my project will look into this to show that there is a need for research on the intersection of these relationships. By conducting this research, I hope to more accurately address the situation so that I may provide educational literature and effective solutions to both the families of older adults and the health care professionals who are trusted with their care.

Literature Review

Social Isolation vs. Loneliness

Before examining the effect that social isolation and loneliness have on older adults, one must first reach a solid understanding of what social isolation and loneliness are; namely, how to compare and contrast social isolation and loneliness in terms of their risk factors, outcomes, and methods of measurement.

Social Isolation

Research has begged for the differentiation between social isolation and loneliness, but how are we to do that when there is no singular definition of either social isolation or loneliness? Multiple definitions of social isolation and loneliness exist in the literature, and that has proven to be a major issue in how we go about discussing and addressing it. In comparing definitions, social isolation has most often been defined as the quantifiable form of social disconnectedness

(Shaw et al., 2017), and the quantitative network size and frequency of contact (Khosravi et al., 2016). Most similarly among definitions, however, was the social integration and the objective lack of social contact with others (Coyle & Dugan, 2012; Blazer, 2020; Beller & Wagner, 2018; Cornwell & Waite, 2009; Gardiner et al., 2016). A lack of social relationships and low levels of social interactions are also sometimes referred to as characteristics of social disconnectedness (Cornwell & Waite, 2009; Poscia et al., 2018).

Social Control Theory helps to explain the importance of social contacts. Essentially, it says that the internalized obligations that arise from one's social relationships have influence over the individual and promote good health behaviors while discouraging poor health behaviors (Cacioppo et al., 2011) Essentially, having social contacts is beneficial to one's health and this could be for a variety of reasons. Social relationships and contact with others can play several roles: they buffer the outcomes of stress; they call attention to the need for health services; and their perspectives create the attitude or stigma around seeking services (Shaw et al., 2017; Coyle & Dugan, 2012; Cornwell & Waite, 2009).

Loneliness

While social isolation has been described as an objective form of isolation, loneliness has been described as a subjective form of isolation. Perception is key in feelings of loneliness as it's most frequently been defined as the perceived discrepancy between one's desired and actual quantity and quality of social relationships (Mund & Neyer, 2019; Morgan & Burholt, 2020; Cornwell & Waite, 2009; Poscia et al., 2018; Gardiner et al., 2016). Khosravi and colleagues take it further by drawing on the individual's sense of satisfaction with their social contacts (2016). Social isolation can affect loneliness, and loneliness is more often associated with the quality rather than the quantity of social interactions (Cacioppo et al., 2011). Despite loneliness

having become a public health problem, many physicians don't have the education and information needed to effectively deal with loneliness in their patients. Lack of agreement on the definition is part of the issue in physicians not having the ability to address this situation.

The main triggers for loneliness are broken down into two categories: single life events and series of events (Morgan & Burholt, 2020). Examples of single life events include loss, marital breakdowns, relocation, and onset of disability. Examples of series of events include retirement due to poor health and loss of a driving license (Morgan & Burholt, 2020). Feelings of loneliness trigger social pain within us, "an aversive signal that evolved to motivate one to take action that minimizes threats or damage to one's social body" (Cacioppo et al., 2011, p.19). Our body reacts to feeling isolated in a very physical manner. We tend to think of loneliness purely in the psychological realm, but it's clear that it's well connected to our bodily functioning as well. In fact, loneliness creates serious biological responses in humans that lead to increased morbidity and mortality, such as: "increased sympathetic tonus and HPA activation; glucocorticoid resistance; decreased inflammatory control; immunity; sleep salubrity; and expression of genes regulating glucocorticoid responses" (Cacioppo et al., 2011, p.21).

People are social beings with a desire for social interaction (Mund & Neyer, 2019; Cacioppo et al., 2011). That being said, when they are presented with feelings of loneliness, they'll typically initiate some form of action to address such feelings. In trying to understand loneliness and how it manifests in people, Mund and Neyer introduced the idea of promotion-focused versus prevention-focused individuals (2019). Promotion-focused people try to make amends and do what they can to reestablish connections and rid themselves of feelings of loneliness (Mund & Neyer, 2019). Seeing as people naturally desire social interaction and stability in their social relationships, this would be considered the "normal" response.

Prevention-focused people, on the other hand, are typically rather passive, avoidant, and they act out defensively; in fact, they are scared that if they try to connect with others, they'll be rejected and feel even worse (Mund & Neyer, 2019). Because of this perspective, these individuals avoid attempts and opportunities for social connection. Their overarching goal is of “self-protection and harm avoidance” and since they experience high levels of loneliness, they typically report negative feelings after social interaction (Mund & Neyer, 2019).

That being said, it's critical that physicians be extremely mindful of patients with a prevention-focused mindset during screening. Using scales that measures objective social isolation can lead physicians to interpret individuals who are surrounded by others as being adequately socially integrated; however, if that individual, despite having social contacts, perceives themselves to be isolated from others, that is where the loneliness comes in. Lonely people are prevention focused people— not promotion-focused people— and this is made clear in their avoidance of opportunities to connect. It also explains why interactions don't seem to alleviate their feelings of loneliness. Loneliness is a negative cognitive state that's related to a negative cognitive style, which is common among prevention-focused people; and this is concerning because the negative cognitive style can worsen mild to moderate feelings of stress which can lead to stress-induced depression (Campagne, 2019).

It's important that to consider the different types of loneliness and how they're brought about. Occasional periods of loneliness typically go away on their own and can be aided by various interventions, but chronic loneliness leads to serious effects on both health and wellbeing (Morgan & Burholt, 2020). Chronic illnesses can often be a contributing factor for loneliness, which in turn creates changes in social roles, social networks, health, and ability, which then disrupts social relations and one's sense of identity (Morgan & Burholt, 2020). Narrative

accounts of loneliness can determine one's health and social outcomes (Morgan & Burholt, 2020; Campagne, 2019). This argument goes back to the importance of individuals' perceptions— how one chooses to view their life, their circumstances, and the meaning of loneliness will determine their experience with loneliness and how they choose to deal with it, if they do. For example, chronically lonely older adults have reported such effects as: less exercise, increased tobacco use, a greater number of chronic illnesses, higher scores of depression, and a greater average number of stays in nursing homes than non-lonely counterparts (Gardiner et al., 2016). Chronic illness entails greater financial expenditure on the part of the patient because they need to continually treat it or risk it becoming fatal. Increased tobacco use and nursing home stays also entail greater financial expenditure. Less exercise and greater depression scores also have direct and negative effects on one's health status. As one can see, chronic loneliness is cause for a myriad of consequences for the individual and finding ways to prevent it or mitigate it are the best moves forward.

Coping strategies for loneliness vary with culture and they also “differ depending on whether the individual perceives loneliness to be modifiable or not” (Morgan & Burholt, 2020, p.2031; Kitzmüller et al., 2018). That being said, it's crucial to consider how the patient views their own situation/experience with loneliness in order to propose an intervention that would be effective for them. Being able to alter your state of mind and view on your conditions in life can create positive health outcomes as you're able to avoid feelings of loneliness (Cornwell & Waite, 2009). Those who can reconstruct their narratives during changes in their social life are those who transition out of loneliness because they possess the ability to achieve a sense of continuity in their life (Morgan & Burholt, 2020). This is often done via the well-known process of life review (Butler, 1963). That being said, it's arguable that those who find disconnection between

their past and current selves are the ones who become chronically lonely (Morgan & Burholt, 2020).

Another aspect to consider is how individuals feel about receiving support in time of social disruption. Some individuals struggle with the idea of relying on others for comfort or support after the loss of a spouse (Morgan & Burholt, 2020). This shows why it's crucial for physicians to ask questions and consider their patients' perception of their situation. How they view their situation extends to what they're asking of others and how they think others now view them. Social networks will often react differently and provide different types and amounts of support depending on the context and situation in which the person became lonely. For example, loneliness after the death of a spouse is different than loneliness after separation or divorce (Morgan & Burholt, 2020). These two situations will likely elicit different emotions out of one's social relationships which will determine the support they are offered. This is why it's important for researchers and physicians to consider the circumstances around one's transition into loneliness.

Conceptualization and Operationalization

In order for us to truly move forward with this work and propose effective solutions, we need to form a single definition of social isolation and loneliness to ensure the shared understanding of future research and interventions. Ambiguity in the way in which we conceptualize social isolation and loneliness poses serious challenges for us to develop knowledge and testable hypotheses when it comes to this area of research (Coyle & Dugan, 2012; Poscia et al., 2018). It also makes it incredibly difficult for researchers, educators, and health care professionals to get policy makers involved. There is so much material on this subject, yet researchers and authors are all using different definitions in their studies. To get to

the point in which policy makers can take actionable steps towards addressing this issue, we must recognize the importance of not just conceptualization but operationalization as well.

How we measure social isolation and loneliness have also been drastically different. When reviewing the vast literature on this topic, one finds several different scales used to measure social isolation and loneliness. For the construct of loneliness alone, researchers have used the UCLA Loneliness Scale, the de Jong-Giervald Loneliness Scale, and the Social and Emotional Loneliness Scale for Adults— just to name a few. While it's useful to utilize the different aspects of each of these scales, it's problematic when readers interpret the results of each study and compare them to one another, as they may not be measuring the same thing. When assessing the results of a study, it's crucial to consider which scales were used. If they're using specific scales, such as the UCLA Loneliness Scale, and reporting findings based on how interventions fared on that scale, there could be discrepancies and misunderstandings if one interprets those results similarly to other studies that might use the de Jong-Giervald Loneliness Scale. There could be differing definitions and determinations of what the levels of loneliness are, and this could lead us to interpret the data incorrectly. Studying mental health in great depth is a fairly new practice, so the scales have been useful in exploring the mental experiences of people; however, individuals' social worlds are extremely complex, and the scales cannot accurately capture how mental health statuses are interconnected with social worlds.

If we don't agree on the way in which we conceptualize and operationalize, how are we to effectively draw conclusions from various studies? We'd be comparing results that were produced from different definitions and measurements which can lead to erroneous conclusions. We need to be on the same page in order to create practices and policies that have high relevancy.

Importance of Differentiating Between Social Isolation and Loneliness

Social isolation and loneliness have similar effects on the body which explains why both are associated with a nearly 30% increase in mortality risk (Shaw et al., 2017); however, there is a key difference in the ways in which they affect one's health. Loneliness is associated with detrimental mental health effects while social isolation is associated with detrimental cognitive and physical health effects (Beller & Wagner, 2018; Shaw et al., 2017; Coyle & Dugan, 2012; Cornwell & Waite, 2009). Some individuals can be socially isolated but not lonely and some can be lonely but not socially isolated, but it's the ones who are both lonely *and* isolated for whom physicians should be most concerned (Beller & Wagner, 2018).

Social isolation is independent of loneliness. As the world is fostering a value of individualism, more people are reporting living alone while maintaining their social relationships in other ways (Campagne, 2019). Assuming that one is lonely because they are socially isolated is problematic because it shows a lack of understanding for the individual's situation. Additionally, one may choose to be socially isolated and their objective lack of social contacts does not necessarily mean that they desire more social connectedness than they have. Recognizing that people come to feelings of loneliness differently illustrates how the process of managing one's social lives is dependent on the individual, and perhaps even the differences in their personalities. At all levels of social disconnectedness, it's found that loneliness takes a toll on one's physical health (Cornwell & Waite, 2009). This shows how the two concepts are independent of each other and one's level of social integration does not necessarily indicate the impact that loneliness can have on your physical health. The effect of social isolation on one's mental health, however, is dependent upon feelings of loneliness and whether one feels isolated (Cornwell & Waite, 2009).

Supporting Foundational Theories

One of the supporting foundational theories behind loneliness and isolation is Relational-Cultural Theory (RCT) (Comstock et al., 2008). This theory was developed to better understand social networks, especially among marginalized groups. The voices of women, People of Color, and marginalized men are often left out of research and decisions, and Miller argues that the lack of understanding of their experiences has led mental health professionals to characterize them as abnormal because they don't understand or value how their unique identities impact their wellbeing (Comstock et al., 2008). The core tenets of RCT aim to explain, "the process of psychological growth and relational development" (Comstock et al., 2008, p.279). Individuals' confidence in their ability to contribute to, and their sense of belonging to, social networks with genuine and meaningful relationships stems from various facts: people grow through and towards relationships; people participate in increasingly complex relational networks; mutual empathy and empowerment; authenticity; and a realization of increased relational competence (Comstock et al., 2008).

RCT also aims to support counselors and practitioners in creating better relationships with their clients by heavily emphasizing the need for high multicultural and relational counseling competencies. "Cultural oppression, marginalization, and various forms of social injustice lead to feelings of isolation, shame, and humiliation among persons from devalued groups," and these feelings are, "relational violations and traumas which are at the core of human suffering and threaten the survival of humankind" (Comstock et al., 2008, p.280). Marginalized groups' experience with exclusion, especially due to their culture, plays a massive role in their perspective of social relationships. A counselor's inability to address these factors only makes it harder for patients to feel comfortable in their relationship. Not basing counseling in these

relational, multicultural, or social justice ideologies can create the potential for marginalized groups to feel even more silenced and misunderstood (Comstock et al., 2008). It's critical for counselors to understand this because a silenced population will feel disconnected and, "disconnections that cannot be transformed have the potential to lead to feelings of condemned isolation" (Comstock et al., 2008). This illustrates the importance of acknowledging individual identities, backgrounds, and situations in counseling because it shows that counselors are aware of the ways in which society impacts individuals.

The tenets of RCT could be expanded beyond use by counselors and extended to medical professionals in general. Such professionals must put in a substantial amount of work on their own to create an inclusive environment for their patients. It's important for them to recognize their privilege and the type of information they've been taught to expect, especially in regard to expectations about behaviors of certain identity groups. An inability to check their privilege and socialization may create bias and affect their professional conduct. This is true when looking at not only gender, race, and ethnicity, but also at age.

To produce a holistic understanding of loneliness and how people perceive it, we must first look at it from its different theoretical and philosophical angles. The phenomenological and existential perspective views loneliness as "a natural part of the human condition". Existentialists view loneliness as a painful state and a potential opportunity for growth. Interactionists view loneliness as resulting from an absence of close relationships and it stresses how social and emotional isolation are separate forms of loneliness. The sociological angle views loneliness as the result of "sociological forces such as the commitment to individualism, increased family and social mobility, decline in primary group relations, and an inclination to be 'liked' by others and to behave in accordance with their expectations" (Kitzmüller et al., 2018, p.213). By viewing the

various ways in which people conceptualize loneliness, we get a better understanding of how loneliness manifests within people and produces different results.

Social Isolation and Loneliness in Older Adults

While social isolation and loneliness are issues on their own, older adults experience them in a distinctive way. Older adults face unique risk factors and adverse outcomes for both social isolation and loneliness, and a better understanding of this can help us to make sense of the relationship that exists between them and what we can do about it.

Social Isolation and Loneliness' Impact on Older Adults

There are many ways that social isolation and loneliness impact older adults, both on an individual and societal level. For starters, social isolation and loneliness are often overlooked, leading to an accumulation of negative effects. Even though nearly all older adults interact with the healthcare system, physicians are not trained and well-versed in being able to identify and treat social isolation and loneliness in older adults (Blazer, 2020). Again, drawing on the importance of distinguishing between social isolation and loneliness, it's critical to look at them separately because they have unique and independent causes, triggers, and consequences (Coyle & Dugan, 2012). Viewing the two as the same thing will cause physicians, researchers, and family members to miss critical characteristics about them individually that can help to better understand the older adult's experience with both social isolation and loneliness.

There are various forms of social support and recognizing which types are available and utilized by older adults is crucial in determining their health needs because the type of support someone receives can either encourage or discourage their use of health care (Shaw et al., 2017). These types of social support include instrumental support (financial and transportation), informational support (advice, guidance, and referrals), and emotional support (empathy and

trust) (Shaw et al., 2017). Different forms of social support can create different health outcomes. Informational and instrumental support are helpful in solving one's problems and answering questions while emotional support helps create and maintain a sense of group belonging and social connectedness with significant figures in one's life (Tomaka et al., 2006). To the contrary, one can see how a lack of these various types of support can lead to negative outcomes in all areas of older adult functioning.

Despite some physicians' beliefs that one's social network is indicative of levels of loneliness, physicians cannot determine if their patients are lonely without consulting with them (Coyle & Dugan, 2012). They must have quality conversations with these individuals to gather an understanding of what their perception of the situation is. Further expanding on this, some older adults have greater access to social support resources than others do, but that doesn't mean that they're utilizing those support systems. Taking a patient's situation at surface level, without sincere inquiry about their perceptions, will prevent physicians from truly understanding the experiences and feelings of their patient— further hindering their ability to provide useful and effective support.

Many of the studies done on social isolation and loneliness in older adults were conducted using self-reporting health questions (Tomaka et al., 2006). Some questions would ask participants if their doctor had diagnosed them with a mental illness as a way to gauge if the participant is lonely (Coyle & Dugan, 2012). This is particularly problematic because the conversation around mental health has been taboo for years and it has just recently become prioritized within American society. That being said, many physicians don't even inquire about their patients' mental health as they don't have the screening tools in place yet. If a patient's doctor has never talked to them about their mental health and therefore has never diagnosed them

with a mental illness, it doesn't necessarily mean that they don't have one; however, that is often what the studies conclude when they use scales that include self-reporting questions like that.

It is striking how important it is for physicians to accurately measure and address social isolation and loneliness. At an individual level, as previously discussed, greater social connectedness provides individuals with more access to the various forms of support previously mentioned, which helps to promote healthy behaviors and better outcomes in health (Cornwell & Waite, 2009). This is even more important for older adults. In 2010, 29% of all noninstitutionalized older adults were living alone (Coyle & Dugan, 2012). As the number of older adults increases, we can predict that so will the number of people living alone, who are widowed, and whose health is declining; therefore, we can predict that rates of social isolation and loneliness will also increase, which can then lead to negative health outcomes.

When looking at the effects from a macrosystem level, there are monetary repercussions related to these issues. For example, Medicare covers more than 50 million people, which is about 15% of the current population (Shaw et al., 2017). In a study done on the relationship between social isolation, loneliness, and Medicare spending, it was found that after fully adjusting for basic demographics, socioeconomic status, and health status, "loneliness predicted a \$64/month reduction in Medicare spending while social isolation predicted a \$137/month increase in Medicare spending" (Shaw et al., 2017, p.1133). From these results, it'd be wise for physicians to reduce social isolation in older adults to reduce the amount of money being spent through Medicare. As previously addressed with the Social Control Theory, social contacts are an important factor for taking care of one's health, so an increase in spending could be attributed to the lack of social contacts that encourage preventative health behaviors. This could allow health problems to accumulate and/or worsen which would then require the individual to need

more services and potentially hospitalizations—treatments that would be more costly than preventative measures. A possible reasoning for why loneliness was associated with a decrease in Medicare spending is that lonely older adults do not seek the care they need. To decrease feelings of loneliness in older adults would be beneficial to their health because it'd reduce negative feelings of social interaction which could encourage them to utilize the health care resources that are available to them. Spending less on healthcare is not a positive outcome if it's at the cost of the individual's health.

It was found that social isolation and loneliness are more prevalent in those with poor health and socioeconomic status; moreover, loneliness is strongly correlated with “poorer socioeconomic, mental and physical wellbeing” (Shaw et al., 2017, p.1136). In this case, loneliness can serve as a marker of high-risk older adults who are in most need of intervention, and physicians should be highly attuned to screening for loneliness within older adults. It was also found that socially isolated older adults spend more on care facilities (Shaw et al., 2017). This could be because they don't have the family or robust social networks to care for them, so their main option for caregiving is through external facilities. Other groups who were considered to have increased risks of social isolation and loneliness were the immigrant and LGBTQ community (Blazer, 2020). Although there is limited literature in this area, it's important to look at how marginalized groups fare greater risks of social isolation and loneliness. It's plausible that they do because, in general, they face greater social exclusion, discrimination, and adverse health effects.

Many researchers translated their survey questions into other languages such as Spanish so that non-English speaking individuals could participate in their study (Tomaka et al., 2006). While this was meant to be inclusive of individual's identities and considerate of how a study in

English could leave out valuable perspectives and results from other cultures, studies did not address how different cultures understand the subject on which they were being surveyed. Researchers can translate their questions into other languages, but that doesn't mean that the results translate as well. As previously discussed, personal perception changes individuals' experiences and reporting of loneliness, and that is further complicated when we take culture into consideration. Within certain cultures, especially Asian and Latinx cultures, there's an expectation or tradition of caring for one's elders. This means looking after them in older adulthood rather than placing them in a facility. Also, family and extended family are found to play a greater role in Latinx cultures and social lives (Tomaka et al., 2006). In Latinx culture, loneliness is probably not understood or taught in the same way as it is in "American" culture. This gets even more complex for individuals who have mixed identities such as Latinx Americans because their experiences in life, and with subjects such as loneliness, will also be mixed due to the differing aspects of their identity. This difference in education that people have received around loneliness, such as the definition and expectations of how it manifests and shows up in people, can influence how they choose to respond to the self-reporting questions in the surveys. Loneliness is already a complex enough subject when discussed in English. Trying to cross language barriers and carry conversations through translations can make it even more complex to understand, conceptualize, operationalize, and come to conclusions on.

Understanding Loneliness in Older Adults

For women, the most notable predictor of loneliness in older adulthood is mobility problems (Kitzmüller et al., 2018). For men, it's low levels of social contact (Kitzmüller et al., 2018). For both men and women, widowhood is a key indicator of loneliness in older adulthood (Kitzmüller et al., 2018); however, it's a greater risk in women because of their longer life

expectancy and tendency to outlive male partners (Coyle & Dugan, 2012). The most notable cause of loneliness in older adults is illness, followed by the death of a spouse, and then a lack of family and friends (Kitzmüller et al., 2018). Knowing the main causes of loneliness in older adults can provide physicians with a clearer idea of what to screen for and be observant of during physicals and appointments. Illnesses are often dealt with solely in a physical health manner, but knowing how it can transpire into mental consequences is important for prevention efforts.

Loneliness was also found to be common in nursing home residents (Kitzmüller et al., 2018). This is understandable considering that individuals placed in nursing facilities experience drastic changes in their social lives. They're removed from their home environment, they're isolated from friends and family, and the main point of contact for them frequently becomes the nurses in the facilities. The act of family members dropping older adults off at a nursing home makes it very apparent how separate their lives are and how the family is able to move on and live without the older adult. Also, seeing as the profession of caregiving is traditionally low-paid and has a lot of turnover, facilities are often understaffed and the attention of nurses is primarily focused on residents who require more medical attention. This can make nursing home residents feel incredibly isolated and alone.

Advanced age is also a risk-factor for loneliness. Loneliness in older adults is suggested to be most prevalent in those categorized as the "oldest old," or those who are 80 years old and older (Poscia et al., 2018). Individuals tend to lose more of their abilities and normal functioning as they get older, which can serve as an explanation for this finding. For example, it's likely they'll lose a greater amount of their sight, hearing, and cognitive ability as they age. Parts of aging can naturally lead to loneliness because of its effects on the body. Aging often entails: cognitive impairment which has been proven to be a cause of loneliness; increased muscle

tension and pain which can cause stress which leads to loneliness; and lower interests in sex, romance, and love which can also lead to feelings of loneliness (Campagne, 2019). This is important for health care physicians to take note of because it emphasizes how physical effects can influence psychological effects and have adverse outcomes. Physicians should not immediately assume that old age insinuates loneliness, though. There are aspects of aging that also contribute to a greater sense of social connectedness, such as increased free time from retirement leading to greater opportunities for social participation and volunteering— both of which have been linked to lower feelings of loneliness (Cornwell & Waite, 2009). In regard to this, it's crucial for physicians to be considerate of those who can't retire or don't have the opportunity to do so.

Any type of social change in an older adult's life should require a follow-up about their feelings through conversations facilitated by family and friends and/or physicians. This is especially true regarding feelings of loneliness. The loss of ability to do activities of daily living and changes in social roles can bring about feelings of loneliness for the individual if they feel that the changes to their lives are causing their social relationships to change in response (Blazer, 2020). They may not know how to identify or regulate such feelings, and feelings of loneliness can easily intensify if they feel that they are not getting the support they need.

“Trapped in a Waiting Room”

Loneliness is a complex concept to understand in general, but even more so in older adults. Kitzmüller and colleagues proposed four themes to understanding loneliness in older adults: negative emotions of loneliness; loss of meaningful interpersonal relationships; loneliness and the perception of self; and ways of dealing with loneliness (2018). For negative emotions of loneliness, older adults view loneliness as a wall separating them from those around them, which

leads to feelings of disconnection, helplessness, and confinement to an empty and boring life with little chance to escape it (Kitzmüller et al., 2018). Other common emotions that older adults feel as a result of loneliness include fear, anxiety, and abandonment (Kitzmüller et al., 2018). The fear and anxiety that they face comes from the social changes in their lives: they fear future dependency on others due to a physical decline in their health; they become anxious at the prospect of being forced to relocate due to changes in their lives; and they fear becoming a burden to others, especially their children (Kitzmüller et al., 2018). Older adults have reported a reluctance to show that they are in need of support or services because of the fear that family or physicians may choose to move them from their homes and into care facilities (National Institute on Aging). The sense of abandonment that they face stems from the deaths of friends and peers who belonged to their generation; in addition, the inability to talk to people their own age, who shared in similar experiences and moments of history, often lead to feelings of meaninglessness (Kitzmüller et al., 2018). These intense emotions that were reported alert us about the need for greater emotional support for older adults. Older adults seem to see loneliness as something that's boxing them in with all of their emotions, and regular checkups with a mental health professional could serve as an outlet for older adults to work out their feelings and prevent it from becoming too overwhelming for them to manage.

The loss of meaningful interpersonal relationships is difficult for older adults because they desire the familiarity, comfort, companionship, and sense of belonging that was provided in the relationships they used to have (Kitzmüller et al., 2018). The loss of meaningful relationships makes it incredibly difficult for older adults to embrace new relationships (Kitzmüller et al., 2018). This is important for physicians and family members to be mindful of before proposing interventions that are meant to introduce new people as replacements for relationships lost.

Attempts to “fill the void” are rarely effective and can actually be incredibly harmful to the older adult’s personal development if they were not given the proper time and resources to emotionally heal from such a loss. Related to this, many older adults who have suffered a loss of a partner are often urged to consider remarrying; however, remarrying is not always accepted in individuals’ cultures and therefore should not be suggested without prior consideration for such cultural differences (Kitzmüller et al., 2018). This is another reason why physicians, and not just counselors, should have high multicultural and relational competencies to ensure that the work they’re carrying out is inclusive and considerate. Culture frequently influences one’s abilities to cope with loneliness as well as what resources and coping strategies are accessible options. Working with patients without regard for such major aspects of their identity is an ignorant and offensive practice of healthcare.

Loneliness greatly influences one’s perception of self. For example, feelings of uselessness, being outdated, and being disconnected to one’s surroundings influences one’s sense of self (Kitzmüller et al., 2018). This begs the question of how society’s rapid technological advancement has contributed to making older adults feel lonely, useless, outdated, and disconnected. For the current older adult population, technology is not the only massive change that they’ve experienced, but it’s facilitated the other changes that have come after. Life, for many older adults, has become almost unrecognizable (Kitzmüller et al., 2018). Life is becoming less physically social in many ways; socializing has become a mainly virtual experience and older adults are being left out. In testimonies given by older adults, many reminisced about growing up in an era in which they relied on community efforts; for example, milkmen were regular figures of their social networks but are now a thing of the past (Kitzmüller et al., 2018). Many researchers and scholars in this subject did not grow up in that era, so the aspect of

different histories and its impact on older adults has often been left out of the literature out of sheer lack of awareness.

When we think of older adults being left behind, we usually think about technology because of the blatant exclusion of their population in modern user interface designs, but they're also being left behind in that their sense of normalcy and what they're used to is not even something the current generations are aware of. Many younger generations don't know what the world was like in the years that the older adult generation grew up in. This lack of understanding between generations can create a sense of dissonance that works to isolate the older adult as they feel more separated from current culture and lifestyles. Gender norms also play a role in how loneliness affects the perception of self. In a 2018 study conducted by Kitzmüller and colleagues, retirement brought about intense feelings of worthlessness for male participants. While the authors didn't elaborate on the reasonings behind this, it's probable that the feelings of worthlessness stem from perceptions of the male identity. Older adults did not receive the education that exists today in terms of what "socialization" means or what "gender norms" are and how they can affect a person's development. For them, gender norms are likely deeply engraved in the creation and maintenance of their sense of identity; therefore, retirement could indicate a loss of their identity seeing as it was rooted in economic success and the ability to provide for one's family.

People view loneliness and its manifestation in people differently; therefore, they have different ways of preventing loneliness for themselves. For some people, loneliness is a perspective and in order to fight it off, one has to change their thoughts (Kitzmüller et al., 2018). For others, it's a matter of pushing themselves and distracting themselves from thinking about it (Kitzmüller et al., 2018). In others, thinking about happier times is what works in fighting it off

(Kitzmüller et al., 2018). This further emphasizes the need for a person-centered approach because physicians need to first understand their patient and how their patient conceptualizes loneliness in order for them to understand what would be an effective intervention for them. While some people see loneliness as a satisfying feeling and a potential for growth, that is only the case for those of whom loneliness was optional and not forced upon them from some situation or life event (Kitzmüller et al., 2018).

Loneliness in older adulthood is analogous to being trapped in an empty waiting room (Kitzmüller et al., 2018). The older adult is not permanently in that situation, and while they themselves can open the door to change, sometimes they need someone from the outside to open it and show them that there *is* a way out and that it's possible to even "leave the room" (Kitzmüller et al., 2018). This is a relevant analogy that can be very useful to physicians *and* family members in understanding the older adult's experience with loneliness. It illustrates how some older adults may desire help but aren't aware of where to obtain it or that getting better is even a possibility. It emphasizes the important role of the external figure in helping the older adult through it and making them aware of their options.

Loneliness often leads to anxiety, which leads to a reduced level of energy, which leads to a decreased likelihood of seeking help (Kitzmüller et al., 2018). This is important to note because loneliness creates psychological effects in older adults which can make it difficult for them to reach out and seek help. That being said, the role of the family members, peers, and physicians is to look out for potential signs of loneliness and then to do something to get them help. Not only should physicians and family members be alert, but it's equally as important that they are also patient and genuinely caring about the situation of the older adult in question. Since older adults have a greater sense of shame and fear around dependence on the support of others,

it's crucial to keep these barriers in mind so that older adults may feel comfortable being honest and open about their feelings.

Implications for Physicians

In 2030, older adults (those 65 years and up) are expected to make up 24% of the population; this is a dramatic rise seeing as they only made up 10% of the population in 2000 (Khosravi et al., 2016). While we're seeing a sharp rise in older adults, we can also expect to see a rise in the cost of caring and the use of health care systems and services (Khosravi et al., 2016). Physicians have reported difficulties in identifying lonely patients and providing solutions for them because they had never really been trained for it (Freedman & Nicolle, 2020). The network for support and resources are already in existence, so patients just need to know how to get there. That being said, educational material and training needs to be developed for physicians so that they can start implementing this into their practice.

A start to that is providing a better understanding of the risk factors and consequences of social isolation and loneliness, and how it's a cyclical relationship in many cases. Risk factors for social isolation and loneliness can be separated into three different categories: sociodemographic risk factors, medical risk factors, and social risk factors (Freedman & Nicolle, 2020). Linguistic isolation also serves as a risk factor to be considerate of (Coyle & Dugan, 2012). Physicians must be aware of the various risk factors of social isolation and loneliness in order to deal with the repercussions of it. Adverse outcomes of social isolation and loneliness can be broken down into three categories as well: physical health outcomes; mental health outcomes; and health service use outcomes (Freedman & Nicolle, 2020). Adverse physical health outcomes include an increase in mortality falls, cardiovascular disease, serious illness, functional decline, and malnutrition (Freedman & Nicolle, 2020). Adverse mental health outcomes include:

increased depression, dementia, and elder abuse; and a decrease in life satisfaction (Freedman & Nicolle, 2020). Adverse health service use outcomes include increased emergency room visits, physician visits, hospital admissions, and long-term care admissions (Freedman & Nicolle, 2020). It was found that, “cultural and structural factors, coupled with high rates of traumatic events over the person’s life, might increase the risk of loneliness and social isolation” (Freedman & Nicolle, 2020, p.180). This poses a specific risk to marginalized groups who’ve faced a great deal of adversity, and it serves as something for physicians to be considerate of when screening for social isolation and loneliness in older adults.

Addressing loneliness in older adults has long been viewed as the sole responsibility of physicians; however, reducing loneliness in older adults is not one group’s job but a collective effort of family members, health care providers, and volunteers (Kitzmüller et al., 2018). Family members and other close social contacts can provide a more personal perspective from knowing the older adult and potentially important details about their personal life. Then they would have the perspectives of multiple professionals in the healthcare world who can give insight into the best interventions for them as individuals. Having a variety of individuals involved in the assessment and decision making of interventions allows for the patient to have a holistic decision be made on their behalf.

Impacts of Social Disconnectedness in Older Adults

Now that the ways in which social isolation and loneliness present in older adults as well as how they experience it has been addressed, it is important to examine in detail the impacts that social disconnectedness has on the health and quality of life of older adults.

The Impact of Stress and Other Biological Effects

Loneliness in older adults results in chronic hypercortisolism (chronic stress), and chronic

stress is damaging to the brain (Campagne, 2019). Campagne's study helped to explain how loneliness, as a subjective feeling, can have biological effects on the individual. Campagne found that damages to the brain can be partially reversed through early treatment (2019). This fact should urge people to seek prevention and treatment early to combat stress, especially as a consequence of loneliness. Many people experience stress independently of loneliness, but when stress is combined with loneliness, the health problems that the individual faces is aggravated (Campagne, 2019).

Older adults are uniquely able to frame their situations so that they're less negatively affected by low levels of social disconnectedness (Cornwell & Waite, 2009). When older adults practice positive self-appraisal and life review, their positive attitude towards stress and loneliness induces "health-related self-protection" (Campagne, 2019). This is another way in which the older adults' mental state impacts their physical state. Campagne found that medical professionals do not recognize the importance of looking out for stress as it manifests in medical and biological manners (Campagne, 2019). While stress is found to manifest as a consequence of loneliness, there are so many other issues that can produce stress. Changes in one's social life can lead to loneliness as we've seen in other studies, and we can hypothesize that perhaps the relationship between loneliness and stress is not one-sided but cyclical. It's believed that loneliness affects physical health through its impact on mental health (Cornwell & Waite, 2009). Changes in social life can create stress and unmanaged stress can break one's social equilibrium, which can potentially lead to loneliness and exacerbate feelings of stress. Stress has very real consequences on the body, especially neurologically, so stress should be screened for, especially in at-risk populations. To reduce chronic stress, medical treatment interventions should aim to circulate glucocorticoid, leukocyte, and other relevant immune systems (Campagne, 2019). This

is a way in which we can take action to prevent stress from building up in the body so that we are not treating that have already been ravaged by the damaging effects of stress.

Health-Related Outcomes

Odds of self-reporting fair/poor health, in comparison to good/very good/excellent health, was 39% higher for those with higher scores on the social isolation scale (Coyle & Dugan, 2012). In fact, scoring high on such measures of social isolation is associated with a 25% increased risk for premature mortality in later life (Blazer, 2020). These are frightening statistics; however, combating social isolation is much easier than that of loneliness. Knowing this information, it's vital that we act now because not only are the number of older adults rapidly increasing, but the COVID-19 pandemic has also forced more older adults into social isolation.

Loneliness in older adults was found to be positively related to having emphysema and arthritis (Tomaka et al., 2006). This begs the question of whether they developed such health effects from not participating in social activities. Regardless, it illustrates the physical health effects that come from loneliness. Arthritis and emphysema are often painful conditions that impede one's ability to live life comfortably and they reduce one's participation in normal social activities that maintain levels of belonging and support (Tomaka et al., 2006). Such interferences to their livelihood can create stress and lead to feelings of loneliness as they are no longer able to do things as they were before.

“Social conditions such as loneliness and low social support may be the cause or consequence of disease” (Tomaka et al., 2006, p.376). This relationship tells us that a vicious cycle can be brought upon older adults as soon as one of the variables gets introduced, whether that be the social conditions or various diseases. As soon as one's health starts deteriorating or as soon as they're isolated or as soon as they feel lonely, it can kickstart the cycle which becomes

incredibly difficult to escape.

Social Determinants of Health

Addressing social isolation and loneliness in older adulthood has served as a challenging task, but one way to potentially go about this is by viewing it as a social determinant of health. The World Health Organization defines social determinants of health (SDH) as “the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels” (Rine, 2016, p.143). These factors greatly influence health outcomes which shows a deep inequality in consequences. It’s an important way of looking at health because it illustrates the relationship between an individual and their community and how the macro and mezzo levels of society influence people on an individual basis.

Individual- and Community-Level Healthcare Strategies

There are two major categories of strategies that invest in SDH: patient care strategies and community health strategies (Gottlieb et al., 2019). Patient care strategies are approaches on an individual level that focus on modifying patient care, and they center intervention choices around the goal of reducing the patient’s social risks (Gottlieb et al., 2019). Providing more information on the patient, such as their working patterns, housing status, or food insecurity, can also help the physician to make better informed decisions specific to their patient that would then create better outcomes for them (Gottlieb et al., 2019). Like most people, physicians aren’t always cognizant of the situations of others and how performing certain activities or accessing certain resources proves harder for some than others. This makes this approach incredibly beneficial as it helps physicians to be more aware of the financial and social hardships that their patients face. Something to be cautious of when it comes to implementing individual-level

patient care strategies is that they depend on the availability of patients' social risk data at the time of the appointment (Gottlieb et al., 2019). This assumes that people are going to the doctors to be taken care of; however, sometimes the people who are most at risk are not going in to see the doctor. Undocumented people, for example, may avoid the doctors or not be able to afford it, yet they often work in dangerous jobs that put them at a higher risk of developing poor health conditions. Then there are the people who simply don't go to the doctors' and we see this in the older adults who are socially isolated or who don't have relatives or people in their lives who can take them.

Community health strategies are approaches on a wider community level that include financial resources and community partnerships as ways to improve community health (Gottlieb et al., 2019). Community health strategies are considered to be "high risk/high gain" opportunities in which they present the greatest long-term payoffs should they be successful in improving SDH at the community level (Gottlieb et al., 2019). It's likely that the long-term benefits addressed in this argument are results of how community health strategies aim to address and eradicate SDH causes at the root. Patient care strategies, on the other hand, tend to focus on individual solutions that address and mitigate outcomes of the SDH for patients. It's only with a combination of both, or the addition of community health strategies, will the individual patient care strategies be sustainable efforts.

A Social-Determinants of Health Approach to Healthcare Interventions

Prevention and wellness strategies are separated into two categories: education and public awareness that promotes good choices and a responsibility for one's behavior; and community-level approaches that are funded through grants to local organizations (Rine, 2016). Innovative services have been called to attention for their potential to provide wellness services in a way

that more people can access them. Telehealth, for example, greatly benefits those who can no longer physically make it to their appointments, such as older adults who have lost functionality and/or do not have people to take them to the doctors (Rine, 2016). In this sense, telehealth promotes equity by meeting patients where they are and providing services that accommodate their needs. A SDH perspective aims to address both the social and environmental factors that contribute to one's health status (Rine, 2016). This allows physicians to better understand how their patient interacts with certain interventions which guides them in determining which interventions to propose.

Screening for Social Determinants of Health

Identifying SDH in patients and implementing interventions will only be successful if changes occur at the greater societal level that aim to address the SDH that perpetuate poor health (Davidson & McGinn, 2019). Physicians should screen for different SDH together because when looking at SDH separately, they are unable to get the full picture of how the SDH are interrelated and, when compounded, cause greater consequences for the individual. Physicians do not get much time with each patient, so while the structural SDH that are impacting the patient are important and must be addressed, that responsibility should lie with other organizations while the physician uses their time doing things within their abilities to mitigate the issue for the patient. While it's important to discover the underlying social inequalities and SDH, sometimes the best the physician can do, while maximizing the use of their time with their patients, is to refer them to other external resources.

In addition to creating a database for available social services, a database should be created for organizing and compiling the different SDH (Davidson & McGinn, 2019). This is especially important because many physicians aren't even aware of all the SDH in place and

what to look for. This is because the importance of SDH in healthcare services has not always been prioritized. The lack of physicians' education of SDH can explain why 94% of physicians felt that the screening would better fit the role of the social worker who *does* have education on the subject (Davidson & McGinn, 2019). In creating a master list of these SDH and how they manifest in different populations, physicians can better show up for patients and improve their health and wellbeing. Additionally, it'd be beneficial to map out interventions for SDH and the known pros and cons for each in order to make the job easier for whoever is making the call (Gottlieb et al., 2019). If healthcare settings choose to move forward in implementing a screening process for the SDH, this should be a critical first step. Organizing the data and ensuring that it's clear-cut can help physicians once the screening is implemented. It will ensure that the screening process is efficient and that the physicians can actually do something with the results that they gather from the screening.

Utilizing the Social Determinants of Health to Invest in Health Prevention

The National Institute on Aging looked into the structural obstacles that older adults face in obtaining affordable services that address their specific needs. They found that caregivers are seldom trained to offer support to cognitively impaired older adults and that the fees incurred to keep them on are far too high for older adults to afford on a long-term basis (National Institute on Aging). One hardship that was illustrated was of cognitively impaired older adults who get their license revoked without transportation offered in replacement, thus dramatically increasing their isolation from others (National Institute on Aging). This is similar to the degradation of health and how older adults are not provided with options to maintain activity as a way to combat functional decline. For example, experiencing a fall may cause an older adult to limp which often leads to the use of a cane and then a walker and then eventually— a wheelchair.

This evolution is mainly due to the fact that when older adults come in with physical ailments, it's often seen as a part of aging—that they are meant to face physical hardships. So, they are not provided with physical therapy or anything to help with their condition. These two examples are examples of why we should be investing more in health prevention rather than investing so heavily in the treatment services provided afterwards. We should invest more in physical training and good physical health than in walkers and wheelchairs. By considering social isolation and loneliness as a SDH, physicians would be able to spot the potential risk factors which would allow them to take action in preventing adverse outcomes. If they realized that the limp that the older adult came in with was a risk factor for social isolation, perhaps they'd choose to get them to physical therapy rather than having them get a cane.

Interventions

How can our understanding of social isolation and loneliness in older adults and the potential inclusion of this issue as a SDH influence suggested interventions for targeting this problem and potential areas for improvement? The culmination of this information should lead to intervention suggestions that can help mitigate these issues.

Intervention Types

The interventions for older adults that are proposed for social isolation will likely look very different from those proposed for loneliness (National Institute on Aging). This confirms the necessity of differentiating between social isolation and loneliness as they will likely have different approaches for intervention. Moreover, it's important to recognize cultural differences across groups and how they may influence the effectiveness of different interventions.

Different intervention types serve different functions. For example, pet attachment has the potential to alleviate loneliness by acting as a coping mechanism to the loss or lack of social

relationships (Gardiner et al., 2016). When working with patients, physicians should take the time to assess whether the patient is in the prevention stage or treatment stage for social isolation and loneliness. Prevention-focused interventions would align well with the SDH as it aims to prevent health consequences for the older adults, but prevention-focused interventions can also take on the form of therapy sessions, health and social care provision, and skill development (Gardiner et al., 2016). Many of these interventions can have both prevention and treatment functions, and which role they play will be determined by centering the patient's needs.

In a systematic review of interventions targeting social isolation and loneliness in older adults, Poscia and colleagues found that there was great variety in the types of interventions utilized (2018). While they only used 20 articles on interventions in their study, they were able to identify 1,386 different articles on interventions in their search (Poscia et al., 2018). There are many intervention types, but not enough quality research being done on each type of intervention frequently enough in order to really draw accurate conclusions. With such a variety in types of interventions, there are understandably many factors at play that influence the assessment of their effectiveness. In assessing the effectiveness of different interventions, the quality of evidence was typically weak and did not provide much support for causation (Gardiner et al., 2016).

Technology and Social Networking Services

In the studies that reported on technology use as an intervention for social isolation and loneliness, the researchers found that older adults were more receptive of the intervention when it was delivered in a small group format by volunteers (Poscia et al., 2018). Physicians should be conscientious of this and ensure that they deliver interventions in a way that makes the patient feel comfortable enough accepting the intervention. Learning something new is often a daunting task because there's a sense of vulnerability in being open to the possibility of failing. In this

case, 1:1 delivery likely allows older adults to ask questions and get the personal attention they need while learning how to use technology.

Technology and the use of Social Networking Services (SNS), especially Facebook, have been found to play an important role in older adults' fight against social isolation (Coelho et al., 2017). Nearly one third of older adults use SNS, but there are multiple issues that make it difficult for older adults to interact with it: design complexity; privacy issues; and negative preconceptions about SNS use (Coelho et al., 2017). Despite these barriers, SNS provides users with the ability to connect with family and friends and it also allows them the opportunity to feel as though they are part of their society (Coelho et al., 2017). The ability to feel a sense of connection and belonging explains why technology and SNS use helps to combat social isolation, but it also serves as a valid intervention against loneliness because it can alter the user's perception of their social relationships.

SNS have been essential in aiding the wellbeing of older adults because of its ability to build and maintain social relationships (Khosravi et al., 2016). While younger adults have the ability to go out and connect with others, SNS serves as a socializing platform for older adults who can't or don't go out— whether that be due to social isolation, loneliness, or personal choice. While the reason for their lack of physical socialization differs, SNS can help fight feelings of loneliness in many older adults by providing a means to maintain social contacts that otherwise would've been lost or diminished. In addition, SNS and the internet are “lower risk” forms of socializing. Users can sit behind their screen and some of the fear and social anxiety around approaching someone and talking in person is reduced. This reasoning makes SNS a viable intervention option for prevention-focused individuals who otherwise struggle with putting themselves “out there.”

It'd be wise of physicians to promote information and communication technology (ICT) literacy among older adults in order to provide them with the opportunity to use it should they want to (Khosravi et al., year). Although this is a valid proposal, Khosravi and colleagues didn't acknowledge the potential barriers to this. Before suggesting this intervention to their patients, physicians must first address the potential barriers that patients face in becoming literate in ICT: language barriers; lack of internet access; personal feelings about technology and the safety of it; etc. Providing older adults with the tools to choose their own interventions and be able to access them establishes a greater sense of agency and control over the choice of the intervention.

While technology and SNS use has proved to be effective in multiple cases, it's crucial that physicians still consider the patient's situation before proposing it as an intervention. Some patients may be both socially isolated and lonely and therefore do not have contacts with whom they can connect with online. Others may have family members who aren't online or who don't frequently use SNS. With the heightened risk for security breaches, many people refrain from posting their whereabouts as they used to before. A lack of posting on the end of the family members may be misunderstood by the older adult and it could make them feel as though they are missing out on their family members lives due to the lack of visibility.

The Role of the Community

Interventions implemented to improve community wellbeing can lead to wellbeing inequalities because not everyone will benefit from the intervention equally— namely, minority ethnic groups, groups of lower socioeconomic status, and sometimes women, depending on the country (Bagnall, 2018). That being said, it's recommended that when considering interventions, rather than asking if the policy would improve wellbeing, we should ask whose wellbeing the policy will improve (Bagnall, 2018). Should physicians move forward with community

approaches, they should know that respect for community members' expertise serves as a key theme related to successful community engagement (Bagnall, 2018). This is important to note because in order for people in communities to trust any large-scale intervention, they need to be involved in the planning, executing, and revising stages so they feel that their voices have been included and that they have some power in the decision that's being made and applied to them. Likewise, the individual should be involved in the personal interventions— whether it be through direct input or ensuring it's patient centered and based on the individual patient's history.

Oftentimes, older adults themselves cannot provide the services needed to improve their livelihood. How a community views its role in addressing the problem and how they view the issue in itself says a lot about what can realistically be done for the individual. Some view social isolation among older adults as a threat to be avoided while some view it as a challenging community health problem to be resolved (Tadaka et al., 2016). Self-efficacy plays a large role in differentiating between the two because one's sense of ability has the power to change communities (Tadaka et al., 2016). Positive social participation has been found to positively impact the individual through reports of better health and wellbeing and increased self-confidence, self-esteem, and social relationships (Bagnall, 2018). This highlights the potential power that the community has in affecting individual wellbeing. Community-based interventions don't just benefit the older adults in question, but they have positive implications for improving the community in which they belong to as well.

Creating Successful Interventions

Features of a successful intervention include: adaptability; productive engagement; and a community development approach (Gardiner et al., 2016). In reviewing studies done on interventions targeting social isolation and loneliness in older adults, the findings have often

been contradictory (Gardiner et al., 2016). One reason for this is the original issue of conceptualization and operationalization. It's not until more recently that researchers have been looking at social isolation and loneliness independently and in tandem at the same time. For topics like this, where there's so many interventions without credible causal ties, new data is common and there's likely to be some contradiction. However, that should not prevent future researchers from conducting their studies and other scholars from assessing their work.

To make interventions as effective as possible, they should aim to utilize existing community resources and ensure that the intervention is centered around the specific needs of the patient (Poscia et al., 2018). Utilizing existing community resources helps with the effort to sustain interventions because it builds upon the strengths that already exist within the community. It also prevents the professional from having to introduce an external resource into the patient's life; it'll seem more familiar and accessible for the individual if it's already a part of the community. Research also suggests that in order to reinforce the sustainability of such interventions, healthcare and social care services should work much more closely (Poscia et al., 2018).

Gardiner et al. calls for a greater integration of qualitative research methods in future studies done on this topic (Gardiner et al., 2016). By only conducting quantitative studies, researchers are not getting the whole picture— just the numbers. Qualitative studies center the individual and allow for them to expand on their answers. In this manner, they can respond freely in a way that they feel more accurately represents their feelings and opinions on the subject. For example, the UCLA Loneliness Scale is a quantitative measurement and if researchers are just evaluating studies using these scales, they disregard crucial information that could indicate significant results (Russell et al., 1980). Gardiner and colleagues found that researchers were

unable to demonstrate significant reduction in loneliness using the UCLA scale, but they were able to gain insight about levels of boredom and helplessness when those participants were placed in an intervention group (2016).

Interpreting the results of interventions has proven to be complex because many studies rely on more than one mechanism to reduce social isolation and loneliness (Gardiner et al., 2016). How can one evaluate individual intervention effectiveness when they're often coupled with other interventions and factors? There is also a lack of research on the cost-effectiveness of different intervention approaches, but as physicians assess the situation of each patient, they should determine which strategies would be most effective and accessible to their patients. Despite the inconsistency in the literature in measuring outcomes of various interventions, one can still gain a solid understanding of the types of interventions available. Different intervention categories include: social facilitation interventions; psychological therapies; health and social care provision; animal interventions; befriending interventions; and leisure and skill development (Gardiner et al., 2016).

Constructing Infographics on Loneliness in Older Adults

Going into this senior project, I knew that there was going to be a lot of information available on the subject of social isolation and loneliness in older adults. It wasn't until I started selecting and reading articles that I truly understood the sheer magnitude of research that's been done on this topic. I've read over thirty articles, some of which didn't make it into this paper, and while it was absolutely fascinating, I also found it difficult to wrap my head around. There are many important areas of research related to this topic, but the organization of the information as a whole is overwhelming. I then came to the realization that this is likely how health care professionals, policy makers, family members, and older adults feel themselves. As a college

student who chose this for my senior project, I have the privilege of time to be researching this. My Cal Poly Kennedy Library account also gives me access to thousands of journals from which I was able to select articles. I have a background in Sociology and I realized that as I was reading through these articles, I didn't really have any issues understanding the studies and research. I didn't bat an eye when reading terms like "socioeconomic status" and "cognitive impairment," but for someone who doesn't have my educational background, like an older adult or caring family member, it may be confusing and prevent them from gaining the valuable knowledge that's out there. I wanted to take what I've learned from my literature review, consolidate it into a digestible product, and distribute it so that others can still be educated and make better informed decisions for the health and wellbeing of older adults. I decided that creating infographics would be an effective way to communicate my takeaways in a manner that's easy to process and understand (see Appendix A for infographics).

Methods

Producing effective infographics require thoughtfulness and being intentional at the planning, executing, and reviewing stages. The following is a description of the process undertaken in constructing the infographics.

Planning

First, I had to decide who my target audience would be and I ended up creating two infographics: one for physicians and one for older adults. The central coast, San Luis Obispo especially, has a large older adult population. Hoping to create as much direct impact as possible as a graduating Cal Poly student, I see the Community Health Centers of the Central Coast as a perfect organization to utilize the physicians' infographic. It's easy for them to refer patients to other departments such as behavioral health since they are an all-inclusive healthcare model that

includes multiple departments and services within one organization

(<https://www.communityhealthcenters.org/>). This organization also serves those who are low income or underinsured, so this seemed an appropriate healthcare setting to target more marginalized older adults, a value inherent to the area of social work. After deciding who my target audiences were, my next step in creating my infographics was going through my literature review and selecting which pieces of information would be most important for my audiences. After doing so, I reviewed the different types of infographics and chose what type would best suit the purpose of what I wanted to convey.

For the physician's infographic, I knew that it would be more educational and informative, so I chose to use a style that outlined it in a linear manner. I chose to first define loneliness, explain its potential relationship with older adults, and then provide a few suggestions as to what the next steps would be for a physician who identified an older adult with loneliness. I felt that the first section would help to explain the next section and so on, so I chose to number each section to help with the flow of attention and ease of reading comprehension. I chose to use muted colors and simple imagery to ensure that the focus would remain on the content while still being aesthetically pleasing. The size of the fonts ran on the smaller end, but printed as a poster or pamphlet, it would still be easily legible.

For the older adult's infographic, I chose to use a simpler, more direct style. Including the title, written content on the physicians' infographic was separated into eight sections. For the older adults' infographic, I knew that I wanted it to be simple so that it would keep the older adult's attention, making it easy to follow and understand. Including the title, written content on the older adults' infographic was separated into four sections. I chose to use different shades of blue as the background of this infographic because it's often described as a calm color (Stone,

2003). The format of this infographic was also linear in a way because it used lines that indicated movement from one section to the next. I made sure to use simple fonts and text sizes that were easy to read. I also made sure that within each section, seeing as they were different shades of blue, the text was in a color that contrasted the background well enough that it would be easy for an older adult to read. This is because presbyopia, or difficulty reading items close up, is a common occurrence in older adulthood (Lampi, et al., 2014). Simplicity was the biggest theme for this infographic, so I selected images that were easy to understand and only put a few words to go with it. I also tried to make sure that the imagery of people was diverse in hopes that older adults wouldn't feel excluded or unrepresented when looking at it.

Execution

I used Canva, a graphic design platform, to create both of my infographics (www.canva.com). Canva has plenty of sample templates for whatever form of design users need. I searched under the 'Infographics' tab of their template section and was amazed to see so many different samples. After I figured out the type of infographic that I had wanted to construct for each audience, I was able to look through the templates and see which ones aligned with my plans. Canva lets you completely customize their templates with colors, imagery, text, and layering, so I was mainly just looking for templates that had the structure and layout that I was looking for. After I selected mine, the first thing I did was change the color to the ones I had envisioned. It was a lot easier to work with after setting the tone of the infographic. Next, I inserted all of the information I selected from my paper and put it into its respective parts on the infographic. Then, I searched for images that I thought would complement the infographics without taking away from the content. After that, it was a matter of manipulating the sizing and alignments. I saved this part of formatting for last because I wanted to make sure that I had the

core content of my work on the page before trying to make it look aesthetically pleasing.

Revision

Before adding in citations, I reviewed the infographics with my senior advisor for feedback. I then incorporated the suggested revisions. The revisions mostly centered around ensuring that the final product was in alignment with the goals and purposes I had envisioned for them when I started the planning process.

Outcome

For the physicians, I tried to address one of the largest issues that I found in my research which was that physicians did not know how to address loneliness in their patients. I figured that if it was such a common problem, then it'd be beneficial to take what I've learned about loneliness in older adults and put it into an infographic for physicians to learn from and potentially use. The infographic briefly covers the definition of loneliness and then goes into risk factors/causes, adverse outcomes, how older adults deal with loneliness, and why perception matters. Then, I include a few brief bullet points of what I found would be useful for physicians in a "next steps" format. The last bullet point urges physicians who identify loneliness in their patients to refer them to behavioral health for a follow up. Patients are likely to disclose risk factors and feelings of loneliness with their primary care physicians, and this would allow physicians to direct patients to other medical professionals who may be more educated in psychology and are better equipped with the knowledge and resources to help their patients. At the bottom are the sources that I utilized in writing the content of the infographic. For potential electronic use of this infographic, I've hyperlinked the journal articles for easy access to the information. I see this infographic being used in a professional setting by physicians, maybe on a wall in the employee's area or printed and placed in brochure holders or files in the examination

rooms.

In addition to having an infographic for the physicians, I wanted to create an infographic that's geared towards the older adults. In this one, I also aimed to identify the risk factors/causes and feelings of loneliness but in a simpler way that's understood by lay persons, including older adults and their family caregivers. This infographic follows the format of a conversation. It starts with "Are you 65 years old or older?" as a way to get their attention and then it asks if they've experienced any of the risk factors/causes or feelings of loneliness. It ends with a call to action for the older adult to speak with their doctor and a reassurance that doctors care for them and want to help. In my research, I found that older adults, when experiencing loneliness, may not always know how to process those emotions (see Literature Review). They may feel the sadness and anxiety but not understand that it could be attributed to feelings of loneliness. The goal of this infographic is to reach out to older adults, to get them to think about their situations, and to provide them with a direct resource for support and engagement. This could hopefully help guide older adults who are at risk for, or who are experiencing, loneliness to talk to a medical professional. I see this infographic being displayed as a poster in a waiting room to catch the attention of older adults and/or their family members or as a single sided brochure sized card in brochure holders in the waiting room.

Conclusion

As evident from this project, there is a plethora of information on the subject of older adult loneliness and social isolation. The biggest issue, however, is that there's no common understanding of social isolation and loneliness—no one way of conceptualizing and operationalizing it. This prevents researchers from being able to conduct studies that align with each other's findings because they're using different definitions, with different understandings of

the subject, and they're using different methods of measuring data. So, when people like myself come in to cross-analyze these studies or to conduct an integrative review of the data and findings, we might not be coming to very accurate conclusions. It also proves to be an issue for healthcare professionals because they have different understandings of the issue and how it manifests in patients. It's an issue for policy makers because they can't enact structural change without having a clear understanding of the issue. It's an issue for the family member because the differing definitions and findings are confusing, and sometimes contradictory. Lastly, it's difficult for the older adult because they have a whole network of caring people who want to help but are led in different directions because of the lack of shared understanding.

Social isolation is more straight-forward and easy to grasp, and loneliness is what people tend to have a difficult time understanding. Individual perception is very important when we're considering loneliness and that's because loneliness is completely about one's perception of their situation and whether they *feel* isolated from others. The human mind is complex and it can cause us to perceive things differently from reality, and understanding this as a physician will help them to become more attuned to what patients say in appointments and how that may differ from their objective situation. We're trying so hard to come to this shared understanding of what loneliness is and what it looks like, but the subject of loneliness is so complex that there simply cannot be one understanding of it. The most researchers can do is find the patterns in existing research and to highlight research on the unique nuances of loneliness in different populations and individuals. The academic study of loneliness is a moving target, as societal and cultural changes throughout time may change one's experiences. We must not forget to include the personal narratives in such research. The number of older adults is rising rapidly, but we can stay ahead of the adverse outcomes of loneliness that may affect this increasing population by

educating ourselves *now* so that we have the knowledge to do something for them.

Going forward, it's vital that physicians take a person-centered approach. The individual's perception is key to truly understanding the relationship between social isolation, loneliness, and older adults. Some of the risk factors for social isolation and loneliness can naturally be produced from the process of aging, so it's important that physicians be wary of such risk factors in older adults seeing as they are a vulnerable population for both social isolation and loneliness. Social isolation and loneliness produce a variety of adverse health consequences that, if caught early, could be managed to prevent fatal outcomes. The most efficacious way to help the older adult in question is by getting to know them. Listen to what they're sharing. Ask questions that communicate a genuine sense of care for their feelings. Be patient and genuine so that they feel comfortable opening up about their experiences. Do something. Older adults sometimes aren't aware that they're experiencing loneliness and they aren't sure how to process their emotions. There are a variety of interventions and healthcare strategies in place, and the best way to determine which type would be most effective for older adults is by having conversations with them to get to know their perspective.

On a personal note, as I wrote this paper, I had my parents and grandparents in the back of my mind. They both raised me and they're my favorite people in the world. As I was making connections between the readings and noting my findings, I thought about how this is equipping me with the knowledge and ability to do something to help. They've taken care of me growing up and through this work, I feel that I'm able to return some of that and help them as well. I've produced this project as a student, but I am also coming from the point of view of a family member. I hope that as they read this paper, readers thought of someone whom this information could help. If not, I hope they thought about themselves. We are all going to be older adults at

some point, and I know that scares some people. To many, aging signifies illness and mortality, so there's a stigma around talking— and even thinking— about it. While my paper did touch on the many potential risks and negative outcomes of social isolation and loneliness, I hope it illustrated how aging is a unique and complex process. Taking the initiative now to learn about aging and the potential experiences that come with it can prepare us to help older adult loved ones and patients and to help *us* when we cross that bridge in the future ourselves.

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Appendix A

ARE YOU 65 YEARS OLD OR OLDER?

CAN YOU RELATE TO ANY OF THESE?



Tough illness



Loss of a loved one



Living alone



Family moved away



No transportation

FELT THIS WAY LATELY?



Ashamed - Anxious - Scared - Abandoned

YOU MIGHT BE EXPERIENCING A COMMON AND TREATABLE CONDITION — LONELINESS

WE ARE HERE FOR YOU!
TALK TO YOUR DOCTOR—
THEY WANT TO HELP.

UNDERSTANDING LONELINESS IN OLDER ADULTS



1 WHAT IS LONELINESS?

Loneliness is the **perceived discrepancy** between one's desired and actual quantity and quality of social relationships, but it is more often associated with the **quality** rather than the quantity of social interactions.

2 CAUSES AND RISK FACTORS

The greatest causes of loneliness in older adults: (1) **illness**, (2) **death of a spouse**, (3) **lack of family and friends**.

The major risk factors of loneliness in older adults: **cognitive impairment**, **widowhood**, **marital breakdown**, **relocation**, and **onset of disability**.

For **women**, **mobility problems** is the most notable predictor of loneliness in older adulthood. For **men**, it's **low levels of social contact**.

3 ADVERSE OUTCOMES

Physical: increase in mortality falls, cardiovascular disease, serious illness, functional decline, & malnutrition

Mental: increased depression, dementia, & elder abuse; feelings of fear, anxiety, and abandonment

Health service use: increased ER visits, physician visits, & long-term care admissions

4 HOW OLDER ADULTS DEAL WITH LONELINESS

People view loneliness and its manifestation differently, and they may have **different approaches** to preventing and dealing with it.

NOTE: some older adults may be hesitant to seek treatment for loneliness! Loneliness → anxiety → reduced level of energy → **decreased likelihood of seeking help**.

5 PERCEPTION MATTERS

Factors like one's **upbringing**, **culture**, **education**, **family life**, and **socioeconomic status** all shape an older adult's view on life and their view on loneliness as well. How one views loneliness will determine how they experience it and what type of treatment they may accept.

NEXT STEPS FOR PHYSICIANS

- **Keep an eye out** for potential risk factors and be vigilant about directing patients to physical and/or emotional support.
- **Talk to your patients!** Find out how they perceive their situation. This will provide the best starting point to determining the effectiveness of any potential interventions.
- **Follow up!** Loneliness, even when not chronic, does not typically go away quickly or on its own. Ensure that your patient has the resources and support that they need!

If you identify loneliness in your patient and they are open to intervention, please refer them to behavioral health for additional follow up.

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