Isolation in the Time of Pandemic: An Analysis of COVID-19-Induced Loneliness and Its Concequences

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Abstract. Loneliness, as a feeling of being socially disconnected, is a well-established risk factor for a range of physical and mental health problems. COVID-19 has disrupted the lives of people and societies around the world. In the context of the pandemic, the experience of loneliness has been exacerbated by factors such as prolonged periods of isolation, reduced opportunities for social connection, and the loss of social support networks. The prolonged negative impact of pandemic-induced loneliness causes public health concerns, with potential long-term implications for individual and societal well-being. The aim of this study is to examine the psychological, social, and economic consequences of prolonged loneliness induced by COVID-19. Through a combination of case study and systematic review of social issues, in regards to elderlies, pet, petowners, and lonely consumers, experienced during the pandemic, this research seeks to shed light on the impact and suggestions resulting from this phenomenon in the post-pandemic era.

Keywords: Loneliness, Pandemic, COVID-19, Isolation.

1. Introduction

The next vital public health issue that is receiving increasing recognition is loneliness. Loneliness has been proven to be associated with negative social impact and health issues such as earlier mortality. This concern may attribute to emerging societal trends that are influencing the ability to connect, communicate, and function effectively in social environment [1]. It is probable that loneliness arises as a result of a complex interplay of various factors. For example, mental condition, cognitive health, physical health, demography, biology, and genetics. Moreover, scholars indicate that emerging socioenvironmental factors such as changes in communication and work practices are deemed crucial in comprehending their impact on loneliness in the present social climate [1]. However, loneliness has been a phenomenon that can affect individuals regardless of factors such as age and living situations. Adolescents who are in the process of developing their personal identity as well as retirees who lack social companionship, are both susceptible to experience loneliness. Similarly, consumers residing in suburban areas may feel socially isolated due to limited access to social facilities and resources. Regardless of various circumstances, loneliness may manifest differently in each individual [2].

While the existing prevalence of loneliness is acknowledged as a significant social issue, the COVID-19 pandemic has further intensified the prominence and gravity of loneliness-induced social concern. The outbreak of COVID-19 has created a profound impact on societies worldwide, disrupting daily routines, social interactions, and economic activities. One of the most significant consequences of the pandemic has been the rise of social isolation and loneliness, as people have been forced to limit their social contact with others to prevent the spread of the infection [2]. Since the majority of the population relies on social interactions for support and companionship, the prevalence of loneliness has led to an unprecedented surge in mental health challenges, including depression, anxiety, and other related disorders [1]. Moreover, researchers suggested that individuals who reside by themselves, senior citizens, and individuals with pre-existing mental health conditions are especially vulnerable towards risks induced by the pandemic [2]. Given this context, researchers anticipated that a substantial group of lonely consumers will emerge, who have become entrenched in social isolation. In particular, consumers are prone to behave and consume products and services

instilled with intricate social elements. For example, the experience that facilitates enjoyable socializing, will contribute to happiness, companionship, and well-being [2].

In response, this paper investigates the consequences of prolonged loneliness induced by COVID-19, seeking to understand the psychological, social, and economic impacts resulting from this phenomenon in post-pandemic era through case study and systematic review of social issues existed during the pandemic. This paper also aims to contribute to this growing body of knowledge by analyzing existing research on the impact of COVID-19-induced loneliness, identifying key insights, and discussing potential avenues for future research and intervention. Ultimately, this paper seeks to shed light on an urgent and complex issue and to inform policies and practices to promote mental health and social well-being in the face of the post-pandemic era.

2. Impacts of COVID-19-Induced Loneliness

The outbreak of COVID-19 in early 2020 has resulted in multidimensional social impacts. One of the social concerns is the prevalent loneliness among the population, which resulted from the epidemic prevention practices of social distancing, quarantine, and lockdown. Scholars identified loneliness as a major public health issue that requires social and medical supports [1]. In addition to structural social change, a study has indicated that loneliness caused by these temporary practices continues to escalate into persisting impacts and change consumer behavior due to extended social isolation [2]. Among this growing group, elderlies who live alone and with poor levels of digital literacy, tend to be more vulnerable to loneliness induced by the pandemic. Basic needs, such as online shopping and socializing, of older generations are failed to be met due to the inequality in digital applications among different social groups. Besides marginalization, the increasing level of stress and loneliness resulting from health risks has also aggravated mental health of elderlies [2].

Lonely consumers attach their social needs and emotions to nonhuman agents (e.g., pets, processions, products, brands) to mediate loneliness, which drives anthropomorphism and parasocial relationship in the consumption context [2, 3]. For example, lonely consumers seek affiliation by consuming the majority-endorsed product, while projecting self-identity on the minority-endorsed product under private consumption contexts [2]. However, comforts provided by the attachment towards nonhuman agents kept consumers isolated from real social interactions, which further increases the level of loneliness [2]. Other than insufficient real social activities and connections, the lack of psychological attachment contributes to the formation of consumer loneliness. As a result, lonely consumers tend to compensate for their psychological needs by establishing social connections and affiliations by shopping, for example, interacting with the salesperson or other consumers [3].

The normalization of telecommunication caused by social isolation during the pandemic has also continued to influence lonely consumers by forming a new communicational habit. Social media became the major coping mechanism for adolescents to alleviate pandemic-induced loneliness and establish a sense of belonging [3]. However, the reliance on telecommunication continues to accelerate loneliness and further keeps consumers isolated from quality social interactions [2].

3. Analysis of COVID-19-Induced Loneliness

3.1. Digital Technologies

3.1.1 Online digital technologies benefit the mental health of elderlies living alone

The outbreak of the pandemic resulted in collective mental issues and the prevalence of depression increased during the outbreak. Among various social groups, elderlies living alone are specifically prone to depression [4]. While studies have shown that living alone is the main cause of depression, the probability of suffering from depression is the highest among lonely elderlies over 80 [4].

The World Health Organization (WHO) forecasted an increase of 34% of the population over 60 year old, which will grow from 1 billion to 1.4 billion in the next decade [3]. By 2050, the proportion of the elderly will rise to 22% [3]. The number of elderly living alone has increased simultaneously

with this trend [4]. As the aged population continues to grow globally, the increasing need of mental health support for elderlies became an issue for not only the geriatric service provider but also the society [5]. Studies have shown the potential of solving this issue by adapting online digital technologies to the lives of lonely elderlies due to the alleviating effects of non-face-to-face social interactions on the solitude-induced mental issues of elderlies [6]. Meanwhile, a Singaporean study suggests that digital technology helps elderlies to socialize with peers [7]. There also is a positive correlation between the use of mobile devices and the mental and physical capabilities of elderlies has been justified. For example, AI Care services, such as AI smart speakers, have been proven to be effective in reducing loneliness and depression [6]. Elderlies living alone implies a significant need of Digital healthcare platforms (DHPs), which enables access to healthcare consultancy and services through online digital channel regardless of the mobility of patients. Moreover, DHPs reduce costs and inefficiency and enable more personalized medical services [8].

While some digital platforms have been developed according to the psychological and social needs of elderlies, the involvement of elderlies is crucial to elevate the intention of use and satisfaction of elderlies [7]. The lack of trust in digital channels and services is the most prominent factor that impedes the wide application of online services and platforms among elderlies. For example, elderlies mainly concern about inaccurate diagnoses of DHPs. The lack of confidence, interest, and the sense of security contributes to other main causes of low participation in online digital technologies [8]. Alongside the limited studies in regards to how elderlies seeking for social and leisure activities through online digital technologies, an online digital application designed for social and mental wellness of elderlies are sparse in the market [7].

3.1.2 Application of Digital Online Platforms (DHPs)

The global trend of the growing aged population accompanying with the pandemic has called attention to the well-being of elderlies. Apart from the vulnerable physical health condition of elderlies, mental illnesses, such as depression, anxiety, and fear of infection deteriorated the living condition of elderlies, especially in countries and regions with the salient disparity in access of medical resources [5]. Scholars have indicated that digital technology, for example, digital health platforms (DHPs), enables access to variable medical resources, consultant services, and social connections through one interface [8]. As the mobility of the older population is restricted and limited by their health or economic conditions, promotion of the intention to use of digital technology can be crucial to sustain the quality of life [5].

Social influence, which involves communities and family supports, is a main motivator for the use of digital technology among elderlies. Scholars recommended an intergenerational approach, which allows tech-savvy generations to attain academic credit by teaching older generations to use digital technology. Moreover, studies identified an influential role of peer supports among elderlies in terms of encouraging the use of digital technologies. Peer supports also promote the perceived ease of use and further enhance user confidence among elderlies [7].

In terms of the design of DHPs, for the better adoption of digital technologies among elderlies, there are a few aspects to which developers can make adjustment. Many elderlies are still unaware of the existence of DHPs. As a result, rising awareness among elderlies through marketing activities will directly boost the intention of use. Step-by-step guidance before the use of technology will also increase adoption. However, the perceived price level of online services is uncertain among the older generations. Therefore, a price model that accommodates to various needs and preferences of elderlies is essential to elevate the intention of use [8].

3.2. Pets Ownership

3.2.1 Pets ownership protects mental well-being in the post-pandemic era

The tendency of attaching social needs to nonhuman agents, including pets, increased during the pandemic [3]. During social isolation of the pandemic, the rate of pet ownership became more popular in the U.S. [9]. Due to the complexity involves in the interactions between two organisms, pets create

variable connections between pet owners in comparison to other nonhuman agents [10]. Meanwhile, the perception of owning pets positively correlated to happiness and health is becoming popular in recent years [10]. Research carried out by Human-Animal Bond Research Institutes (HABRI) has justified this perception by showing a positive correlation between pet ownership and the mental and physical well-being of human, which is recognized by 97% of family doctors [10].

Identifying factors that boost long-term health and reduce vulnerability induced by chronic stress plays important role in protecting the wellbeing of the older population [11]. Human-animal interaction (HAI) contributes to the benefits of pet ownership by ameliorating health issues in regard of cardiovascular functioning, metabolism, and inflammation of older populations [11]. Given the prevalence of pet ownership among seniors in the U.S., studies found that the likelihood of owning a pet is higher among pupolation who are more resilient to chronic stress induced by social isolation or social loss [11, 12]. Moreover, scholars proved that pet ownership that sustained more than 5 years nurtures the cognitive health and reduces cognitive disparity among population over 65 [12]. Besides senior population, scholars reported a positive association between HAI and personal resilience to stress among marginalized social groups, such as sexual and gender minorities, during their early adulthood [13]. The negative impacts resulting from perinatal mood and anxiety disorder (PMADs), which is a prevalent mental issue lacking social support and attention, creates longlasting effecting on females and their families. HAI provides nonpharmacological therapy, which supports maternal mental well-being, to females and families who own pets [13].

On the other hand, the strong kinship and emotional bonds between human and their pets impede the fulfilment of physical and mental needs of both human and animals and makes adverse situation more challenging [11]. Economic vulnerable pet owners tend to prioritize their pets' well-being and irgore their own health. Moreover, resulting from social control and regulations, economically disadvantaged pet owners and their pets are more likely to be separated and inaccessible to pet services, such as advanced pet treatments and pet-friendly hotels. Considering well-being of pets, study has shown that more than 10% of the owners tended to postpone their treatments, as pets were unlikely to receive pet services due to unavailability or unwillingness. The pandemic-induced unemployment and economic downturn have also limited the petcare options and escalated the adversity. Pet owners have also reported a lacking of plan for animal treatment and pet care, in case pet owners were hospitalized [9]. Under the work-from-home situation, pet owners indicated frustration resulting from the desire for attention from pets. Pets lacking of sufficient physical exercises also displayed behavior issues, which negatively impacted the wellbeing of human [9].

3.2.2 Instituitional pet sercives and supports

The connectedness and issues between pets and pet owners reveal the potential needs of social supports. Promoting a healthier animal-human relationship should become the future communal goals of stakeholders involving in pet ownership. Pet institutes and communities may provide the following service to improve the living conditions of both pets and pet owners. For example, offering pet medical insurance that allows the low-income household to access pet-friendly services ranging from veterinary treatment to behavioral training with pet owners. For pet owners with limited mobility or health vulnerability, community services and support can effectively help pet owners to fulfill the needs of animals. For example, helping dog owners to walk their dogs if pet owners are reporting physical disadvantages. Research about COVID-19 treatment of pets is yet to be carried out. Future research should also focus on medications and services in regard to the well-being of pets during the pandemic.

3.3. Longly Consumption

3.3.1 Demands for experiential consumption increase

Shopping has been proven to be an effective coping mechanism to ameliorate loneliness by engaging in mood-regulation activities. Consumers consider loneliness-induced consumption as a social activity that helps consumers construct social connections, which is not only motivated by

material and socializing activities but also experiential consumption, such as travelling [3]. Consumers long for affiliation and social relationships in consumption context [2]. In comparison to material consumption, experiential consumptions, specifically sightseeing and travelling, are more effective in elevating social well-being [14].

The recovery of tourism reveals a notable refuge attitude, which manifests in behaviors of avoiding densely populated destinations, preferring solitary travelling, and looking for retreat experiences. The demand of travelling will also increase in the post-pandemic era by enhancing interpersonal interactions. In addition, social media and social networking platform enable lonely consumers to compensate for their inadequate social relationships. While online travel communities promote peer communication, consumer loneliness increased the use of the touristic online application on smartphone and peer-to-peer accommodations [14].

Luxury goods consumption has seen a growth in post-pandemic era because of the desire for various social motivations, such as recognition and self-expression [14]. Scholars identified the importance of brand experience and consumer involvement in terms of luxury consumption. Brand experience refers to experiential aspects, such as store ambience, scent, and services which contributed an immersive consumption context. Customer involvement responds to personalized customer-brand relationship management to which consumers psychological and social needs are attached [15].

3.3.2 Profiling lonely consumers

For consumers who seek social connectedness through experiential consumption, companies should offer a platform that enables social interactions. Brands should also provide platforms or create social occasions that enable customers to express their identity and establish a sense of belonging. Companies of the tourism industry should integrate managerial tactics, such as operational management and price adjustment to prepare for the upcoming tourism rebound. Moreover, even though previous studies have indicated consumer behaviors, more research should be carried out to deliver a distinct profile of the lonely consumer. Consumer traits, such as self-efficacy, empathy, ethical identity, should be examined as precedents of consumer profiles to predict consumer behavior [3]. Culture is another factor that companies should take into account in terms of understanding consumer loneliness. Therefore, future studies should explore the perceived consumer loneliness in terms of different cultural backgrounds [3].

4. Conclusion

This paper examines the social effects resulting from the prolonged pandemic-induced longlines. Among various social groups, elderlies, especially those living alone, requires substantial attention and supports from society and communities due to their physical and mental vulnerability to infection and loneliness. Practitioners should facilitate digital technology and encourage the application of DHPs to allow elderlies to attain the access to medical services without mobility constraints. Even though pets ameliorate mental stress resulting from pandemic-induced loneliness o, social isolation caused by the pandemic has also challenged the relationship between pets and pet owners. This study excludes considerable number of book chapters and experimental statistics, which constrain the comprehensiveness of the study. This paper examines loneliness regardless of cultural perception, which may impair the comprehensiveness of the understanding of the key concepts of this study. Future practitioners should provide institutional veterinary services and supports addressed to the tension between pets and pet owners. Researchers expect to see a rebound in tourism in the post-pandemic era. Other than travelling, experiential consumption is going to increase due to the solid psychological demand of lonely consumers. Future practitioners and researchers should focus on developing a comprehensive consumer profile that depicts loneliness and decision-making process. The study reveals the latent prolonged impact of the pandemic and provides indications for practitioners in industries which serve retirees, pet, pet owners, and tourism. The pandemic-induced loneliness may also lead to structural social change due to the change in consumer mental states.

Therefore, potential market addressed to the needs of lonely consumers and social groups who are highly vulnerable during the pandemic is expected to emerge.

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