

Aging Women in Lebanon: Struggles of Pet Owners in a Collapsing Economy

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Abstract

Companion animals can enrich people's lives in various ways. Numerous research studies have proven that pets have the ability to improve a person's emotional wellbeing, physical health, and social lifestyle as well as reduce feelings of isolation and loneliness. Among the constantly rising number of people living with companion animals, older adults often tend to form deep connections with their pets and perceive them as irreplaceable family members. However pet ownership comes along with a set of responsibilities and expenses that are crucial to maintaining a healthy human-animal relationship. Following the overlap of Lebanon's financial crisis and the COVID-19 pandemic, aging Lebanese women have become significantly more likely to suffer from financial insecurity. In this study, seven Lebanese women were asked to participate in semi-structured interviews and co-design iterations to identify, and find a solution for, barriers they are facing as pet owners. In addition, four animal care professionals were invited to contribute as secondary participants. The results indicated that the current most common pet-care barrier for aging women in Lebanon is the lack of funds to support their animals. Findings also support previous research claims revolving around human-animal relationships, family-centered Lebanese community values, and how the crises in the country have affected people's daily lives.

Primary Participants: Aging women in Lebanon who own one or more pets and live on low to medium income.

Secondary Participants: Animal care professionals and pet-care sponsors

Keywords: human-animal bond; companion animals; aging women; Lebanon; pet ownership barriers

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Introduction

Previous studies on pet ownership detail the positive effects animals can have on the lives of aging adults (K. A. Anderson et al. 2015). Moreover the relationship formed with the animals can be strong, as many people tend to view their pets as part of their family. A study with older women has reported participants expressing enjoyment of the company and affection of their pets, as well as a sense of attachment to their animals (P. A. Mahalski, 1988). Although pet ownership can be a positive addition to the lives of aging people, it comes with a list of responsibilities and expenses that pet owners must be prepared for. K. A. Anderson et al. (2015) explain the financial barriers many older people face as pet owners. Adoption fees, renters pet deposits, pet food, medical expenses, and other payments often make it difficult for low-income individuals to provide decent care for their pets. Within the current context of Lebanon, pet ownership has become a pricey luxury for most people in the midst of the country's ongoing political and economic crises. While pet-care assistance services are available in other countries, Alijla (2016) describes the lack of governmental and organizational support in Lebanon due to the country's corrupt political system.

According to Usta et al. (2015), aging women in Lebanon are especially vulnerable to struggling with low socioeconomic status. This is mainly due to the Lebanese society's biased views on gender roles, which in turn puts women at a higher risk of accelerated aging Steptoe and Zaninotto (2020). Since the start of the Lebanese revolution in 2019, and the COVID-19 outbreak in 2020, the Lebanese currency has lost 95% of its value against the American Dollar (American Near East Refugee Aid, 2021., Chehayeb, 2021). This collapse kickstarted the ongoing price inflation in Lebanon, increasing the number of Lebanese people living below the poverty line up to 78%. Being a female aging pet owner living in Lebanon is now accompanied

by various pet ownership barriers. The goal of this research was to pinpoint specific pet-care barriers these women are facing today, and collaborate with them to co-design a realistic solution.

For the purpose of this research, 11 participants were recruited. The seven primary participants were women living on medium to low income, and have one or more pet(s). The four secondary participants acted as professional animal care consultants. All participants took part in one semi-structured interview, as well as a remote co-design activity. The pet owners discussed their relationships with their pets, their living situations, and how they are currently navigating pet ownership within the country's collapse. In the results section, interview data was showcased in a story-telling manner. Quotes from interviewees, along with images from their homes, were showcased to portray a more clear picture of their reality. The study then proceeds to the discussion, where the most common and urgent barrier the women are facing is described: lack of financial ability to take care of their pets. As the study developed, it was clear that this issue is affecting pet owners in Lebanon outside the participant criteria in this research. The participants were presented with an initial solution design idea, and we continued to co-design a more effective iteration together. The outcome was a simple, yet effective, sponsorship process that build upon Lebanese cultural values and the participants' pre-existing knowledge

Literature Review

Aging in Society

Social Gerontology

Social Gerontology focuses on studying social, economic, and demographic situations of older populations, and has additionally expanded to investigating the community's everyday lifestyle (J.E Phillips et al., 2010). Aging communities frequently struggle with the rapidly changing social structures surrounding them, which can be characterized as structural lag (Foner, n.d.). This concept can be directly linked to disengagement theory and its opposing view of activity theory. Disengagement theory, expounded by Cummings and Henry (1961), states that as people grow old, their disengagement from society is an inevitable process that severs or alters their relationships with other individuals (Bond et al., 1993). In contrast, activity theory argues that aging successfully requires maintaining the same level of social activity one would have in their middle-age years (Havighurst, 1963, as cited in Bond et al., 1993). The authors express that both theories have been argued as two unrealistic extremes, with disengagement theory described as inaccurate, and activity theory criticized for its idealistic nature. Those two theories can inform the struggles related to aging in society, such as age segregation and ageism (J.E Phillips et al., 2010).

In their book, J.E Phillips et al., (2010) explore fifty of the key concepts in social gerontology, such as age integration, advocacy, ageism, and bereavement, to name a few. The authors discuss age integration as the key method, proposed by Riley and Riley (1994), to address structural lag and ageism barriers for older populations. As life expectancies are increasing, societal role opportunities must expand to integrate older individuals as active members of society. During a

lecture in the University of Michigan, Winkelman (2004, p. 4) expressed that “society should become less age-graded, where age determines what is expected and permissible—an age for education, an age for work and marriage, and an old age for retirement and leisure. Society should become more age-integrated, so that education, work, and leisure are experienced throughout the life course”. As for advocacy, it is a way of meeting human needs, increasing power and participation, and responding to intergenerational conflicts (Phillipson, 1993, as cited in J.E Phillips et al., 2010). It is often needed for older adults when they lack natural advocates (i.e., close friends and family members) to voice their unheard experiences. In such cases, older people may need help to make more informed choices and take better control of their lives (J.E Phillips et al., 2010).

Concerning bereavement for older adults, J.E Phillips et al., (2010) describe this concept as experiencing the loss of someone, or something, highly valuable in one’s life such as a spouse, friend, companion, or perhaps losing financial stability. Bereavement can increase the risk of anxiety, social isolation, and depression for older people, especially since they face higher chances of loss at their age. The authors highlight that due to the frequent desire to “dissociate aging from death” (i.e., gerontophobia), the concept of bereavement in social gerontology has been surprisingly under-researched up until recent years, and is often limited to events of spousal loss. According to Bond et al. (1993), women possess a higher life expectancy than men do, a phenomenon that has increased throughout the 20th century. The authors note that due to this longevity imbalance, older women are more likely to face widowhood. In addition, Older women are less likely to remarry, compared to men, therefore they wind up living alone, often in residential care facilities. Pearsall (1997) argues that due to society’s gender-based double standards, the pressure and anxiety of aging is often significantly higher for women than it is for

men. The author calls for studying the intersectionality of age and gender for older women, and stresses the need to learn more about the struggles associated with it.

Aging in Cultural Contexts: Lebanon

Little (2014) argues that “Cultural values and attitudes can shape people’s experience of aging”. This also entails that different cultures have different meanings regarding the amount and type of care older people receive. For example, Western cultures view older people as independent individuals and expect them to tend to their own needs and care as they age (Little, 2014). In contrast, in Arab cultures, specifically the Lebanese, older people rely almost completely on their families for security as they age (Abdulrahim et al., 2014). The Lebanese government offers little to no support for aging individuals, and therefore family and friends are very crucial social and financial resources. Moreover, multigenerational living is very common in Lebanon, where young adults reside with older family members and act as their main providers and caretakers (Abdulrahim et al., 2014). This is mostly the norm for families with average or lower socioeconomic status, however still a prevalent practice throughout the culture. Unfortunately, Abdulrahim et al. (2014) point out that without governmental help, often families are unable to adequately care for their elderly and it is a difficult responsibility to take on in the midst of Lebanon's economic and political collapse.

In simple terms, surviving today in Lebanon means living in constant uncertainty of what the future holds. It means relying purely on one’s self, family, and friends for any kind of support, because the sectarian political system is corrupt and not to be trusted. Alijla (2016) talks about how inequality and sectarianism in Lebanon has led to the destruction of trust in the country. The Lebanese state recognises 18 different ethnic sects within the system, each based on their

religious affiliation. This divide is clear in social everyday life, where people assess each other based on their affiliations with different sects. It also extends to create inequality within different sectors in Lebanon, such as discriminatory educational systems and biased professional hiring standards. Alijla (2016) explains that Lebanese people tend to define themselves and one another through the framework of their sect and ethnic affiliation rather than by their shared Lebanese identity, leading to the low levels of generalized trust. This is further carried out by a corrupt regime that enforces discriminatory policies in its system that favors one sect over the other. Alijla (2016) highlights the constantly rising number of NGOs (Non-Governmental Organizations) and other civil society organizations in Lebanon, which have a prominent role in supporting the general population and are filling the shoes of a failed political system. Unfortunately, even such organizations are not free of sectarianism, and corruption still blooms at every opportunity.

October 17, 2019 marks the day the Lebanese people gathered across the land and decided to protest their government and the poor economy they have been enduring (American Near East Refugee Aid, 2021). This was followed by the COVID-19 outbreak in early 2020, and later the infamous Beirut Blast on August 4. The country is now witnessing an all-time-high number of “78 percent of the Lebanese population living below the poverty line – some three million people – with 36 percent living in extreme poverty” (Chehayeb, 2021). The Lebanese currency has lost more than 95 percent of its value since the anti-government protests started in 2019, and the cost of living in Lebanon has become unbearable for most people (Chehayeb, 2022). The deadly combination of protests, COVID-19 implications, and the August 4 Blast have left the Lebanese people living in Agony. Saliba and Taher (2020) describe the current situation in Lebanon as the worst financial crisis the country has seen in thirty years, considering that even prior to the

COVID-19 setback, Lebanon has already been grappling with growing national debt and an escalating financial crisis for decades. “When will we place our basic rights and wellbeing ahead of our sectarian and political affiliations? When will our health, mental and physical, become more important than perpetuating political and financial practices that have failed to deliver for decades?” (Saliba and Taher, 2020). In regards to age and gender, middle-aged and older female adults seem to be more affected by the economic crisis. Kharroubi et al. (2021) reveal that, following the overlap of Lebanon’s financial crisis and the COVID-19 pandemic, older Lebanese adults are significantly more likely to suffer from food insecurity, and more so are women. Amenity price inflation, job loss, and salary cuts have left a big part of the Lebanese households unable to afford adequate basic daily needs such as food (Kharroubi et al., 2021).

Within this crisis context, it becomes difficult for low-income middle-aged and older adults to secure adequate levels of safety or quality of life as they age. Abdulrahim et al. (2014) highlight that stress related to war as well as political and economic instabilities can highly affect older adults, and its effects are reported in higher levels among aging adults in comparison to their younger counterparts. Mortality, physical health, and psychological well being are all factors to be considered during turbulent events leading to financial insecurity. Steptoe and Zaninotto (2020) have concluded that lower socioeconomic status among older adults can directly be related to accelerated aging among various domains, such as physical capability, cognitive function, emotional wellbeing, and more. The authors argue that social circumstances have a prevalent role in a person’s aging process, and can accelerate decline over six to eight years. In other words, people who undergo difficult social and financial experiences are more likely to age faster. Women in Lebanon are especially vulnerable to struggling with low socioeconomic status due to the society’s views on gender roles. In a study conducted in Lebanon by Usta et al. (2015),

men's negative views on educated and working women showcase how females are generally expected to strictly fulfill their roles as wives and mothers. The researchers reveal the diminished financial freedom women often have in Lebanon, especially those living on lower income. Considering the ongoing crisis in Lebanon, aging women may be especially at risk of struggling financially and therefore vulnerable to accelerated aging.

Older Adults and Animal Companions

The study of Human-Animal Interaction (HAI) became popular by the late 1970s, followed by the expansion to Anthrozoology during the 1980s (Herzog, 2016). Researchers were becoming more interested in the effects HAI could bring to the lives of people, and the meaning behind the relationships formed between humans and other species. Generally, studies on the physical and psychological repercussions of pet ownership on older adults stipulate the animals' beneficial roles, while others fail to pinpoint measurable data. K. A. Anderson et al. (2015) argues that this is often due to lack of thorough research, faulty participant selection, and self-report biases. The authors showcase examples of their research findings indicating that pet ownership decreases levels of loneliness and depression, and increases physical activity, social interactions, and overall biomarkers. Pets may even become a substitute for human relationships in the lives of older people (Miltiades & Shearer, 2011).

Narrowing down the search parameters to pet ownership for older women, very little literature was found, some of which dates back to the 1980s. Nevertheless, some information illustrated the benefits and barriers of pet ownership to senior women living alone and/or in long-term care facilities. When elderly women participants were surveyed on the advantages of cat ownership, it was mostly confirmed that their companions provided affection, company, happiness, and a sense

of security (P. A. Mahalski, 1988). On the other hand, certain disadvantages were pinpointed when non-pet owners were asked to elaborate on their choice not to have a pet cat. The pensioners' answers included worrying about dying and leaving the cat behind, the added expense for low income participants, and worrying about the cat dying or getting displaced, among other reasons. The authors emphasize that the majority of participants supported the idea of owning a pet, but approximately less than half of them actually owned one. It appears that what was described in this research as disadvantages of owning a cat may in fact be characterized as barriers which could be addressed with inclusive design approaches.

Pet Ownership Barriers for Older Adults

According to Toohey et al. (2016), more than one third of older adults in Canada (i.e., 65 years and older) report living with a companion pet, and while pets can be a wonderful addition to an elderly person's home, numerous barriers can manifest. From the moment an elderly individual decides to welcome an animal companion into their home, they are bombarded with financial barriers. Pet adoption fees and renters pet deposit fees are often unreasonably high and considered two of the primary reasons senior citizens refrain from adopting an animal, especially low income individuals K. A. Anderson et al. (2015).

In a study conducted by Enders-Slegers & Hediger (2019) it was revealed that elderly people living with pets are frequently at risk of physical injury or tripping hazards due to required pet care chores. This study traces this issue back to the community's living environment which was not well adapted for pet owners. Furthermore, the authors indicate that seniors with pets are more prone to putting their health at risk by refusing necessary hospitalization due to the lack of prior pet-care planning, therefore leaving the animal unattended. Leaving a loved pet behind can add

emotional stress to other possible physical health issues Enders-Slegers & Hediger (2019). The study also revealed that in many cases, when an elderly individual is unable to independently provide care for their pet, they might request help from their caregiver, who may not want the added work tasks or may be unable to perform that service correctly.

Research was conducted by Chur-Hansen et al. (2008) to determine reasons for seniors to refrain from pet adoption, and the participants seemed highly concerned for the animals' wellbeing. Six senior women and two senior men participated, and responses included that their living environment was not adequate for having an animal, worrying about tripping over the pet and injuring them or themselves, and concern about dying and leaving their pet in emotional distress. This fear of death, or Green Banana Syndrome “why buy green bananas when you’ll be dead before they ripen?” (K.A Anderson et al., 2015), can possibly be due to the lack of information on pet adoption choices offered by animal adoption establishments.

In a BBC article, J. Reeder (2018) interviews a 104 year old man about his experience fostering a senior dog. The man describes a prolonged journey of being rejected as a pet-adoption applicant by numerous shelters due to his age. He was persistent to adopt a dog because he understood the special bond that can be created, and longed to feel the unique affection of the animal. The interviewee expresses his joy when Lionel’s Legacy Rescue paired him with a senior dog to foster for as long as he can. The author emphasizes that older dogs often end up abandoned in shelters when their guardian is unable to care for them anymore, and the man’s joy with his foster dog is proof that such initiatives would be beneficial for people and animals simultaneously. This article illustrates how age is another barrier hindering the opportunity for older adults to experience the benefits of pet ownership.

Existing Resources for Pet-Care Assistance

There's a variety of available resources and initiatives around the world attempting to assist the elderly with caring for their pets and planning for unfortunate events. Pets Of Older Persons (POOPS) is a non-profit organization based in Australia with a mission to provide help for pet owners who "due to financial disadvantage, age, medical emergency and/or disability, need assistance with caring for their beloved pets." ("About POOPS", 2020.). The Society for the Prevention of Cruelty to Animals (SPCA) also offers similar services, often to low-income seniors. Illness, disability, and old age can impede one's ability to adequately care for their pet, and the SPCA is making an effort to assist with their pet care support, or Companion Animal Programs (CAPS) ("RSPCA: Pet Care Support", 2019). Blue Cross for Pets is an initiative based in England offering help for elderly pet owners. They provide valuable information about dealing with pet loss, and have set up a confidential hotline to comfort people suffering pet-loss grief ("Pet Bereavement and Pet Loss", n.d). Additionally, Pet Peace of Mind is an organization that understands how much older adults value their relationships with their pets, and offers preparatory options that ensure a person's pet will continue a happy life after their owner has passed on ("Pets Peace of Mind", n.d).

Furthermore, there are some legal measures elderly citizens of the United States can take to ensure their pet's wellbeing long after they're gone. R. Hirschfeld (2007) points out that establishing a Pet Trust might be the most effective solution. The author explains that a worried senior pet owner can create a trust fund for their pet, and mention that trust in their will along with information on how the funds should be spent. In the meantime, Wagmo Pet Insurance is offering surprisingly affordable pet insurance packages where small monthly payments are

required and vet bills are instantly wired to the client's PayPal account (Editor at Obesity, Fitness & Wellness Week, 2020).

Methods

Participants

To ensure high standards of participant selection, I drew on research by Burholt, et al., (2010) on meeting the needs of older people in extracare. I have also referred to suggestions on purposeful participant sampling and snowball sampling by Palinkas et al. (2013). The authors emphasize that participant selection criteria must directly relate to the formulated research questions, and selected individuals should be able to provide thorough data on the research topic. With that being said, all participant applications were followed by a short screening process to ensure their meaningful contribution to the study. The process for primary consisted of a small number of questions to make sure that the participant currently has a pet, is living in Lebanon, is over the age of 60 years old, and is open to sharing her experience on pet ownership. As for secondary participants, a screening process was not needed since they were personal contacts, in addition to one referee by a primary participant. Ethics approval was acquired from the Research Ethics Board at OCAD University prior to recruitment.

Primary Participants

The recruitment process for primary participants included purposeful and snowball sampling (Palinkas et al., 2013). A recruitment flier was shared on private and public Facebook groups related to pet rescue and adoption in Lebanon (Appendix A) The post included information about

the study in both English and Arabic in order to eliminate the language barrier for non-english speakers. Privacy and confidentiality was an important aspect to consider when choosing to recruit participants through social media. The recruitment post clearly emphasized that interested women should refrain from leaving public comments, and may contact the researcher through a private message. Gelinas et al. (2017) warn that recruiting research participants through social media “risks allowing a participant’s networked ‘friends’ and ‘followers’ to infer protected and sensitive information about them”. Moreover, I refrained from viewing participants’ personal facebook profiles in order to avoid acquiring biased and preconceived notions about them prior to the screening process and without their consent (Gelinas et al., 2017).

With approval from the REB, the study’s inclusion and exclusion criteria for primary participants were considered in a flexible manner. Due to the COVID-19 crisis implications, it was difficult to accurately meet the original participant approval requirements in time. Age and income criteria were applied in a flexible manner as long as participants were deemed able to contribute the study’s research questions. The approved participant group included seven Lebanese women aged between 55 and 75 years old, and are currently guardians to one or more pets. Five out of seven women live on low income, and two on average and above average income. They have all lived their entire lives in Lebanon, except for one participant who recently relocated for medical purposes. Each participant was offered a compensation of 10 USD as an appreciation for their time. Those who chose not to accept the compensation were given the option to donate the amount to an animal rescue charity of their choice.

Secondary Participants

My previous background in animal rescue in Lebanon allowed me to reach out to personal contacts and friends in the field. In order to ensure ethical recruitment and research with personal contacts, I drew on Yuan, Y. (2014)'s study on *Turning Friends into Research Participants: Rationale, Possibilities and Challenges*. The author recommends that when research participants are also friends, the friendship cannot be overlooked, however the researcher should maintain a balance between both relationship types. In other words, during research activities, friends were treated as participants in order to respect the study's authenticity and the participants' contribution. Recruited friends were clearly assured that honesty during research activities is crucial, and their answers should not be biased towards the goal of the research (Yuan, Y., 2014).

The approved secondary participant group included four people, three of which are personal contacts experienced in animal rescue and adoption. The fourth individual is a financial sponsor for one of the primary participant's pet care needs. With consent from the primary participant, the sponsor was contacted and recruited to participate in the study. The three animal rescue and adoption professionals have all had extensive experience in working with animals, pairing animals with suitable guardians, and working with local animal welfare NGOs. The fourth secondary participant has had experience sponsoring multiple pet owners in Lebanon who are struggling financially and was able to provide information about her process. They all accepted the \$10 compensation as a donation to their cause.

Data Collection

Semi-Structured Interviews

A separate 45-60 minute interview guide for each participant group was developed and approved by the REB. Both guides started with up to three ice breaker questions to build rapport with the

participants, followed by 22 open-ended questions related to the research questions. The questions were designed to smoothly guide each interviewee throughout the topic without influencing their answers. The guide was designed with an open-minded perspective that allowed for the exploration of new paths and probing for unexpected outcomes (Gray, 2004, as cited in Koskei, B.K., & Simiyu, C., 2015). The final section of the guide was left for each interviewee to possibly share further unexplored information they thought was helpful to the study. In an effort to accommodate for cultural differences, the interview guides were translated to Arabic.

Lebanese people are often bilingual and in some cases trilingual (Wikipedia contributors, 2022), therefore the translation allowed for more comfortable interviews. Participants had the freedom to be interviewed in English, Arabic, or a combination of both. Prior to each interview, the consent form was clearly read out loud to each participant and verbal consent was acquired to begin and voice record the interview. Some participants were comfortable revealing their identities on the research report, others gladly consented to sharing photos and voice recordings.

Out of the seven women from the primary participant group, five were interviewed remotely through a Whatsapp call, and two were able to meet with me for a face-to-face interview.

Whatsapp is a messaging mobile application that allows users to communicate with each other using text, voice, or video messages (Whatsapp, 2022). It is very commonly used in Lebanon, and all the women were already familiar and comfortable using it for communications. There were often difficulties connecting and maintaining online calls with participants due to the bad quality of internet connection in Lebanon. Disconnecting and reconnecting a call during an interview was frustrating, however this is a problem that Lebanese people have adapted with.

After building rapport with the women, they were asked to answer demographic questions related to their age, marital status, economic situation, living situation, and professional status. I

then began to inquire about their day-to-day lives, their relationship with their family, and their companion animals. Next, the women were asked questions to determine their connection with their pets, existing difficulties with pet-care, and awareness of pet-care assistive services. Most primary interviews were conducted in Arabic, apart from two participants who chose to speak in a combination of Arabic and English, and rarely French.

As for secondary participants (i.e., animal care professionals and sponsors), interview questions inquired about their professional background working with people and animals. They were asked questions to inquire about pet adoption processes and the current state of local animal welfare NGOs and shelters in Lebanon. The participants contributed to the study's context from a professional point of view, and described their experiences in the field in the midst of Lebanon's recent crises. The fourth secondary participant shared her story of sponsoring pet owners in Lebanon while residing in America, and revealed the additional barriers Lebanese pet owners are facing today within the country's current economic context. All secondary participants chose to speak in a combination of Arabic and English during the interviews.

Conducting interviews in multiple languages posed a challenge during data analysis. It was not possible to use software to transcribe voice recordings spoken in two, and in some cases three, languages. In addition, Lebanese Arabic (*libnēne*) is significantly distinct from the traditional Arabic (Wikipedia contributors, 2022), therefore it was also difficult to transcribe interviews conducted purely in Arabic. Given the circumstances, interview analysis was done by listening to each interview voice recording, writing down key notes, and comparing them with previously taken field notes. I then listened to the interviews a second time, and translated the notes into one *rainbow sheet* per participant group (Cabrera-Mieles, 2021) (see Figure 1. Primary Participant Rainbow Sheet).

| Observation | Participant 1 | Participant 2 | Participant 3 | Participant 4 | Participant 5 | Participant 6 | Participant 7 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Lives with family | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Widowed / Divorced | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Adopted the pet / rescue pet | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Purchased the pet | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Feeds stray cats/dogs | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Was not well educated about pet care prior to ownership | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Used to have a negative view on pet ownership > changed | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Sees the pet as a part of the family / similar to a child | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Difficulties taking care of the pet / not always providing adequate care | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Age barrier in taking care of the pet | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Fears leaving the house for long periods of time because of pet | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Faces pet care financial barriers | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Received financial pet care help | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Received financial pet care help from family/friends | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Received professional pet care help | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Received pet care help from family/friends | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Struggles affording emergency pet care expenses | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Worries about pet getting sick or dying | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Worries about pet in case of personal emergency | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Aware of pet care assistance services in Lebanon | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Believes pet ownership differers between men and women | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Used to be employed / abandonment related to gender or husband | Red | Orange | Yellow | Green | Blue | Purple | Pink |
| Misses being a working woman / regret | Red | Orange | Yellow | Green | Blue | Purple | Pink |

Figure 1. Primary Participant Rainbow Sheet. This table shows the sheet method used for interview analysis

The rainbow sheet consisted of a spreadsheet with a list of questions and observations on the left-most column, and the list of participants on top of each right side column. Each participant was assigned a code name and a different color. As I listened to the interviews, I filled the participant cell that correlates with an observation with their assigned color. The rainbow sheet offered me a visual method to pinpoint common observations among different participants in each participant group. The two spreadsheets were then cross examined to connect common notes between participants from different groups, which further narrowed down the problem scope. Moving on, I used deductive thematic coding to define codes and correlate themes between interviews based on the research questions. The results of interview analysis informed the next step in data collection: remote co-design activity.

Remote Co-Design Activity

Following the interview analysis, a solution design started to formulate. I drafted the first iteration, and started the co-design phase to include both participant groups. All participants were contacted again and invited to participate in the second and last activity. Some were open to contributing and some declined due to timing and personal reasons. The co-design activity had to be done remotely and in a manner that suits the slow unreliable internet connection most participants had in Lebanon. The Co-Create Handbook (Co-Create, 2019) recommends to plan co-design activities based on the pre-existing experience and knowledge of primary participants to maintain a high level of their involvement throughout. Using Whatsapp texting and voice notes feature was a familiar method that was working well during interviews, therefore it was also used for this part of the research. Each participant received a private detailed text explaining the solution design idea I have formulated, followed by a list of questions to determine their opinion on it. Depending on the language the participant chose during their interview, the text they received was either in Arabic or English. The explanation was also shared as a voice note to ensure good communication. Using Whatsapp allowed the women to quickly share text, voice notes, and images to clearly communicate their messages.

Up to two back-and-forth questions and answers were conducted per participant when needed. Participant answers varied between two main perspectives: 1) primary participants acting as the main beneficiaries of the solution, and 2) secondary participants acting as consultants/experts on the matter. Both perspectives were crucial to working on the solution design's second and final iteration, however primary participants were given priority in important decision making. Following this activity, all agreeing participants were compensated with the \$10 gift as an appreciation for their contribution to the study. Many were interested in the outcome of the

research and asked to be updated if the solution design was to be implemented as a real answer to their current problems with pet care.

Results

The women's ages ranged between 50 to 71. Out of seven primary participants, only one woman owned a dog, while the rest were cat owners. However the number of cats owned by each woman varied drastically as shown in figure 2. All participants, except for one, acquired their pets by adopting them. Whether from animal shelters, independent rescuers, friends, or by rescuing them themselves. Only one participant purchased her previous and current pets through an online marketplace application called "OLX". She expressed that cats she has purchased belonged to either rescuers in need of money, or responsible breeders, or else she wouldn't have considered buying them. The remaining participants proudly refused the idea of purchasing their pets. All participants commonly referred to animals as souls just as equally deserving of love and care as humans are, even more so.

| No. of Participants | Type of Pet | No. of Pets | Location |
|---------------------|-------------|-------------|----------|
| 1 | Dog | 1 | Indoor |
| 1 | Cat | 1 | Indoor |
| 2 | Cat | 2 | Indoor |
| 1 | Cat | 10 | Outdoor |
| 1 | Cat | 35 | Mixed |
| 1 | Cat | 51 | Indoor |

Figure 2. Primary Participant Table. A table showing the number of participants, as well as the type, number, and location of their pets (i.e., indoor, outdoor, or mixed)

Five out of the seven women currently live with other family members, such as children, parents, or spouses. They are all currently unemployed, and some expressed feeling sadness that they are no longer working. Two of the participants mentioned that they stopped working after getting married, on account of their husbands' demands. The participants owning 35 and 51 cats now spend most of their time taking care of the animals. The owner of 10 outdoor cats leads a more balanced life, but does spend a lot of her time caring for her strays. They both expressed that they are unable, with good conscience, to not care for an animal in need especially today. All the women shared a common religious outlook on pet ownership and animal rescue. They believe that god created these creatures and that it is their duty as humans to feed them and care for them.

The Human-Animal Bond

Interviews with primary participants started by exploring the relationship each woman had with her pet(s), and then the conversation was steered towards questions about pet care barriers they were facing. During the first part, all the women expressed that they view their pets as part of the family. They love and cherish them with unconditional love, as a mother would feel about her child. Their religious beliefs seemed to strengthen their connection with their pets, and push them to be better guardians for them. The participants clearly emphasized the positive role their pets have had in their lives. The animals improved their mood, provided companionship, and were a source of comfort during difficult times. There were clear tones of excitement and joy whenever a participant was asked to describe her relationship with her pet(s). When asked about how she feels about her twenty three cats, the 62 year old participant expressed in Arabic "بيبي! أنا بس كون متضايقه لين، بكمش بصير لعين. مثل ولد زغير، بتحكّي بيّفهموا", which roughly translates to, "Oh

my god! When I'm feeling bad, Lynn, I just grab them [the cats]. I start playing with them. Like a small child, you talk to them and they understand!".



Figure 3. A Participant and Her Cat Cici. The woman is holding Cici the cat on her shoulder while turning away from the camera.

It was clear that the women worry about their pets' health, safety, overall wellbeing, and happiness. One participant mentioned that she didn't like animals prior to owning Cici, her cat. She lives with her daughter and grandkids, who adopted Cici without consulting her. The more she spent time with Cici, the more her perception of cats changed. She now spends most of her day with the cat, and described how much of a positive impact she's had on her life. She enjoys having a living being to take care of, and one that gives her back feelings of affection and comfort. She makes an effort to provide her cat with the best care to her abilities, similar to all other participants. The woman living with her 51 cats shares the same kind of love for each of her pets as Cici's owner does. She welcomed me into her home for the interview, and we spent

an hour with the cats roaming around us while she answered my questions. This participant was able to recall the names of each one of the 51 cats, and describe their personalities. She spoke about her close relationship with them, and refused the idea of ever separating from them.



Figure 4. A Primary Participant's Home (1). Two images: The first showing the home of the participant who owns 51 cats. The second showing the same participant with one of the cats on her shoulder as she faces away from the camera.

Pet Care Barriers within the Context of Lebanon

Although interview questions inquired about multiple issues, the women seemed to commonly circle back to one significant shared barrier: struggling financially to provide for their pets. The owner of 35 indoor/outdoor cats mentioned that with the current economic situation in Lebanon, less people are throwing away food in the trash, which is resulting in more cats seeking her home for a source of food. It has been very difficult for her to provide food and medical care for the cats. Living with her daughter and husband on low income, this participant is now struggling financially more than ever due to the country's economic collapse. The rising prices, along with

the Lebanese Lira dropping in value (Chehayeb, 2022), has made cat food, vet bills, and pet medical supplies either unavailable or unaffordable in Lebanon. As pet owners, all but two of the participants have been severely affected by recent events happening in the country. The other two participants, although currently able to manage their expenses, did express concern about what the future holds. The women shared a common concern about vet visits and pet medical needs. 5 participants are currently unable to spay/neuter some or all of their cats due to the current pricing of the procedure. This puts the owners of multiple cats at risk of constantly having new litters of cats that they cannot afford to feed or take care of.



Figure 5. A Primary Participant's Home (2). An image showing the participant who owns 35 cats. She is squatted on the floor while holding one cat, and another cat standing on the right next to them.

The women shared different levels of anxiety when asked about their pet care expenses. 5 out of the seven participants have accepted financial help to provide for their pets. Some received sums

from family members, and others occasionally resorted to asking for funds online on social media platforms like Facebook. The owner of 2 cats described instances where she had to choose between buying food for herself or for her pets. She got emotional as she continued to tell about a time when she was in a difficult financial situation, and had to cook plain pasta with canned tomato sauce for her and the cats to share. It appeared that participants with a lower level of household income were affected more critically with Lebanon's economic collapse and the inflated prices of pet care products. One participant pointed out that prices of meat and chicken have risen so much that she's now unable to constantly afford the produce for her family, let alone her cats. Prior to the country's ongoing crises, she used to visit the town butcher and buy chicken neck meat at a low price to feed the cats. With the current prices constantly on the rise, cat dry food (i.e., kebble) is now slightly more affordable as long as she picks low-end brands.



Figure 6. A Sleeping Cat. An image showing one of the participants' cats sleeping inside a cardboard box.

Pet-Care Assistive Resources

Speaking to primary and secondary participants confirmed the preconceived theory that Lebanon lacks professional pet care assistive resources. Not only are the women unaware of any available professional assistance to them, but animal care professionals confirmed the unavailability of such resources. One of the secondary interviewees was a previous board member at the local animal welfare organization Beirut Ethical Treatment of Animals (BETA). She discussed that the lack of funds at BETA, and other similar organizations, prohibits them from initiating programs to assist pet owners in need. BETA's animal shelters are now overloaded with 900+ dogs and 300+ cats. They are constantly asking for funds online, and doing their best to care for their animals. There were plans in place for different social programs to educate and assist pet owners in Lebanon, however it would be impossible with their current staffing and financial situation. The previous board member also discussed pet adoption policies at BETA. Older women are welcomed to apply for pet adoption, and are often encouraged to adopt senior pets. She expressed that applications may be rejected in cases where older women apply to adopt young kittens. First due to their age, and secondly due to the general hyperactive nature of kittens which can cause tripping hazards. Other pet adoption decisions may be affected by the applicant's financial situation, physical ability to care for the pet, home conditions, and lifestyle. The participant mentioned the delicate, sometimes difficult, balance the organization tries to maintain between encouraging pet adoption and rejecting unsuitable applicants.

With professional financial aid for pet owners unavailable, it came to my attention that some personal initiatives have been attempting to fill the gap. The woman owning 35 cats currently has

a sponsor assisting her financially from the United States. Her sponsor is a Lebanese woman who moved to the U.S to continue her studying, and took it upon herself to provide the cat owner with cat food on a monthly basis. With permission from the primary participant, the sponsor agreed to contribute to this study as a secondary participant. She spoke about feeling the urge to help animals and pet owners in Lebanon, but never having the time and space to personally rescue and foster animals. She was emotional as she described financial sponsoring as the only way she is able to assist with the burdens Lebanese pet owners are currently struggling with. The sponsor helps one of the primary participants monthly with 2 large bags of cat food, which are usually sufficient to keep her 35 cats well fed. She is also currently sponsoring other Lebanese pet owners who are in need of financial assistance to feed their cats and dogs. She expressed that there are many more pet owners in need of financial help, however she is at capacity in relation to her own financial situation.

The last two secondary participants were previous members of local animal rescue NGOs, and are currently working full-time as pet sitters. They have both had extensive experience with animal rescuing and pairing animals with suitable adopters. Their perspectives on the current situation for pet owners in the country were relatively similar. In their opinion, local animal welfare NGOs should have built assistive and educational programs for pet owners in Lebanon. People in the country tend to hastily adopt or purchase pets prior to understanding the responsibility and expenses that come along with animal ownership. They believe that this lack of education on the subject is one of the main reasons many pets have been dumped on the street in the past few years. As the economic crisis hit Lebanon, they were contacted by numerous pet owners asking if they can rehome their pets. Some were unable to afford taking care of their pets anymore, while others found opportunities to leave the country and do not have the time nor the

funds to travel with their pets. Those requests came from emotional pet owners who loved their pets dearly, but were forced to abandon or rehome them, mostly due to financial reasons.

Discussion

The goal of this project was to uncover and investigate pet ownership barriers faced by middle aged and older women in Lebanon. Two participant groups were recruited for research activities. Primary participants were seven women who currently live with one or more pets. Their lived experience served as the main source of truth. Secondary participants were individuals who had a good level of expertise in the animal care field. Their subjective input served as a different perspective into the problems faced by primary stakeholders, and assisted in developing a solution design. After interviewing both participant groups, the analyzed data pointed towards one major issue that was shared by all primary participants and confirmed by secondary participants. Women in Lebanon are currently struggling financially to consistently provide a healthy life for their pets. The study proved that these Lebanese women share a very close relationship with their pets, however maintaining this relationship has become increasingly difficult. The fall of the Lebanese currency (Chehayeb, 2022), along with prices inflating has rendered pet supplies extremely expensive and in some cases unavailable. Moreover, medical pet care is now unaffordable to most primary participants. They are financially unprepared for any pet medical emergency that may arise, and that is not a sustainable situation.

As shown in the results, primary participants had a diverse number of pets and living arrangements. Numbers of pets varied between 1 to 51 animals in one household, some living indoors, while others outdoors or in a mixed arrangement. The more pets a participant had, the

more difficult it was for them to provide for their pets as the expenses multiplied. The current economic crisis happening in Lebanon has intensified the women's financial struggles, as it has for many other pet owners. Secondary participants confirmed this issue when they spoke about increasing cases of pets being rehomed or even dumped on the streets. Many pet owners are financially incapable of taking care of their animals following the crisis in Lebanon (Kharroubi et al., 2021). This also suggests that the financial barrier for pet ownership in Lebanon extends beyond the primary participant criteria for this research. The woman who sponsors one of the primary participants' pets, served as a significant milestone in this study. The sponsor, who lives in the United States, has been operating a very simple system of remotely purchasing cat food and sending it directly to Lebanese pet owners in need. The American Dollar currently has a strong purchasing power in Lebanon compared to the Lebanese Lira (Chehayeb, 2022). This gives the sponsor an advantage as she is able to afford helping pet owners with as little as \$25 a month per person.

The initial solution design iteration was based on the model provided by the sponsor. The model suggests the need for a solution that connects Lebanese expatriates with pet owners in need living in Lebanon. This model is already being implemented between family members, where Lebanese people living and working abroad transfer funds to families residing in Lebanon ("Lebanese Rely on Expat", 2022). The participants in this study are mostly residing with family members, and have at some point accepted pet-care and financial help from loved ones. This affirms what Abdulrahim et al. (2014) describe, which is how the Lebanese people are highly reliant on family and friends for support while the government remains absent. A sponsorship model for pet care assistance means building off of the strong connection Lebanese people share with one another, and providing them with the means to help one another. A realistic solution

eliminates the presence of a third “middle” party, and connects the people directly with each other. A good proof-of-concept for this model was showcased by the interviewed sponsor. Both participants seemed comfortable with the arrangement, where the pet owner received cat food every month, and the sponsor felt content about helping someone in need from her homeland.

Co-Designing a Realistic Solution

As described in the Methods chapter, the initial solution idea was presented to both participant groups via Whatsapp messaging. They were then asked questions to determine their attitude towards the idea. It was important that primary participants express willingness to be a part of a sponsorship arrangement with a Lebanese person(s) living abroad. In addition, both participant groups were asked to brainstorm ideas on the method in which Lebanese expats can send resources (i.e., money and/or pet supplies). This exercise clarified the correct direction for the solution design to be realistic and feasible in relation to the women’s pre-existing knowledge and the country’s current situation. It was indicated by two of the women that publicly asking for financial help within the wrong context may feel degrading. They expressed concern about how that will portray them socially. The more financially struggling participants were more supportive of the idea, and requested to be informed if this solution was to be implemented after this study. Moreover, secondary participants pointed out certain important considerations to ensure successful sponsorship arrangements. From a sponsor’s point of view, there needs to be an element of trust that their donations will indeed be used for their promised purpose. The sponsor should also be allowed to choose between money and pet supplies donations.

Drawing on the women’s pre-existing knowledge, I found Facebook to be a platform that has the potential to be convenient for both sponsors and pet owners. It is a social media website both

groups are already comfortable with, and harbors features that can be useful for connecting the sponsors and pet owners (i.e., Facebook groups, pages, private messaging, sharing images and voice notes). In the process of recruiting primary participants, the recruitment flier was posted on Facebook *animal rescue and adoption* groups in Lebanon. These groups included many pet owners in need posting about their situations and requesting help from others. On the other hand, I am personally aware of many Lebanese people living abroad that are a part of Facebook groups specifically created for Lebanese Expatriates within certain countries. These groups are often joined to connect with fellow Lebanese expatriates, follow up on the news of Lebanon, and most importantly, provide and seek help. For example, some of my Lebanese contacts living in Paris, France have created and joined a private Facebook group. They post about general helpful tips, share apartment listings, as well as helpful resources they've come across while living in Paris.

Although both target groups (i.e., Lebanese expatriates and pet owners in Lebanon) are active on Facebook and take part in groups, there seems to be a missing link between the two. Lebanese people living abroad seem to be willing to help, while Lebanese pet owners in Lebanon are seeking financial help. Simply connecting the two groups together could possibly accomplish self-sufficient sponsorship/donation opportunities where pet owners can directly be in contact with potential donors. In other words, a feasible solution means raising awareness on expatriates Facebook groups about pet owners in Lebanon in need of financial support. Similarly, pet owners in Lebanon should be aware of Lebanese expatriates willing to offer a helping hand, and know how to reach them. This can be accomplished by creating a campaign on social media that clearly calls on Lebanese people abroad to be aware of struggling pet owners in Lebanon. The campaign would explain pet owners' financial struggles, and provide a number of options in which sponsorships can help people in Lebanon sustain their human-animal relationships.

When asked about their monthly pet care expenses, the participants' answers ranged between 25 to 100 US Dollars per month depending on the numbers of pets and their specific needs. To put things into perspective, 1 US Dollar nowadays is roughly equal to 30,000 Lebanese Lira (Lira Rate App, 2022). Meanwhile, the minimum wage in Lebanon is as little as 675,000 Lebanese Lira (Al-Awsat, 2022), which is the equivalent of 22.5 US Dollars. A 25 Dollar donation per month for a person working abroad may not seem significant, however it may be life changing for a struggling pet owner in Lebanon. Regarding methods of donation transfers, the participants brought up the current bank policies in Lebanon. Since 2019, Lebanese depositors have been illegally denied access to their foreign currency bank accounts (Geldi, 2021). This means that bank transfers may only be possible if the receiving end in Lebanon is the owner of a "Fresh Dollars" bank account that allows international money transfers. According to both participant groups, and considering Lebanon's current money transfer restrictions, the following are the best methods for potential sponsors to donate resources:

- Sending cash to pet owners through money transfer services in Lebanon such as Western Union (Western Union, 2022)
- Transferring exact amounts of money to a trusted pet supply store and directly purchasing the items needed by the pet owners such as pet food
- Covering pet medical bills for pet owners in need by transferring money directly to trusted veterinary clinics under the pet owner's name
- Sending bank transfers in American Dollars for pet owners who have bank accounts that are eligible for receiving and withdrawing foreign currency. However very few participants believe this is a realistic option considering the constantly changing bank policies and the people's lack of trust in the Lebanese banking systems.

Using private Facebook groups to connect sponsors and people in Lebanon will reduce the concerns pet owners may have about publicly requesting help. Private Facebook groups can only be accessed by approved group members, and any content posted is not visible to non-members (Facebook, n.d.). The group admin(s) can choose who they want to accept into the group, and eliminate any members that do not abide by the set community regulations. With that being said, a private Facebook group can be set to connect the two groups together following the social media campaign which will raise awareness to the issue. People will be guided on how to participate in the group, and methods in which they can collaborate to establish successful sponsorships. From that point forward, it is up to group members to choose how they prefer to communicate, establish trust, and send/receive donations.

Research and Inclusive Design

The Inclusive Design program at OCAD University has taught me the pillars of inclusion. One important concept suggests that targeting marginalized communities has the power to benefit more diverse groups of people. During my research, the main stakeholders were Lebanese middle-aged/older women who are struggling with pet ownership. By the end of this study, I was able to identify the main issue most pet owners are facing in Lebanon. The solution design provided not only benefits the study's primary participant group, but any pet owner struggling financially to care for their pet. Using Co-Design as a tool for inclusive research facilitated a custom designed solution that is feasible and realistic within the given context of Lebanon. The way to assist pet owners in Lebanon is not an out-of-the-box innovation, but a model based on Lebanese social values and the community's pre-existing knowledge. An unexpected additional value to the solution design was offering an outlet for Lebanese expatriates to feel a stronger connection to their homeland by actively helping struggling members of their society.

Limitations

This research was conducted in the midst of the COVID-19 crisis. It was originally targeted towards older women living in Toronto, Canada to identify pet-care related barriers they may be facing. Given that I was residing in Lebanon at the time and completing the Inclusive Design program remotely, in addition to COVID-19 restrictions, it was highly difficult to recruit participants without being physically present in Toronto. Acknowledging this issue, I reformulated the research to be retargeted towards middle-aged/older women living in Lebanon. I navigated cultural differences, and adapted the research plan to fit the Lebanese context. All research material (i.e., recruitment material, screening process, informed consent forms, interview guides, and co-design activity) were translated to Arabic and modified to fit the new research plan and participant criteria. This enforced a tight timeline on the project, therefore the participant inclusion/exclusion criteria was handled in a highly flexible manner. Moreover, I was unable to conduct extensive co-design activities and develop the solution design further.

On the other hand, the current situation in Lebanon added difficulties to research activities. The unreliable internet connection and extensive power cuts often made it difficult to conduct remote interviews and maintain a decent call quality. It may have been possible to meet participants in person, however with the inflated fuel prices transportation was not possible for them, nor for myself.

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Appendix

Appendix A

Recruitment Flier

The image below is the bilingual visual that was used to recruit primary participants. It was posted on my personal Facebook account, as well as animal rescue and adoption groups.



Hey animal lovers!

I'm looking to invite women to participate in my research study about pet adoption and pet ownership difficulties.

Please read the caption :

مرحبا !

عام فتش على نساء ليشاركوا
بمشروع ماجستير عن صعوبات
تبنى و إمتلاك الحيوانات الأليفة

يرجى قراءة التعليق :

This study has been reviewed and has received ethics clearance through the Research Ethics Board at OCAD University [File #102054]. Research Ethics Board c/o Office of the Vice President, Research and Innovation, OCAD University, 100 McCaul Street, Toronto, M5T1W1.
416 977 6000 x4368 | research@ocadu.ca

Below are three visuals posted together on my personal instagram as stories.



Hey friends!
 Help me recruit women for my Master's research project

Pet Adoption & Pet Ownership Barriers Affecting Older Women in Lebanon

Here's how you can help

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I'm looking for

Women living in Lebanon aged 65 years or older

They must own a pet(s)
OR
 Be considering pet adoption

If they are living alone and/or on low income that's a plus.

Participation Includes:

- 1 or 2 interviews
- Diary keeping
- 1 focus group
- 2 Collaboration sessions
- \$10 gift card as a thank you!



Why am I doing this?

I believe everyone should have the right to adopt and own a pet, regardless of their age and financial situation.

I want to work with women to identify and solve possible ageism issues with pet adoption and pet ownership to help them:

- 1) be able to adopt a pet, and
- 2) maintain their relationship with their future or existing companions.

If you fit the criteria, or know someone who does

Please DM me on insta or email me on

[Redacted contact information]