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Online therapy as a steppingstone: using online mediums to encourage consumers to engage in therapy

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by

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Executive Summary

The non-treatment of mental disorders in the population has a heavy cost in terms of productivity on the economy and an impact on the general population's health.

Current literature shows that online therapy is as effective as its in-person counterpart. It also shows that there are a number of barriers to therapy, including shame, stigma, low perceived need, and structural barriers like transportation and cost.

The goal of this research is to find out if individuals with a negative or neutral view of therapy are more likely to choose online therapy in order to encourage them to take the first step toward treatment through online mediums.

To investigate this question, an online experiment followed by in-depth interviews were conducted. The experiment consisted of 12 profiles of either mental health apps, online or in-person psychotherapists. From those, participants had to choose the one they were more interested in trying therapy with, motivate their answer and communicate which aspect of the profiles caught their eye.

There was no statistical association between the choice of medium and the opinion of the participants on therapy. There was however a strong association between a past experience with therapy and the choice of medium.

Online therapy is seen as a good alternative for people who have difficulties opening up, do not have time to travel to an office, or in times where social interactions are restricted like during a pandemic.

Culture, stigma, lack of resources and support during the search for a therapist, and cost are the most mentioned barriers to therapy. A recurring recommendation is the creation of an online database with all the necessary information on therapists like name, address, work experience, therapeutic approach, and medium of choice to make the search easier.

There is further research to be done on the impact of culture and a past experience with mental health treatments on barriers to therapy. A possible plan of action is to start developing an online platform to catalog all therapists from a region to facilitate research.

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1. Introduction

In the last few years, awareness of mental health issues has become more prevalent (WHO/Sergey Volkov). People have started to open up about their struggles on social media, and the dialogue opened inside social circles. With the arrival of the pandemic at the beginning of 2020, this trend dramatically accelerated. (UN, Michele Nealon, 2021)

But as people were trying to manage the challenges of dealing with the virus, like lockdowns and the movement from in-person to online work, mental stress and issues had the perfect environment to fester and grow. (UN, Michele Nealon, 2021).

This worsening in mental state in the population has been felt across countries that are part of the organization for economic cooperation and development (OECD), where rates of anxiety and depression got close to double or more than double the level observed before the pandemic (OECD, Hewlett et al., 2021). And as the population struggled with the shift, mental health services too had to adapt to the situation to continue to practice as usual and handle the rising demand for mental health support (OECD, Hewlett et al., 2021).

However, the pandemic further pushed down an already struggling system. Shortly after the beginning of the pandemic, the number of people who needed access to mental health services but could not get it almost doubled in OECD countries. (OECD, Hewlett et al., 2021).

This decline in mental well-being does not only have a negative impact on health but also on the economy. Indeed, mental health disorders cost the global economy approximately one trillion US dollars in lost productivity. (WHO, 2021)

In order to respond to the increasing demand while respecting social distancing guidelines, mental health services had to rethink their model of care delivery from in-person to online. On top of this transition, adding different helplines and modifications of insurance policies further facilitated the change. (OECD, Hewlett et al., 2021).

However, now that the pandemic is slowly coming to an end, work, studies, and even therapy are able to return to the way they were before. Despite this, therapists are not necessarily willing to go back to the office, and many will offer both ways to attend their sessions (Shklarski et al., 2021).

As such, since online and in-person are both viable ways to attend therapy, a perfect opportunity to expand into this alternative way of conducting therapy has risen. This could allow a more significant portion of the population to gain access to mental health care from a practical and medical point of view.

It is worth investing in this new medium for care as it has been estimated that for each US dollar invested into increasing treatment for mental disorders, there is a four dollar return in improved health and productivity globally. (WHO, 2021)

2. Literature review

2.1 definitions

In order to have a uniform understanding concerning the terms used later on, the definitions used throughout this research will be established in the following.

In the diagnostic and statistical manual for mental disorders fifth edition, mental disorders are defined as:

> *"A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities".*
> *(American psychological association, p.20, 2013)*

From the American Psychology Association, mental health is defined as:

> *"a state of mind characterized by emotional well-being, good behavioural adjustment, relative freedom from anxiety and disabling symptoms, and a capacity to establish constructive relationships and cope with the ordinary demands and stresses of life."* *(American psychological association, 2022)*

2.2 Effectiveness of online therapy

Numerous studies have been conducted on the effectiveness of online therapy for different disorders (Varker T et al. (2019); Turgoose et al., 2017; David Mohr et al., 2012). A rapid evidence assessment study conducted in 2019, which reviewed 24 studies, has found that treatment performed through phone and video calls was as effective as in-person therapy (Varker, T. et al., 2019).

This research was focused on conditions like anxiety, depression, post-traumatic stress disorder, and adjustment disorders. Out of a pool of 2266 studies published between 2005 and 2016, 24 were deemed relevant enough to the study subject to be included. Very few studies were included in the review because all individual studies included in meta-analyses were removed and counted only as part of the over-arching meta-analyses or systematic reviews. Those studies were peer-reviewed meta-analyses, systematic reviews, or randomized controlled trials involving adults 18 years or older with an official diagnosis.

The intervention types for these studies were primarily cognitive behavioural therapy, cognitive processing therapy, and behavioural exposure which also comprised results in terms of mental health symptom severity. Since the research yield was small, the studies were grouped by mode of communication to provide the best result possible, regardless of the mental disorder initially targeted in the study.

Results of the review of the different studies were categorized as follows: supported, promising, unknown, and not supported.

“Supported” meant that there is clear, consistent evidence for a beneficial effect with no evidence suggesting negative/harmful effects. “Promising” meant that the evidence points towards a beneficial effect, but further information is required. An “unknown” ranking was attributed to interventions with insufficient evidence of a beneficial impact, and further research is needed. The last order is “not supported,” meaning there is clear, consistent evidence that the interventions have no effect or a negative/harmful effect. (Varker T et al. 2019).

The assessment of the different studies was realized by independent evaluators using the Australian National Health and Medical Research Council (NHMRC) checklist and the NHMRC quality criteria. (Varker T et al. 2019).

For telephone and VTC (video teleconference) delivered interventions, which accounted for eight studies and one meta-analysis for telephone and ten studies plus a systematic review for VTC, the result of the analysis classified it as “supported.” For internet-delivered, text-based treatments, which included two studies and one meta-analysis, the conclusion found in this review was “unknown.” (Varker T et al. 2019).

While this rapid evidence assessment has its merit of having a vast pool of literature from which the 24 studies were selected, since it is not a meta-analysis, the conclusion made here can be considered less relevant than if it was one. It has its advantages, though, since a rapid evidence assessment allows to bypass the long and arduous research and analysis that a meta-analysis requires, allowing for results to take significantly less time to be published.

On the other hand, the fact that only 24 studies were selected out of the two thousand two hundred studies, there is a possibility that there is other evidence that contradicts the results of this analysis but have not been selected and as such, results may vary.

As mentioned before, they have selected only meta-analyses and systematic reviews and removed the individual studies already included in one of those reviews from the pool of studies. This allows for a bigger overview of the evidence and literature published up to this point, but it also takes away nuance and the possibility to see possible evidence that contradicts or reveals other outcomes.

This review chose only peer-reviewed meta-analyses, randomized control trials and systematic reviews, which are considered to be the most reliable type of studies. (University of Canberra, 2022). In addition, the studies selected had a large scope of mental disorders and as such, more general conclusions can be made about the results for more mental disorders.

In Turgoose's systematic literature review, 41 studies on the effect of synchronous, PTSD focused therapy for veterans in the United States were analysed (Turgoose et al, 2017). The objective of this review was to analyse the literature present on the effectiveness of online therapy compared to its in-person counterpart. Out of the initial pool of 228 papers, 41 studies were retained as part of the review. Those studies were trauma-focused, and the range of therapies covered was large, comprising of prolonged exposure (PE) for the majority. Cognitive processing therapy, cognitive behavioural therapy, behavioural activation, and eye-movement desensitization and reprocessing (EMDR) were practiced.

The results of this study were separated in different categories depending on the specific angle from which it was studied. Out of the 41 studies selected, 18 looked at the clinical effectiveness of online therapy. 12 of those found that online therapy was as effective as its in-person counterpart, and one even found that teletherapy was more effective than usual care.

Yet, two studies found that in-person treatment brought a significant reduction in PTSD symptoms. One of those studies though is a case report measuring the effectiveness of exposure therapy on PTSD symptoms, and the other did find a reduction in symptoms for both mediums but also better outcome for in-person treatment. However, neither of those studies used randomization to assign participants to treatment groups (Turgoose et al, 2017).

Even though those two studies found the opposite, it can still be concluded that online therapy is as effective as traditional methods.

However, while this positive result was found, it was also found that in studies where it was more effective than face-to-face therapy, the participants were far more likely to have received cognitive processing therapy than any other type of therapy. As such, it remains unclear if the positive results come from the medium with which therapy was delivered or if it was the specific therapy (here, cognitive processing therapy) that brought relief in symptoms for the participants.

13 studies analysed attrition, drop out, and attendance rates differences between online and in-person therapy. For attrition rates, no differences between the two methods of delivery were found, except for one study that found that in online therapy, a lot more sessions were attended by the participants. (Turgoose et al, 2017)

Concerning the dropout rate, overall, the results were similar to the conclusion drawn for the attrition rate. One study discovered that in-person therapy participants were more likely to drop out due to logistical problems (poor weather, transportation issues, work or family obligations) (Turgoose et al, 2017)), but it is the only one out of the 13 examining dropout rates.

Concerning treatment adherence, no differences were found between the two delivery methods, but the studies suggested that a structured implementation strategy with a description showing off the positive aspects of the method could lead to higher uptake of online therapy.

For acceptability, no differences were found in satisfaction and acceptability, however, the acceptance of the need for therapy was found to be a key success factor for the therapy in all participants.

Some studies also mentioned factors affecting the use of technology in online therapy such as technical difficulties, e.g., problems connecting and audio delays.

Others relayed lessons learned from using technology with online therapy such as familiarizing the patient and the therapist with the software beforehand so problems can be resolved quickly, and the level of comfort increased. Another study mentions that participants had problems with their internet provider and possibly contributed to them withdrawing from the study (Turgoose et al, 2017). From the same study, some participants mentioned that they did not have access to a quiet area for the therapy session.

Two other studies analysed the relation between age and the willingness to engage in online therapy, and both suggest that being older could be a barrier to therapy. Another found that neither age nor prior familiarity with the software used in online sessions was related to treatment response. (Turgoose et al, 2017).

While this study had a higher number of studies included in the final analysis, the initial pool from which they were chosen from is significantly lower than the previous study. This means that, as mentioned before, the chance of a study either disproving or showing different results existing but not having been included is possible and even higher than the previous study. However, since this study is a systematic review, it is more reliable than a rapid evidence assessment because the methodology is more rigorous. (University of Canberra, 2022).

This systematic review not only evaluated the differences in outcomes for online and in-person therapy, but also different criteria like process issues, acceptability, clinical issues, managing risk and safety, therapist fidelity and competence, and feasibility. This allows for a more holistic view on the subject and considers different aspects and not only the efficacy of online therapy.

The downside of this systematic review is the narrowness of the scope of the population studied. Indeed, while post-traumatic stress disorder affects around 3.6% of the population worldwide (WHO, 2013), there are a lot of other types of disorders that affect people differently like depression, anxiety, mood disorders, etc. that are worth looking into.

A possible hypothesis is that since different disorders have overlapping but also separate symptoms, treatment outcomes between online and in-person therapy might be different. For example, for the treatment of post-traumatic stress disorder, while CBT can still be effective in relieving symptoms, trauma-focused therapies like EMDR (Eye Movement desensitization and reprocessing) or cognitive processing therapy are the recommended ones for this type of disorder (NHS, 2018; US Department of Veterans Affairs, 2022). As such, this impacts the ability to generalize the results of studies like the one conducted by Turgoose et al. to other disorders and types of therapy.

If the type of therapy is the only variable we want to be studied, David Mohr et al. conducted a randomized trial where the effectiveness of online CBT was tested on 325 care patients with major depressive disorder in 2012.

This study mostly found the same results as the previous two, where both online and in-person participants saw improvements in their mood. It also found that the dropout rate was lower for online therapy. However, while adherence was better, it was found that the gain maintenance was lower for online treatment compared to in-person. (David Mohr et al., 2012)

Two possible hypotheses can explain this difference. One hypothesis proposed in the study is that the physical act of going to the therapist's office serves as a behavioural activator. It can be theorized that the act of going might be therapeutic in and of itself and could help keep the effects of the treatment in the longer term.

Another hypothesis is that the physical presence of the therapist is helping. The different cues and messages passed through body language might give more positive reinforcement and could contribute to gains and cultivate resilience for the patient. This hypothesis is supported by an article published by Foley et al.,2010 in the national library of medicine. In this article, nonverbal communication and behaviours are shown to be key to all interpersonal communications and even more so during psychotherapy, even if often put aside in favour of verbal communication. (Foley et al., 2010)

While the importance of observing the patient's body language is clear, the non-verbal communication of the psychiatrist is also shown to be a key factor in the willingness of the patient to share difficult emotions and experiences and greatly contributed to the stalling of the therapeutic progress. Here, the therapist has demonstrated through her body language uneasiness with the topic at hand, which in turn stopped the patient from sharing more on a heavy subject that needed attention. (Foley et al., 2010)

As such, while a negative response can be detrimental to the therapeutic process, awareness of the psychiatrist or therapist's body language can impact the interactions with the patient and if positive, give positive feedback and help the patient's resilience and motivation for the therapeutic work.

While this clinical trial lead by David Mohr is one of the most in-depth studies on the subject, the study was only conducted on patients with depression, which only reveals the results for this type of disorder. Different outcomes might be discovered for others like anxiety disorders, post-traumatic stress disorders, and panic disorders as mentioned earlier. Apart from the kind of disorder studied, this research solely focused on cognitive behavioural therapy and its effect after treatment and six months post-treatment.

This was interesting to analyse because of its focus on CBT exclusively, but the other two studies presented earlier present a more complete and overall view of the subject. While it is one of the most widespread types of therapy practiced, other types exist for specific disorders, and results might differ and make it more or less suitable for online therapy.

While there is no available statistics on how common CBT is used as a treatment option, cognitive behavioural therapy is widely considered as the golden standard in therapy (Daniel David et al, 2018). It is the most researched type of psychotherapy, and no other form has been shown to be systematically superior to CBT (Daniel David et al, 2018). It is also the type of therapy the most in line with the current model of understanding of the human mind and behaviour. (Daniel David et al, 2018).

It could also become one of the best therapies to practice online as one of its main advantages is its short duration (between 12 to 16 sessions) and quite flexible in its implementation (Rockville (MD), 1999). Its highly structured nature also means that it can be practiced in different formats, including self-help books and through online practice. (NHS, 2019)

Understanding why people start therapy is an important point to tackle in order to get a holistic view on the subject.

According to the American psychology association,

“Some people seek psychotherapy because they have felt depressed, anxious, or angry for a long time. Others may want help for a chronic illness that is interfering with their emotional or physical well-being. Still others may have short-term problems they need help navigating. They may be going through a divorce, facing an empty nest, feeling overwhelmed by a new job, or grieving a family member’s death, for example.” (APA, 2022).

While there are many reasons as to why someone would start therapy, what are the barriers preventing them from actually doing so?

2.3 Barriers to therapy

In a study realized by L.H Antrade et al. for the WHO in 2013, a worldwide survey was conducted to understand what prevented people with possible mental disorders from starting therapy. This study consisted of face-to-face interviews conducted in 24 countries worldwide. Six were in the low to low-middle income countries, six from the upper-middle, and 12 from high-income countries. The participants were selected through a multistage household probability sample. (L.H Antrade et al, 2013).

The interviews were separated into two parts. The first one is a core assessment, where interviewers used the DSM5 manual for diagnosis to evaluate if the participant had symptoms corresponding to a mental illness and to assess the level of severity. Of the 120'000 initially selected, only 64'000 respondents who had symptoms of a mental illness went on to respond to the second part of the interview. The second part was about the reason for not using mental health services, if they had used one at some point during the last 12 months and dropped, and why they chose to do so.

This study used a multivariate logistic regression model to examine associations between sociodemographic variables and disorder severity with perceived barriers to therapy (L.H Antrade et al, 2013).

The results showed that the most commonly reported barrier was low perceived need and attitudinal barriers. Amongst those, "want to handle it on their own", "stigma", "thought it would get better", "problem was judged as not severe" and "unspecified" were mentioned as attitudinal barriers. (L.H Antrade et al, 2013).

Low perceived need was mentioned as a barrier more at older ages, by men and among participants with milder cases. When it comes to structural barriers like cost and transportation, it was brought up by younger rather than older participants. It was also mentioned more by participants in the two lowest levels of education. People with more serious mental disorders were also more likely to bring up structural barriers. (L.H Antrade et al., 2013)

For dropout rates, the results were similar to the reason why participants did not seek therapy to alleviate their symptoms. 83.9% of respondents reported at least one attitudinal reason (handle on their own, perceived effectiveness of treatment, negative experience with the provider). As for structural barriers, they were reported by 41.8% of respondents. The most common ones were financial barriers and inconvenience or transport.

Overall, this study is of very good quality because of the sample size and that it includes participants from different countries with different levels of income and economic development. The sampling method and statistical analysis was very rigorous, which gives more credit to the results and conclusion drawn.

A possible add-on that could be used for further research is to have less standardized questions that would account for cultural differences and could show this layer of barriers. As a suggestion, the distinction between mental disorders could be more precise and instead of just classifying it in severity, but also in types of disorder (personality, mood, or eating disorders for example).

A possible hypothesis is that results would differ depending on the nature of the disorder and would bring a new perspective and more targeted treatment for the patient.

Another study looking at barriers to therapy has been conducted in 2018 by Goetter et al. This study realized in the United States focused on the part of the population with social anxiety disorder (SAD) and generalized anxiety disorder (GAD). Participants were aged between 18 and 65 and underwent a preliminary clinical interview to establish a primary diagnosis of SAD or GAD. In total, 226 participants were included in the study, with 105 participants who did not seek treatment and were diagnosed with SAD and 121 with GAD. (Goetter et al., 2018).

The questionnaire was composed of 23 self-report measures that evaluate the participant's perceived barriers to seeking treatment. (Goetter et al., 2018). These measures assessed multiple potential barriers such as logistic and financial, stigma and shame, treatment perception, and satisfaction. Each statement had a 4-point Likert scale ranging from zero, "not at all" to four, "extremely". The maximum score on those questions was of 92 and was used to determine the extent of the perceived feeling of barrier to treatment. (Goetter et al., 2018).

In order to analyse the data, an independent-sample t-test was performed to determine if there was a difference in barriers to treatment question (BTQ) scores between the two diagnoses. T-tests and one-way analyses of variance were used to then examine relationships between the demographic variables and the BTQ scores. (Goetter et al., 2018).

Across both groups of diagnoses, shame and stigma were the highest cited barriers, closely followed by logistical and financial barriers.

More precisely, for participants with a primary diagnosis of generalized anxiety disorder, the barriers that were mentioned the most often were “wanting to handle problems oneself”, “feeling embarrassed about needing help”, “not knowing where to get treatment”.

For participants with a primary diagnosis of social anxiety disorder, the same barriers were brought up, plus another barrier “feeling embarrassed by one’s problems”.

In terms of association with demographic variables, younger individuals perceived more barriers to treatment that the older participants. Ethnic minorities, people with lower economic status as well as single participants were found to score significantly higher on the BTQ. Participants who had more symptom severity were also found to score higher than others.

The full table with all the barriers to treatment can be found in appendix 1.

This study brings in a new perspective as it bridges some of the gaps that were identified with the other study carried out by the WHO. As it focuses on one family type of disorder, namely anxiety disorders, it showed that results were consistent with the findings previously mentioned and that there does not seem to have many differences in between disorders. However, further research should be conducted with other types of disorders to confirm this trend.

It was also interesting as the question asked of the participants also included specifically tailored questions for ethnic minorities like “I was afraid of being treated badly in treatment because of my race or ethnicity” or “I could not find a mental health professional of my same race or ethnicity”. (Goetter et al., 2018). Another aspect that made this study stand out is the variety and precision of the questions.

The questions encompassed a multitude of aspects that could prevent someone with an anxiety disorder to seek out treatment, ranging from cost, schedule, lack of resources to trust in professionals, motivation, and feeling like it was normal to feel this way. (See appendix 1)

However, a larger-scale study encompassing multiple countries like the one commissioned by the WHO with the variety of barriers presented in the study could possibly give a larger overview of the problem and compensate for the limitations that both studies had.

Another interesting barrier that could have been mentioned is the notion of vulnerability. A possible hypothesis is that by starting psychotherapy, the individual must open up about their problems to another person, which could be an attitudinal barrier preventing them from engaging in therapy.

As of now, there is no scientific research on this subject or that encompasses it in its study, and it could possibly further the understanding of what prevents an individual from seeking treatment.

2.4 United States and Swiss health care

As seen above, extensive research has been conducted in the United States about online therapy and its efficacy on common mental issues like depression and anxiety.

However, it is not possible to fully generalize those results to Europe as there is no literature examining the quality of psychotherapy care and if they can be compared. Only assumptions can be made since they are both western-like systems from high-income countries, there is a high chance that the quality is equivalent and that results can be transposed to the European care system.

Nonetheless, comparisons can be done between the overall health care system of the US and Europe, specifically Switzerland, when it comes to the cost of mental health care as a barrier to therapy. As the US health care system is a highly decentralized and fragmented private fee-for-service system (Jonas et al., 2007), there is a stark difference in the challenges they face compared to Swiss patients with compulsory health care insurance. Within the American health care system, whether a patient receives the necessary and adequate treatment is highly dependent on their insurance, demographic as well as residence. (Jonas et al., 2007).

On the other hand, in Switzerland, health care and insurance are compulsory and are only dependent on the specific type of treatment. Hospital treatment, consultations with a medical professional, medications, maternity, accidents, and even specific complementary medicine are covered by basic health insurance (Federal office of public health FOPH, 2022) As such, access to care is not limited by the insurance plan or the economic situation of the patients.

When it comes to mental health care, the situation in both countries is different. In the US, the right insurance plan will have mental health benefits, but they are not required by the law to provide them (American psychology association, 2014). In Switzerland, if the therapist works by the delegation of a psychiatrist, basic health insurance will cover 90% of the cost. (Centre de competence en psychologie, Virginie Kyburz, 2015).

As such, the barrier to accessing therapy in terms of cost is very different between the two countries.

The research that has been done so far was on the efficacy of online therapy and the different barriers to therapy. While each study tackled a different aspect of therapy, little research has been done about the attractiveness of online therapy compared to in-person therapy and if it could be an interesting approach for people to ease their way in.

And so, a hypothesis that can be formed following the review of the relevant literature available around online therapy is that a person's perception of therapy has an influence on their choice of medium if they were to engage in therapy.

The hypothesis is stated as follows:

***H_0*:" There is no association between a person's point of view on therapy and their choice of medium for therapy"**

***H_1*: "There is an association between a person's point of view on therapy and their choice of medium for therapy"**

3. Research methods

3.1 Design

For my bachelor thesis, I have decided to conduct an online experiment with fictional psychologist profiles and real descriptions of mental-health-based apps. Among all the possible methods, an experiment was he most fitting to get the desired result, which was to decipher whether online therapy was preferred by a certain population.

By confronting them with a panel of profiles composed of app and therapist profiles who practice either online or in person, it allowed to see what they would choose if confronted by the choice of a medium.

This method was used instead of asking questions only on online therapy and their opinion on it, the likeliness of them engaging in that kind of therapy or if they would be more willing to attend sessions online.

3.2 Participants

Data was collected from people in my network, my social media following and students at the university. The survey was posted on my Instagram page, shared among my peers and students at the university of Geneva were asked to participate in this experiment.

To determine the sample size needed to detect a difference between groups an a-priori power analysis was conducted.

In order to compute a power analysis, some assumptions had to be made (see appendix 2). In the program G*power 3.1, chi square test was selected in the test family drop down menu. It automatically selected the “goodness-of-fit tests: contingency table” which is what was used in the statistic software JASP 0.16.2.0. For the type of power analysis, the a-priori option was selected as it is used to compute the required sample size, given alpha, power, and effect size.

For the effect size w, a size of 0.3, medium, was assumed because choosing a larger effect like 0.5 could lead to an underpowered study. (UCLA, 2021). For the alpha value, a 0.05 value was assumed, and the degree of freedom was 4 as there are three rows and three columns in the variables chosen for the chi-square to be conducted.

Table 1 a-priori power analysis to determine sample size

χ² tests – Goodness-of-fit tests: Contingency tables		
Analysis:	A priori: Compute required sample size	
Input:	Effect size w	= 0.3
	α err prob	= 0.05
	Power (1-β err prob)	= 0.95
	Df	= 4
Output:	Noncentrality parameter λ	= 18.6300000
	Critical χ²	= 9.4877290
	Total sample size	= 207
	Actual power	= 0.9506581

As the sample size needed was quite consequent, a convenience method was used to be able to collect as many responses as possible, but the objective was to collect between 40 and 50 participants.

After having closed the experiment, 60 responses were recorded, 40 of which were fully completed and used in this analysis.

Out of those participants, those who volunteered have been interviewed either online or in-person to get more in-depth opinions and thought processes behind their choice of therapist and their views of online therapy. The objective was to conduct eight to ten interviews to include them in my data analysis. Eight interviews were conducted and included in this analysis.

3.3 Ethics

Participants had to read the first paragraph with explanations on what the purpose of the study is and a clear description on how their data will be used.

A confirmation that they were 18 years or older, that they consented to their responses being used in this thesis and that they understood the purpose of the study was required.

They could continue on to answering the rest of the survey only if they answered “yes” to both questions. If they answered “no” to either one of those questions, the survey ended immediately with a thank you message. This feature was added to ensure that informed consent was obtained before the participant could continue onto the experiment.

For the interviews, consent for recording the whole conversation and the use of the data for my research has been asked and obtained on record during the interview. (See appendix 6 to 14). After the interview, it was transcribed and corrected for transcription mistakes. The final document has been sent to the interviewee for them to check if everything is correct and if needed, make modifications. Confirmations that everything written was correct and could be used in my thesis were received.

As the subject of this experiment is considered as sensitive, the questionnaire was first sent to the International Business Management department to ensure that all the ethical rules were respected. The experiment was validated and as such was used for this thesis.

For both the experiment and the interviews, steps have been taken to ensure that all the data collected stayed anonymous. In the software used for the experiment, Qualtrics, the "anonymize responses" was selected so that the respondents' IP address, location data, and contact info would not be collected or recorded. In the interview transcripts, the name and any other possible identifiers have been removed to ensure that anonymity was preserved.

After submitting the final version of the document, the experiment along with the account used to publish it will be deleted from the Qualtrics website, and all the documents and files containing participants data will also be deleted, leaving only the results present in this document.

3.4 Equipment/data collection tools

The questionnaire was accessible through a Qualtrics link. Qualtrics has been selected as the data collection tool for this thesis because of its partnership with the HEG, which shows that it is a trustworthy software, and it offers an easy-to-use interface for the designer and the participant.

The questionnaire includes nine questions excluding questions about consent, majority, and interview recruitment. (See appendix 3)

For the demographics questions, age was to be chosen among ranges of ten years from 18 to 65 and older to account for any age but not going lower than 18 as this experiment was designed for adults only. For gender, participants were asked to choose between male, female, non-binary, and other with a text box to account for any gender identity the participant may have. The question about the respondent's origin was an open-ended question so that they could fill it in with one or multiple countries.

Apart from open-ended questions, the others used multiple choice answers, and one used one to five Likert-type scales provided by Qualtrics itself. It was chosen as Likert-type scales are used to collect data on the opinion of the respondents, which is what was sought with the question on the participants' stance on therapy. (Smart survey, 2022). A one-to-five scale was chosen as it is the most commonly used scale and because larger scales have more variance (Alex Birkett, 2019).

The questionnaire is structured as follows:

3.5 Experiment

The experiment contained 12 different profiles (appendix 3): four therapists who hold sessions online, four face-to-face, and four online apps that offer classes on stress management and self-help tips. The idea of putting this specific number of profiles for each medium was to avoid the participants having only three choices (online, app or in person) and to see if outside of the specificities of each profile, the medium was the one parameter that made them choose an option over the other.

They were written and presented as neutrally and equally as possible so as to not influence the choice of the participants outside of the wanted variables. All the profiles contained the same type of information: name, education, work experience, the type of therapy they practice, and whether they offer online in-person sessions.

Those pieces of information were chosen after consulting different psychotherapist profiles because they give a good overview of their professional career and the points that people look at when making their decision.

When designing the profiles, I tried where possible to ensure that all the profiles have a comparable experience. However, as the profiles were gendered, it was hard to counterbalance them.

For the apps, a brief overview of the features and for what type of disorders/problems they are made for are described. As for the therapist profiles, these pieces of information were selected so that participants understand well the purpose of the app and its use.

The prices of the app or the hourly rate of the therapist have not been mentioned in any of the profiles.

3.6 Procedure

First, participants had to read an introduction text explaining what the context of the survey is and information about anonymity and the use of their responses. They were then asked to confirm that they were 18 years or older and that they consented to the previously mentioned conditions.

After this they were asked some demographic questions to determine their age, gender, and origins.

This was then followed by an explanation of the experiment and the instructions. They were asked to read the 12 profiles carefully and then answer the questions. They were asked to choose the therapist or app profile that they would be most interested in trying therapy with, to justify their choice, and finally to mention which aspect of the profile caught their attention.

The survey continued with questions about their experience with therapy, namely whether they have ever gone to therapy, if they did but stopped, why they did so and a question to determine their view and stance on therapy.

The questionnaire was finished by asking the participant if they would like to participate to a 15min interview to go more in-depth about the subject and if they answered yes, a space was provided so they could fill in their contact information.

3.7 Data analysis

To analyse the data collected throughout the experiment, the statistics software JASP V0.16.2.0 was used to perform a chi square test with the variables type of psychotherapy (online, app, in-person) and opinion on therapy. The Chi square test was selected for the statistical analysis because it is a non-parametric test used to determine if a difference between observed data and actual data is due to an association between the two or if it is due to chance (University of Southampton, 2022).

As the hypothesis was to find if there is a relationship between opinion on therapy and willingness to try online therapy, this was the test that would bring the most relevant results.

As for the qualitative part of the survey and the interviews, content analysis was used to see what topics were brought up the most by participants after reading the different profiles from the experiment, or during the discussions during the interviews.

Content analysis was the most relevant type of qualitative analysis for the type of data collected because it allowed to draw a more general picture by allowing different types of words to enter the same category.

All the answers to the questions: “Why did you choose this specific therapist/app?” and “Which aspect of the profile you chose caught your attention?” were compiled.

Then, the most relevant words and topics mentioned in each answer were selected, and then regrouped them into more general topics and analysed which one came up the most often and by whom.

For the interviews, after transcribing the whole conversation, I went through the text again and summarized each conversation with the most important points brought up.

4. Results

4.1 Quantitative data - statistics

Table 2 Chi-square test: choice of medium/opinion on therapy

Contingency Tables

profile choice		Opinion on therapy			Total
		low	mid	high	
apps	Count	0.00	6.00	10.00	16.00
	Expected count	0.84	5.05	10.11	
online	Count	1.00	2.00	4.00	7.00
	Expected count	0.36	2.21	4.42	
In-person	Count	1.00	4.00	10.00	15.00
	Expected count	0.79	4.74	9.48	
Total	Count	2.000	12.00	24.00	38.00

Chi-Square Test

X^2	df	p	N
2.36	4	0.67	38

A Chi-square test of association was conducted, and it showed that there was no association between the independent variable “therapy stance” and the variable “profile choice”, with a chi score of 2.36, a P-value above 0.05 (P value= 0.67) and effect size of 0.3. (AcaStat, 2015)

Table 3 Chi-square test: choice of medium/ past experience with therapy

Contingency Tables

Choice of medium		Experience with therapy			
		Yes, going	**Yes, but stopped**	**no**	**Total**
App	Count	0.00	3.00	13.00	16.00
	Expected count	2.11	4.21	9.68	
Online	Count	3.00	4.00	0.00	7.00
	Expected count	0.92	1.84	4.24	
In-person	Count	2.00	3.00	10.00	15.00
	Expected count	1.97	3.95	9.08	
Total	Count	5.00	10.00	23.00	38.00

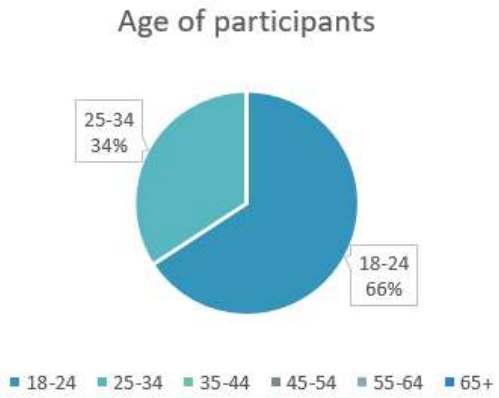
Chi-Square Test

X^2	df	p	N
15.37	4	0.004	38

A Chi-square test of association was conducted, and it showed that there was a strong association between the independent variable “therapy history” and the variable “profile choice”, with a chi score of 15.36, a P-value below 0.05 (P value= 0.004) and an effect size of 0.3 (AcaStat, 2015).

4.2 Quantitative data summary

Figure 1 age of participants of the experiment

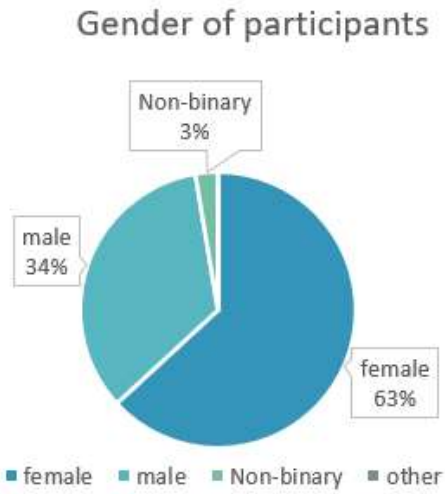


In this experiment, participants were aged in majority between 18 and 24 years old, with another third aged between 25 and 34 years old.

Figure 2. Country of origin of the participants of the experiment

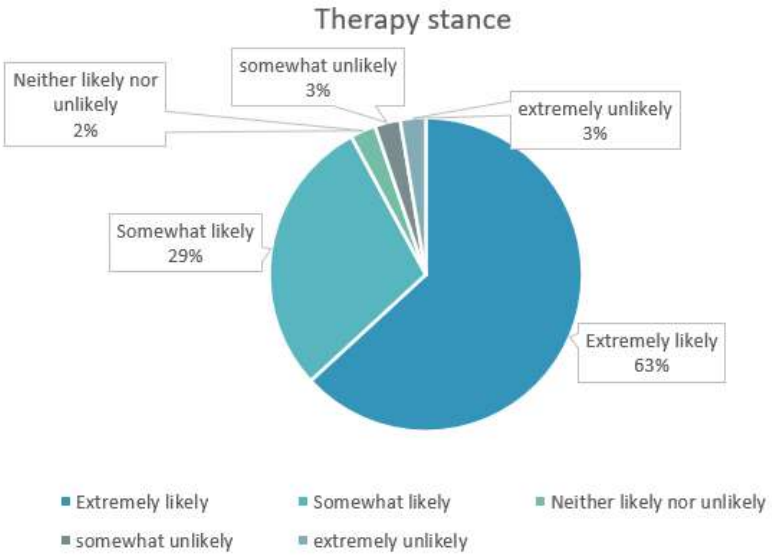
In terms of country of origin, the majority of respondents came from Switzerland, followed by Germany, the United States, France, Nepal, India, Vietnam, Iran and Sweden. The fact that a multitude of countries were represented allowed to have different point of views in terms of cultural backgrounds.

Figure 3 Gender of the participants to the experiment



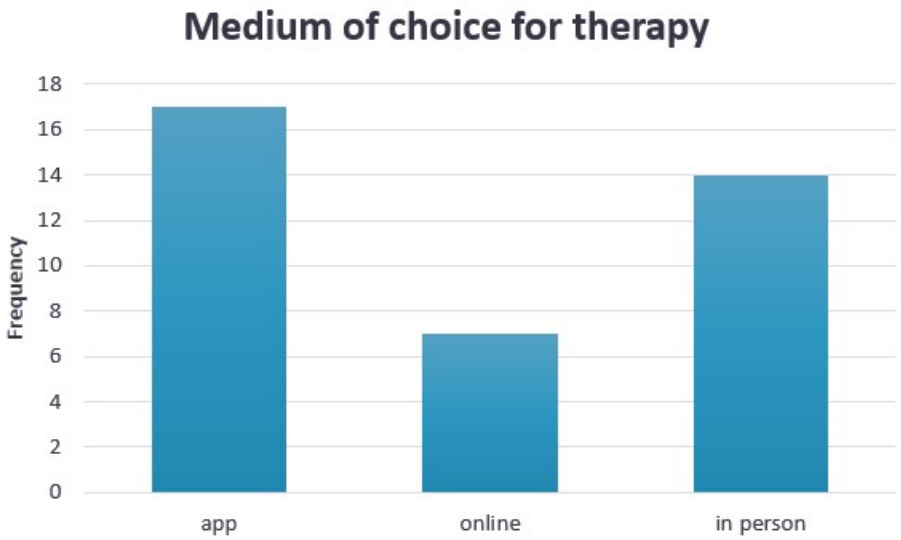
The pool of participants was composed of 63 percent of female, 34 percent of male and 3 percent of non-binary persons.

Figure 4 Participant's likeliness to recommend therapy to a friend



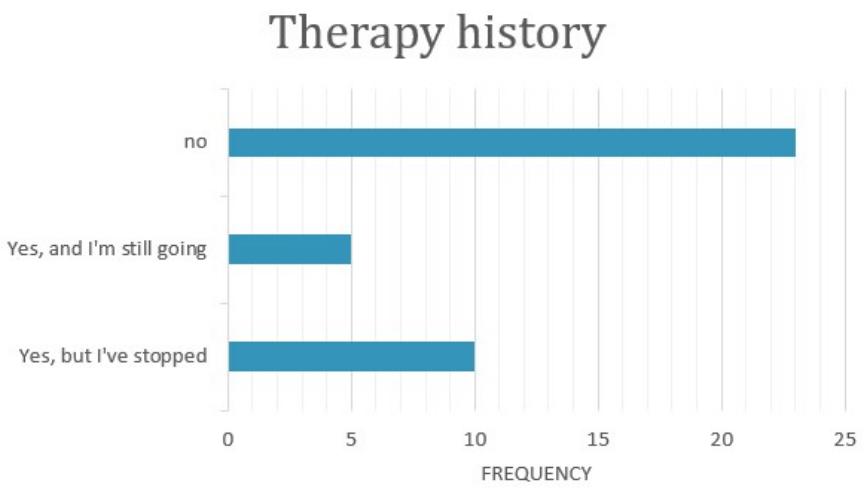
Participants' opinion on therapy was overwhelmingly positive, with 92 percent answering with either somewhat or extremely likely, and 8 percent answering with neither likely nor unlikely, somewhat or extremely unlikely. Data for this question, which was used to conduct the statistical test, is not normally distributed, which is why the Chi-square test was chosen to conduct statistical calculations.

Figure 5 Medium of choice for therapy of the participants



The most chosen medium for psychotherapy was the apps, followed by in-person and online. Online therapy was the least chosen option, but if app and online medium are merged into internet based, they were the preferred medium compared to in-person.

Figure 6 Participants' past experience with therapy



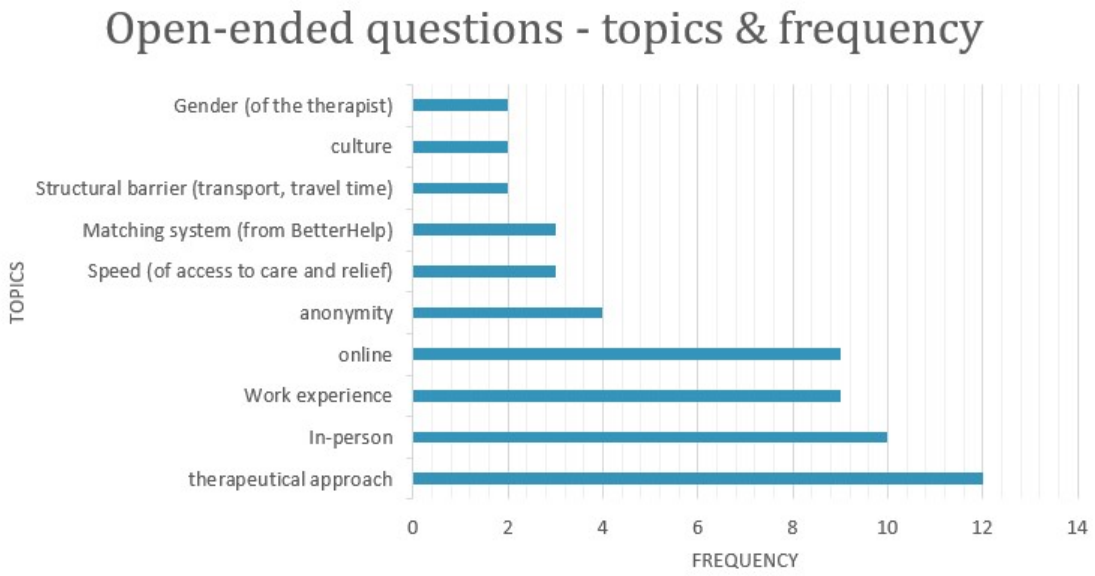
The majority of participants did not engage in therapy prior to the experiment. Others either are still undergoing treatment or already did in the past and have stopped. As for the question on why the participant has stopped going to therapy, there were only ten participant who entered that they had gone to therapy but stopped, and of those, only a handful of them gave an answer as to why, which is why this question was not included.

4.3 Qualitative data

4.3.1 Experiment

After an analysis of the open-ended questions about the profile choice of participants, the following topics were brought up with their **frequency:**

Figure 7 Open-ended questions – topics & frequencies



Miscellaneous:

Practicity
Interactivity
similarities
target patient
privacy
vulnerability
conversation
trust
goals
first step (towards therapy),
familiarity (because of resemblance to current or previous therapist)

As we can see from the results, the most important factors when choosing a therapist are their work experience and the fact that they practice in person. Coming very close behind is the therapeutic approach and that the medium is online. After that, other topics like anonymity, speed, matching system, and structural barriers were mentioned, but fairly rarely.

4.3.2 Interviews

A total of eight interviews have been conducted in the span of eight weeks. Each participant had answered to the survey beforehand.

All except one, who felt neutral, had an excellent view of therapy. One participant chose an app profile, two had chosen an online therapist profile and five chose an in-person one. Two had never had therapy and the six others have already seen one or more therapists in the last two years.

When asked to motivate their choice of medium for therapy, participants who chose face to face brought up most often that the human connection and non-verbal communication was really important for them and a factor for them to develop a trusting bond with the practitioner.

Two participants mentioned that the action of going to the therapist's office and the atmosphere of the room played a part in the therapeutic work. They also perceived that being online actually put another barrier in the way of therapy and was too impersonal for such an intimate moment.

However, most, when asked if the fact that the camera was on would help, did confirm that it would help reduce those barriers. Two of the participants mentioned that they would consider online therapy if there were to be a reduction in price, but the approximate amount was not mentioned.

All of them would follow their therapist if they were to completely stop practicing face-to-face sessions and only work online. The reason for this decision is that for them, the relationship that was created is more important than the medium used. Another reason was that since they had the opportunity to meet them in person and for some, participated in therapy for a while, the connection was already created, and it did not change much when moving online.

On the other hand, participants who chose online therapy felt that it was actually easier to open up because the anonymity brought them a sense of comfort. Being online also made them feel less embarrassed and more likely to open up.

When in-person leaning participants were talking about the advantages of online therapy, the most recurring ones were reduction in travel time, convenience, and possible price reduction.

One participant who chose in-person therapy did mention that online therapy was very advantageous as they were able to continue their treatment even though their social anxiety had gotten worse, and they could not go to their therapist's office anymore.

Others mentioned that online therapy is useful in times of covid where meeting in person was unsafe or not possible, or the patient cannot physically go to the office due to an illness or disability.

The participant who chose an app did so because the self-paced and self-learning aspect of the different classes was attractive. Furthermore, the possibility to still get in touch with a therapist if needed was seen as reassuring.

A clear difference was perceived between online therapy through video calls and phone calls by participants. They all said that phone calls were too impersonal or dehumanizing as they could not see the face of the person they were talking to. If they had to do online therapy, having the video on would be necessary for them to engage in the session.

When asked about what prevented them or still prevents them from starting therapy, different types of barriers were mentioned: stigma, difficulties admitting that they needed help, lack of knowledge about therapy and procedures, and cost.

All participants mentioned stigma around mental health as an obstacle to starting therapy. Fear around the perception close friends and family would have if they were to know was mentioned by participants in Switzerland.

However, two participants from Asian countries brought up how culture heavily influences the perception of therapy. They explained that as these cultures were heavily collective based, reputation was of utmost importance to have a place in society. This aspect will be discussed further down below.

For other participants, even though they have actually never received any negative feedback on their intention to start therapy, all mentioned that they feared people around them would think that they suffer from a serious disorder or would be dismissive of their struggles.

All participants who engaged in therapy before talked about having difficulties realizing and admitting that they needed help for their mental health. They often had a close friend or family member telling them that they noticed a change in behaviour and recommended therapy before actually coming to terms with their struggles.

All but two participants who had engaged in therapy before mentioned that they had to do research for a long time before finding a therapist that corresponded to their criteria and had a spot available for a new patient, and even longer to try out different therapists before finding the right one. This long and tedious process brought feelings of discouragement and helplessness.

Two other participants found their therapist by word of mouth or lived in a rural area where demand is lower than in bigger cities.

Another aspect that was also brought up was that researching information about the therapists themselves proved to be difficult. Participants mentioned that internet searches provided only the basic information about a therapist such as their name, address, and phone number/email address. Only a handful of therapists actually had a website where they talked about their therapy approach, work experience, studies, and the types of patients they work with.

The costs incurred by therapy sessions were also a source of worry for multiple interviewees, even it was not mentioned at any point during the experiment. Either their country's insurance did not cover therapy costs at all, or it covered them but only under specific conditions. For one participant, their country's healthcare and even more so mental health care is too lacking to consider seeking help unless the problem becomes too severe that it impedes on their ability to function normally.

5. Analysis

The Chi-square calculation shows that the null hypothesis “There is no association between a person’s point of view on therapy and their choice of medium for therapy” cannot be rejected. However, the second statistical test shows that there is a strong association between the participants’ history with therapy and their choice of medium.

While the result for the main hypothesis of this thesis is rather underwhelming and the other is very promising, they do not hold much weight as the number of participants is lower than what would be necessary to show statistically relevant results, as shown by the power analysis calculated. While these results cannot confirm or deny the possibility of an association, the idea of online therapy being more attractive was mentioned a lot in the open-ended questions of the survey.

On top of this, the second statistical test raises a question about the relationship between the therapy history of an individual and their choice of medium. As this specific subject has not been studied in the available academic literature, it could become the subject of a subsequent research project to find out if there is indeed an association, why and the implication it could have for the future of online therapy.

For the open-ended qualitative questions, the two most recurring topics were the work experience, and that the therapist was working face to face. This shows that while everything is connected through different technologies, for that kind of emotional work, the face-to-face interaction between the patient and the practitioner is still an important factor and even for some, a mandatory factor to accept going to a specific therapist. However, closely following is the therapeutical approach which is to be expected as it is important to choose the right kind of therapy for different types of problems.

Following right after is the fact that therapy is offered online that was one of the most important variables for choosing the profile. If we add in the fact that anonymity was mentioned three times, there is ground to believe that the online medium and the anonymity that it brings could be a factor encouraging people to try therapy in an alternative way.

Some participants mentioned that the anonymity of an app or online medium brought was reassuring because they had difficulties opening up about their emotions or that they were autistic and as such, social interactions were difficult and draining at times. Others mentioned that they feel like they can express themselves better in writing, as they have time to ponder on their answer and can edit it however many times they want.

Structural barriers like travel time and transportation were mentioned, confirming that these issues do have an impact on the prospect of going to therapy, as discussed in the studies realized by the WHO and Goetter et al. on barriers to therapy.

A matching system has been mentioned two times in relation to the profile of an online therapy platform BetterHelp. It is a platform created by Alon Matas and Danny Bragonier in 2013 that aims to offer cheaper, and easier access to online counselling, whether it is through video calls or texting. Upon registering, they ask a series of questions to identify the needs and preferences of the prospective patient and take those into account in order to match them with the most fitting therapist. The fact that participants seemed interested by this system could open up new ways of proceeding that will be discussed later in this analysis.

The miscellaneous category contains topics that were only brought up once. While some of them are really interesting like vulnerability, trust, privacy or first step (towards therapy), further research needs to be done to assess the true weight of those topics on the decision to go to therapy and with which therapist.

The cultural aspect was brought up in the open-ended questions of the survey but also in the interviews, but for different reasons. In the survey, the cultural aspect was mentioned because something that caught the participant's eye was that some of the profiles mentioned having worked in different countries, and this was something that they felt was important as it would give them a more open-minded view and a better ability to understand the cultural implications of the participants' problems. This aspect of the cultural theme is not something that has been mentioned in the available literature on the subject but is something that could be taken in consideration when providing information about a therapist.

The other aspect that has been mentioned in the interviews in the stigma around mental health that is specific of certain cultures, namely Asian cultures in these interviews. It has been discussed that since they are very collective focused type of culture, there is a heavy stigma around mental health.

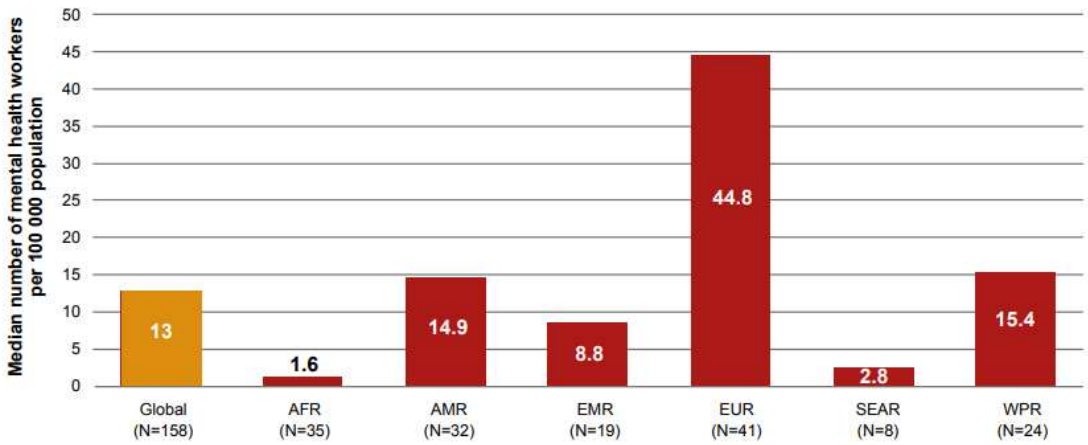
If people were to find out that a member of a family showed signs of mental illness or was seeking treatment, they would be deemed as not contributing to society fully. They will start to treat the patient and their family differently and will not seek close contact with them. As such, the image of a family member has a big impact on the reputation of the rest of the family.

Thus, mental health issues have been pushed under the rug and considered as taboo. While it has been slowly changing with the youngest generations, lack of information and resources is still a big obstacle in the way of appropriate treatment. This lack of information and resources does not come as a surprise for the reason that in the “mental health Atlas” published by the WHO in 2021, the South-East Asia region had the lowest number of countries reporting that guidelines for the integration of mental health into primary health were available and adopted at national level (WHO, 2021, p.72).

In southeast Asia, only six countries reported integration and adoption of guidelines while Europe had 34, the Americas 24, and Africa 25. (WHO, 2021, p.72). (See appendix 10)

On top of this, the number of mental health workers per 100’000 inhabitants in southeast Asia was 28, while in Europe it was 44 and in the Americas at 14.9. (WHO, 2021, p.61).

Figure 8 Number of mental health workers per 100’000 habitants, by WHO region. (WHO,2021)



In terms of cost, it was a concern that was brought up by many participants. The participant for whom it was the most important was one who had very little access to healthcare in general and for which mental health care was inaccessible due to the cost. This corroborates the results of the study conducted by the WHO and Goetter et al. on barriers to therapy, where in terms of structural barriers, the cost was the most recurring one.

However, a surprising result from the interviews was that cost was a topic that was brought up and played a role in the decision-making process of Swiss participants. They mentioned that they either were not aware that the mandatory health insurance reimbursed most therapist sessions or proposed that a reduction in price for online therapy could be an incentive in choosing this medium over in-person.

Overall, what was discussed during the interviews and the open-ended questions from the survey corroborate the findings of the WHO study conducted in 2013 and the research conducted by Goetter et al. in 2018. It seems like even after the pandemic and the rise in awareness for mental health that it brought, attitudinal barriers like stigma and low perceived needs still play a role in the thought process when pondering whether or not to start therapy.

However, something that was not discussed in either the mental health atlas and the studies realized by the WHO and Goetter et al. on barriers to therapy, are the difficulties to find and access accurate information about therapists. There were two types of scenarios mentioned by the participants. The first one is that due to the lack of energy and motivation caused by post-partum depression, it was difficult to find the will and concentration to start researching on google for a therapist when it was already difficult to take care of their hygiene and nutrition.

This makes sense as one of the main symptoms of depression is a lack of energy or motivation and loss of appetite. (DSM-5, APA 2013, p.161). The other participant did not struggle with symptoms of depression but did mention that the process of researching on google, calling therapists to schedule an appointment, and going for a first appointment was extremely time-consuming. As they did not have any guidance on where to look and what to look for, they found themselves calling haphazardly therapists.

Even then, many did not take any new patients or would have some space but in a few months' time. They mentioned that after some time of fruitless searches, they started to feel discouraged and helpless. The whole process was described as a "hassle" and "stressful". They even started questioning if they will ever find someone to help.

Both participants then mentioned that a sort of database regrouping all available therapists from a specific region would be the best solution to help with research. Those profiles would ideally contain their name, contact information, work experience and therapeutic approach, and if they practice in-person or online. This would allow participants to have all the information needed to take a decision and to filter the results according to their preferences. Later on, a matching system similar to the one proposed by BetterHelp could be added as it was seen as an appealing feature.

The limitation of this study is the small sample size, which was only a fifth of what would be needed to find a difference between groups. This limited number of participants comes from a lack of resources and also a lack of judgment in the experiment design.

When analysing the results, there was a clear dropout point which was at the moment of the experiment.

A possible hypothesis for this separation is that there were too many profiles and participants did not have the motivation to go through all of them. If this experiment were to be reproduced, only showing two profiles per medium (app, online, in-person) would possibly not discourage participants from reading the profiles and proceeding with the remaining questions.

After analysing the results of the quantitative and qualitative data of the experiment and the qualitative data of the interview, a new research project could be developed to advance the understanding of the impact culture has on attending therapy. As discussed previously, separate cultures interact differently with the concept of mental health, but there is research to be made on how much of this impacts the mental health care system and the utilization of those resources depending on the culture.

This type of study could bring more insight on how to reduce attitudinal barriers to therapy and bring new ways to counteract the negative impacts it has in order to allow more people to access adequate treatment.

The link that has been discovered between an individual's past experience with therapy and the medium of choice between online, in-person and in app is something that deserves further investigation, as mentioned at the beginning of this analysis. Understand why and in which condition this parameter comes into account when deciding on the medium could prove useful when it comes to targeting a certain medium to a certain target customer.

Another research project could dive deeper into the issue brought up during interviews about the access to resources online. Based on what was discussed, once a decision was made to go and start treatment with a therapist, research for resources online was found to be a long and arduous process, leading to feelings of discouragement.

Understanding how mental health resources are made available and experimenting with new ways to make them easier to access would bring new action plans and make looking for information easier for future patients.

6. Conclusion

This research's purpose was to better understand the barriers that an individual might face when considering therapy and to see whether the new online tools which have been used exponentially during the pandemic could alleviate some of those barriers.

While the initial hypothesis "a person who is on the fence or has a negative view of therapy is more likely to choose online therapy than someone who has a positive view", cannot be answered statistically, the qualitative and quantitative data shows that for a certain category of people, it is a possibility that would encourage them to start therapy. It was also shown that culture, stigma, and difficulties to find resources or reliable information on therapists were still preventing people from accessing treatment.

It is of utmost importance that we take actions to tackle this problem. If left as it is, it will have heavy repercussions on the well-being of the population and a negative economic impact in terms of productivity and cost of non-treatment.

It is going to take time to change cultural norms, mental barriers, stigma, and the impact it has on people. But there is space for improvement in the practical side of looking to start therapy and subjects to explore to further our understanding of the barriers to therapy. Whether it is the impact of culture on the decision-making process or the impact of a past experience with therapy on the medium of choice, there are actions to be taken in order to improve the process for patients.

One of those could be to start developing an online platform to catalogue all the therapists from a region with all the relevant information to choose the right practitioner and book an appointment.

So that when they finally take the first step toward therapy, we can ensure that they will find the support that they need for their mental health as quickly as possible.

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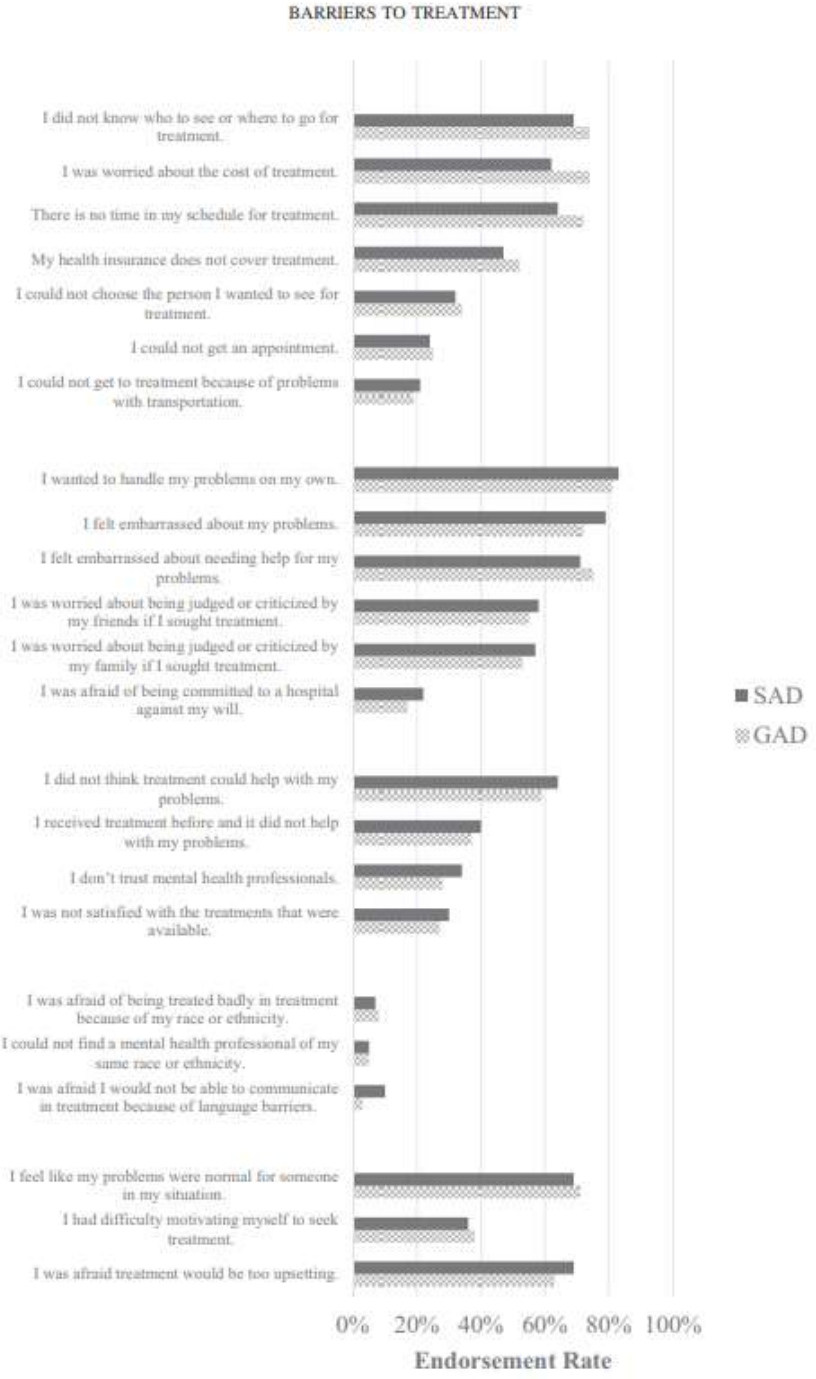
Appendix 1: barriers to therapy, Goetter et al., 2018



Appendix 2: Experiment questionnaire

Introduction

I am a 3rd-year bachelor's student at the Geneva school of business administration, and as a part of my thesis work, I am looking to investigate different approaches to psychotherapy. This survey will consist of several general questions and a short experiment where you will be asked to decide which therapist you would like to visit based on a brief biography. All the answers will be kept anonymous, used exclusively for my thesis research, and not distributed to 3rd parties.

Age confirmation

please confirm that you are 18 years or older.

Yes, I am 18 years or older

No I am not 18 years or older

Consent

By checking the box below, you agree that you understand the purpose of this study and are happy to participate.

Yes I agree

no I don't agree

demographic questions

what is your age?

18 – 24

25 – 34

35 – 44

45 – 54

55 – 64

65 or older

what is your gender?

Male

Female

Non-binary

Prefer not to say

Where are you from?

(text box)

Experiment instruction

For this part of the survey, you will be presented with 12 different profiles of therapists and mental health apps. Please read them carefully and answer the following questions:

Therapist & app profiles

Stresscoach

Stresscoach is a CBT-based self-help app that helps to guide you towards a less anxiety and stress ridden life.

The Stresscoach App consists of two main parts, long term behavioral therapy through specifically designed courses and quick momentary help in the form of relaxation audios.

The app is Conversation-based with self-help for anxiety, Highly tailored learning, Empathy and understanding

Pas de panique

No panic is an app to help with anxiety through hypnosis, meditation and bio hacking exercises. A wide variety of topic are available depending on your needs. A forum to discuss with other users of the app is also available to share about your experience.

Wysa

Wysa is a mental health app that combines meditation/therapeutic exercises with real time support from either an AI chatbot or a real therapist. Consultations are held online through text, phone calls or video calls. All discussions with the AI and the exercises are CBT and evidence based. No phone number or email is required, making your use fully anonymous.

Betterhelp

Betterhelp is an online platform for therapy. With the help of a questionnaire, the site will match you with a therapist. You will be able to start immediately to chat through text with the therapist and to book online sessions.

Claire Brown graduated from the university of Geneva with a master's degree in psychology and a specialization in psychodynamic therapy. She has practiced in the UK, France and Switzerland and now has now her own practice in the centre of Geneva. She specialises in working with adolescents and young adults with depression, anxiety, eating disorders and personality disorders. Only face to face sessions

Jean Leduc obtained their psychology masters in France at the University of Paris. After working at the HUG for 15 years, he opened his own practice focusing solely on adult therapy and specialises in Cognitive Behavioural Therapy. Mr. Leduc is specialised in grief counselling, divorce, and addiction. He only practices online through phone or video calls.

Lena Schmidt is a board-certified psychologist who graduated from the University of Stuttgart. After spending a few years doing empirical research on depression in adolescents and young adults, she decided to open her practice in Geneva and has been practicing for 5 years. She specializes in humanistic therapy for adolescents and young adults. She exclusively practices online through phone or video calls.

Patrick Hubert is a psychologist/psychotherapist who graduated from the University of Fribourg. He spent 10 years in the Psychiatric division of the CHUV before deciding to join a private practice with some colleagues. Practising dialectal behavioural therapy, he takes care of patients diagnosed with borderline personality disorder and adolescents with trouble with education. Mr. Hubert practices in his office in the centre of Geneva.

Larissa Ilsfeld is a psychotherapist based in Vernier specialized in couple counselling and cognitive behavioural therapy. After graduating from the University of Lausanne, she obtained a certification for marital therapy. She has been practicing for 5 years and accepts couple and depending on the situation each patient individually. She practices only in face-to-face sessions.

Julie Gehring is a psychologist who graduated from the University of Zurich with a master's in psychology, option illness management. She has been practicing for 10 years with adolescents and adults who suffer from chronic illnesses and depression with a humanistic approach. She mostly conducts therapy online.

Hannah Baker graduated from the University of Geneva with a master's in psychology. After working for 4 years as an emergency psychologist for the HUG, she opened her office in Carouge. She treats patients with PTSD with the EMDR approach and dialectal behavioural therapy. She exclusively works in person.

Benoit Bauer is a graduate from the University of Lyon in psychology. After practicing for 7 years in Lyon in a clinic, he decided to open his own office. Specialized in psychodynamic therapy, he treats patients with depression, anxiety, childhood traumatism and PTSD. He only conducts online sessions.

Which profile are you most likely to be more interested in trying therapy with?

Stresscoach

pas de panique/no panic

Wysa

BetterHelp

Claire Brown

Jean Leduc

Lena Schmidt

Patrick Hubert

Larissa ilsfeld

Julie Gehring

Hannah Baker

Benoit Bauer

Why did you choose this specific therapist/app?

(text box)

Which aspect of the profile you chose caught your attention?

(text box)

The experiment part is now finished, we still have 2 more questions to ask about your experience with therapy.

Have you ever gone to therapy?

Yes, and I'm still going

Yes, but I've stopped

No

prefer not to say

Why did you stop going to therapy?

I didn't feel the need to go anymore

I wasn't able to form a relationship with my therapist

I didn't like the type of therapy they were practicing

it was too inconvenient for me to go see my therapist

other

Your friend is confessing that they've been struggling with their mental health, how likely would you suggest they go see a therapist?

Extremely unlikely

Somewhat unlikely

Neither likely nor unlikely

Somewhat likely

Extremely likely

Would you be interested in participating in a 15min interview about this subject online or in Geneva?

Yes

No

Please leave your email address and/or phone number to schedule the interview

(text box)

Appendix 3: interview question

- Ever gone to therapy?
- What do you think of psychotherapy? Useful? Only for people who are really ill?
- Which profile did you choose out of the twelve?
- Has the fact that some therapists conducted therapy exclusively online influenced your decision?
- If a therapist that corresponds to your needs proposed both online and in person sessions, which would you choose?
- If you have already let or if you were to feel the need for some support for your mental health, what did or would prevent you from starting?

Appendix 4: interview 1 summary

Never went to therapy before, neutral view of therapy, chose online(app)

- Big focus on cost, Therapy is too expensive
- The health care system is lacking, even more so for mental health
- Heavy stigma around mental health
- Lack of education and resources on mental health in general
- Since it is so expensive, they have to reach a certain level of severity to get help
- Cultural aspect: Asian culture is a collective type of society so image comes first. If you show signs of mental illness, people will treat you and your family differently and will not want to come near you. As such, They were worried of how their family would look to other if they went to therapy.
- They were raised more western-like so they had less stigma, less of a collective kind of thinking
- Why they chose an app: self-paced, but can ask for help if needed, long-term
- In-person: easier to connect with the therapist even though it is harder because you have to seat in front of someone.
- The connection with the therapist is really important
- Online therapy is useful, especially in covid type of situations or when you can't physically go
- They would consider doing online therapy if it was through video call, even though they would find it weird/uneasy, but online therapy just through a phone call would be too impersonal
- They have not started therapy because they have no knowledge of any therapist or resources/service
- They had heard before of mental health apps and they thought it might be easier, but as it's more targeted towards western market, other people from their country might not have heard of those apps. There are no apps targeted towards Asian cultures

Appendix 5: interview 2 summary

Went to therapy before, positive view of therapy, chose in-person

- For them, online therapy really is not the first choice
- real need for a face-to-face meeting to create a connection
- The act of going/traveling to the therapist's office is important
- Would tend to skip online sessions than in person
- The act of showing up to the office brings in a sense of responsibility that is not felt when online
- Would move to online to follow a therapist with whom they have a connection
- If they were to find a therapist with the perfect profile for their needs, they would attend sessions online
- However, they feel like it would be more difficult to create a connection online
- They think it would be okay to do online sessions through video call, even if they would feel unsettled and uneasy
- But it would also depend on the patient therapists personality
- They might need to put in more efforts to create a relationship
- Concerning why they did not seek therapy, they have answered that the feeling of helplessness, stigma and shame prevented them from reaching out for help. They also only received negative feedback from people around them.
- They have looked at online resources online while they were feeling anxious, but they could not find relief which led to feeling disappointed
- The cost of therapy was not relevant in their thought process

Appendix 6: interview 3 summary

Went to therapy before, positive view of therapy, chose online

- They chose online therapy purely because it alleviates structural barriers, for practical reasons like parking issues and lack of time to travel to an office
- They find that the number of therapists working under psychiatrists too restraining
- Price is an important factor
- When choosing a therapist, the most important is their profile, followed by the price
- If the therapist is too expensive, they will do less sessions
- consulted a therapist they have never seen IRL
- They felt that it was unsettling, but not much different than meeting someone face to face for the 1st time
- That same therapist proposed video calls.
- They found it really nice, because they can take notes easily.
- They find phones dehumanizing, but video calls almost same as in-person
- Taking the first step to start research is difficult when they have no energy, they are not feeling well/not able to take care of themselves (hygiene and nutrition) -> online therapy would also help with that.
- They first had a phase of denial before accepting the need for help.
- They would be interested in a platform regrouping all psychologists/psychiatrist to make research easier

Appendix 7: interview 4 summary

Never went to therapy before, positive view of therapy, chose online

- They chose online therapy because it feels easier/less vulnerable
- They also think that they chose online therapy because they are an introvert.
- They mentioned structural barriers like travel because it is time consuming to go in person
- Since they have to meet someone they don't know, it's less embarrassing online and easier to open up
- The other structural barrier mentioned is cost.
- An attitudinal barrier mentioned is stigma, what will people think, will they think what you have is really serious
- They only heard negative things about therapy since young, because in their culture it is very frowned upon.
- However, spending time on the internet has helped change this perception
- They were scared that people would be dismissive, or suggest yoga or meditation because they would think it is not that bad
- They know about the school mental health program for cheaper sessions
- They have done research for a therapist in the past
- They did not know about the reimbursement system for therapy sessions
- They have seen a lot of advertisement for BetterHelp.
- They find the chatting function 24/ 7 to be very interesting, you can resolve a problem immediately without waiting for the next session.

Appendix 8: interview 5 summary

Went to therapy before, very positive view of therapy, chose in-person

- They chose face to face therapy because for them the point of therapy is to have a discussion
- They also practiced EMDR in the past, and for that they need to be in the office
- the fact to be in an office, in a different setting, a different atmosphere also plays a part

- They used word of mouth to find the right therapist
- They find that online therapy is a bit too impersonal, but online with camera is ok if the price online is lower
- They think that online therapy is temporary fix but not a long-term solution.
- They think that online could be good for people who have money problem. However, if they have a good relationship and the therapist moves fully online, they are ready to move online too (only w/ Camera)
- One of the barriers to therapy they mentioned is not realizing that they need help
- They had an experience recommending therapy to family and friends, but they were defensive and in denial.
- Whatever the medium, they wanted to put emphasis on the fact that not doing well mentally is okay and not the end of the world.

Appendix 9: interview 6 summary

Went to therapy before, very positive view of therapy, chose in-person

- They couldn't admit to themselves that they weren't doing well
- Their friends noticed and talked about it
- They were hesitant at first, because they did not think it would be effective or that it would be the same as talking to friends at a pub
- They were also scared of the stigma, how other people will react when they learn that they go to therapy
- Actually, their friends were curious and noticed the positive change
- They chose face to face for the nonverbal communication and they think it is more effective
- They doubt that distance has a positive effect and that the therapist can catch everything
- It could be a good solution for them while on vacation instead of an interruption, but only 1-2 Sessions
- For them, it is important to see/ know the face of the therapist
- In the beginning, they had difficulties opening up in the first few session because it
  was a stranger, and that even though they knew about confidentiality, that they're here to help, confessing to a person is hard
- And so, confessing to someone they cannot see is impossible for them, they NEED to see a face
- A structural barrier for them was that they did not know where to look for a therapist, so in the end they found one through word of mouth. They mentioned that they were lucky to have a spot because one of the therapist's previous patient was leaving, so a spot was free.
- They think that if they had to do without word of mouth, it would have taken a long time since there is a shortage of therapist.

Appendix 10: interview 7 summary

Went to therapy before, very positive view of therapy, chose in-person

- They feel like online makes it like there is a barrier between them and the therapist. For them, human interaction is different in person
- Consultations by phone is viable in case of emergencies or they don't have easy access to in-person therapy
- online would be good for immune-compromised people(Covid), or people who have very packed schedule and don't have time to make it to the office
- They would move online to follow their current therapist because the threshold to move is lower if they already have a connection with the therapist
- They found it was very hard to find a therapist. They had to call many people but most of them don't accept new patients. Once they found one, but it did not work out so they had to start all over again
- They found it to be a long process, they were feeling discouraged. The process was described as hassle, stressful. They started doubling if they will find someone to help them
- A website regrouping all therapists of a city and region + relevant information would be helpful
- Their cultural background prevented them from starting. As they come from an Asian culture, mental health is very stigmatized not talked about or researched If you show signs of mental distress, you are considered not a full functioning member of society
- They were also scared that their parents or people are going to think they are crazy. It Is even worse with extended family, it really has a big influence on you as person, and your reputation
- They found it daunting to start because there is no support, they did not know where to start. Their friends who have gone through it have guided them on what kind of therapy there is, etc.

Appendix 11: interview 8 summary

Went to therapy before, very positive view of therapy, chose in-person

- Apps are not well developed in their country, so they did not consider it
- online is nice but they need that first contact to be face to face to create trust and a bond. But once that is done, they don't mind phone or video call.
- They find online therapy nice if you are moving or doing other things but still need a session
- The medium through which therapy takes place wasn't taken into account during the experiment. Whether it is online or in-person, it doesn't matter for them if the first session is face to face
- For them, behind a screen is not the same feeling as in person.
- They think that online could be advantageous because they don't need to travel to the office
- It could help people with social Anxiety. It actually helped them when their social anxiety had gotten worse, and they could not take public transport to go to the therapist's office
- They found it difficult to find relevant information on google, they only found the name, address, and phone number but no information on the type of therapy
- The ideal would be the type of profiles found in the experiment
- They took around 10 days to do their research
- An attitudinal barrier was apprehension. They knew they needed it but there is a kind of psychological barrier preventing them from starting
- They had thoughts like: "aren't I just too weak?"
- They were also afraid of the negative perception of other people
- They found that older generations tend to be more judgemental people. But they found only support from people close to them and younger
- They think that if the session is conducted online, there should be a reduction in price, as in their country therapy sessions are not reimbursed by insurance

Appendix 12: Mental health Atlas (WHO) Adoption of mental health guidelines at national level by countries

Table: Countries reporting that guidelines for integration of mental health into primary health care are available and adopted at national level, by WHO region and world Bank income group (WHO, 2021)

	Countries reporting that guidelines are available and adopted at national level (N=168)	
	Number of countries	Percentage of responding countries
Global	**125**	**74%**
WHO region		
AFR	25	66%
AMR	24	75%
EMR	18	90%
EUR	34	74%
SEAR	6	75%
WPR	18	75%
World Bank income group		
Low	17	71%
Lower-middle	27	69%
Upper-middle	40	77%
High	41	77%