## SEVERE MENTAL ILLNESS

### **Rehabilitation in Semi-isolated Environments**

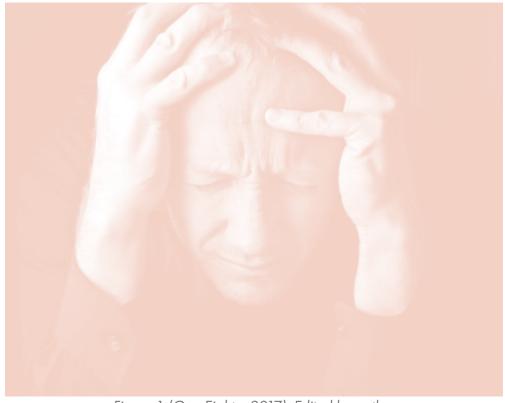


Figure 1:(One Eighty, 2017), Edited by author

### **RESEARCH PLAN**

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Figure 2: (Psycom, 2022), Edited by author

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Design for Care In an Inclusive Environment AR3AD110

Romina Gurkan Saul

#### - Introduction to Severe Mental Illness-

used for individuals that have psychiatric problems that create functional impairment which causes problems in daily activities. The Diagnostic and Statistical Manual in treating all symptoms of the patients or creates a of Mental Disorders (DSM) includes bipolar disorder, borderline personality disorder, post-traumatic & Fleck, 2018) where patients get readmitted multiple stress disorder (PTSD), major depressive disorder, times in a short period (Oyffe, Kurs, Gelkopf, Melamed, schizophrenia, and obsessive-compulsive disorder & Bleich, 2009). Therefore, even though the ideal (OCD) as diseases that count as severe mental illnesses. (What is a Serious Mental Illness?, n.d.).

In Europe, SMI affects 6.5 million people, representing 1.3% of the population (European Union, 2018). However, in the Netherlands, 1.7% of the population has SMI, and approximately 75% of the patients are in psychiatric care (GGZ Standaarden, 2021). Therefore, it can be interpreted as 216.750 people having a low ability to complete daily activities and functional tasks. In addition to this, their psychological disorder also causes physical conditions such as asthma, stroke, cancer, heart failure, hypertension, etc. Therefore, the psychiatric treatment of these patients is very important for their physical health as well (Lachowycz, Celebi, Price, Lugton, & Roche, 2018). Especially, with the current challenge of role in implementing semi-isolated environments in the Netherlands with healthcare staff shortages psychiatric care for the rehabilitation of patients. (Visser, 2019) the treatment and rehabilitation of psychiatric patients is of great importance. According to the report of Medisch Contact in 2020, there are around 3.000 job vacancies for caretakers in the mental health department. This results in long waiting lines in mental health care facilities (NL Times, 2021).

In addition to this, even though hospitalization for severe mental illnesses is often needed and beneficial, often psychiatric hospitalization has a low satisfaction rate. Length of stay (LOS) is an important aspect that affects satisfaction after discharge, according to research, longer LOS often results in high suicide rates

Severe mental illness, also known as SMI, is a term after discharge (Navarro, et al., 2021). However, the patient's background severity might require a longer LOS. On the other hand, shorter LOS also causes failure pattern called a "revolving-door" (Baeza, da Rocha, LOS is still unknown, inpatient psychiatric admissions outcomes result in readmissions and high suicide rates (Loch, 2014). Especially, according to research, SMI patients of ages 26-45, have the highest chance of readmission (Teigland, Forma, Green, & Kim, 2018). This means that current psychiatric facilities fail to create a good transition from isolated psychiatric facilities into society for adults.

> Creating a good transition from psychiatric facilities into society would be beneficial for first the quality of life of the patient, second, the society, and lastly, it would decrease the burden on the Dutch healthcare system with decreased readmissions, suicides, and physical health problems. As the problem is hypothesized to lie in the direct transition from isolated to non-isolated (society) environments, architecture can play a big

### INTRODUCTION



Figure 3: (The Promise Act, 2021), Edited by author

#### - Problem -

Transitioning from the isolated environment back to the community is difficult for patients discharged from psychiatric hospitalization. As psychiatric facilities offer controlled social interactions and routines, the readaptation of the patient to society is very hard, increasing rehospitalization rates (Loch, 2014). In Europe, the re-admission rate of an inpatient after 30 days varies between 9-15%, this rate is between 33-48% within a year (Hegedüs, Kozel, Richter, & Behrens, 2020). In addition to this, according to the Harvard Review of Psychiatry studies, suicide rates of SMI patients after discharge are 23 times greater than the general population. 26.4% of the suicides are attempted within a month of discharge, 40.8% within 3 months, and 73.2% within a year (Forte, Buscajoni, Fiorillo, Pompili, & Baldessarini, 2019).

The fact is that semi-isolated living environments are not common in psychiatric care was hypothesized to be the main problem in the transition after discharge. Architecture can help with implementing this semi-isolation environment in current psychiatric facilities to solve this problem. The patients that have been living dependently in strict and isolated psychiatric facilities for weeks/ months to are expected to learn to live independently with their symptoms while also readapting to the social codes of society. Therefore, creating semi-isolated environments where patients can slowly adjust to living independently and take over roles in the community while also being under the surveillance of psychiatrists can be beneficial in fixing this problem in psychiatric care.

# **PROBLEM**

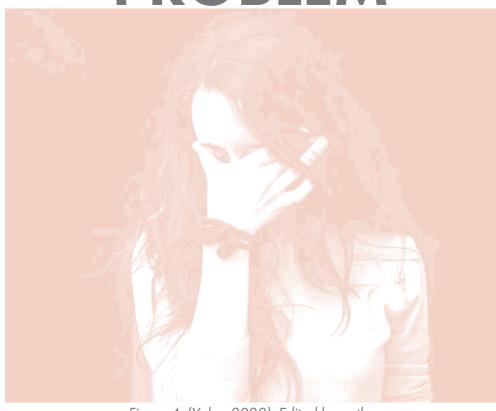


Figure 4: (Yoho, 2020), Edited by author

## RESEARCH



Figure 5: (Sharma, 2019), Edited by author

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#### - Goal of the Research -

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The research aim of this project is to increase the quality of life of severe mental illness patients and provide better rehabilitation in the community by increasing their self-esteem, teaching them to live independently, and preparing them for the social codes of society. For this, it is aimed to create a semi-isolated living environment where patients can have a slower transition from psychiatric hospitals to society and where real-life circumstances are created under the surveillance of their psychiatrists. With this, it is aimed to facilitate the transition of SMI patients to society, hence, decreasing the number of rehospitalization and suicide attempts which will also result in decreasing the need for caregivers for the same patients which will reduce the burden of psychiatric care in Dutch healthcare.



Figure 6: (Garber, 2021), Edited by author

#### **Design for Care In an Inclusive Environment AR3AD110**

#### - Research Questions and Explanation of the Terms -

In this chapter the main research question together with the sub-questions that will help answer the main question will be introduced and the terms that are important for this research will be explained. Additionally, the scope of the research will be described by explaining what is included in the research and what is not.

#### Main Research Question:

In what way can a semi-isolated living environment provide rehabilitation to adults living with severe mental illnesses (SMI) to facilitate their transition from psychiatric hospitals into society?

#### Research Sub-Questions:

- 1. What's the main reason for the high suicide and rehospitalization rates for SMI patients during the transition from psychiatric hospitals into society?
- 2. Why is isolation necessary, and to what extent semi-isolation can be provided to facilitate rehabilitation?
- 3. What design strategy can create an ideal environment for the rehabilitation of SMI patients?

#### Explanation of the Terms:

Severe Mental Illness (SMI): People who have psychological issues so severe that they are greatly limited in their ability to engage in functional and occupational activities. Bipolar disorder, borderline personality disorder, PTSD, major depressive disorder, schizophrenia, and OCD are referred to as SMI (Lachowycz, Celebi, Price, Lugton, & Roche, 2018).

**Rehabilitation:** Restoring someone to normal life after illness. In this case, full recovery is rarely possible. However, patients may learn to complete daily life activities with their symptoms (Oxford Languages, n.d.).

Treatment: The medical treatment provided to a patient for a disease (Oxford Languages, n.d.). Isolation: The environment where the patients cannot speak to anyone outside the psychiatric facility and must follow strict routines.

Semi-isolation: The environment where patients can have some contact with the outside world, be a bit more autonomous, and learn how to function in the community while being watched over by medical workers and following certain therapy activities.

The definitions of isolation and semi-isolation were written by the author to describe what is meant by isolation and semi-isolation in this research.

### - Including / Excluding -

As there is a limited time for the thesis, certain things will be included in the research while certain things will be excluded. Therefore, a list is provided below to draw a clear picture of the extent of this research:

- Treatment is also included as it is the first step to rehabilitation. However, the main issue is the gap between "after treatment" into society therefore the focus is rehabilitation.
- Monetary issues are not included. To clarify, it is also important that the patients also have an environment where they learn how to function in society and work, earning money is an important aspect, therefore, I'm including this. However, I'm excluding the monetary side of the design, meaning that this facility can be a big project that would require a big investment.
- Substance users are not included. Commonly, some SMI patients can be addicted to certain substances. However, the main goal of my design is to treat and rehabilitate psychiatric illnesses, not substance addicts.
- Physical symptoms of the patients are not included. The goal is just to treat and rehabilitate psychiatric illnesses which will also indirectly result in fewer physical symptoms however, treating physical illnesses is not the main goal.

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### RESEARCH

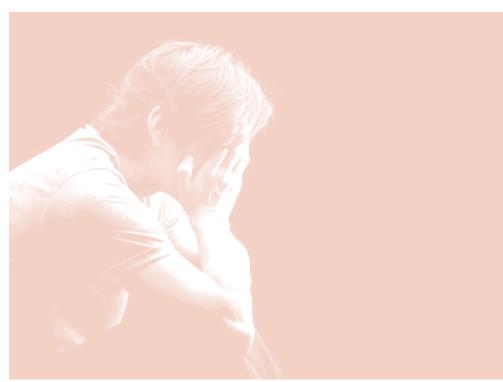


Figure 7: (Love The Wind, 2022), Edited by author

#### -Methods

In this chapter methods that will be used to answer the sub-questions will be explained with the help of the research diagram. Additionally, the methodology chapter where the reasoning behind each sub-question and how each method will help with the intended outcome will follow.

- 1. What's the main reason for the high suicide and rehospitalization rates for SMI patients during the transition from psychiatric hospitals into society?
- Literature review
- Fieldwork: Interview with psychiatrists
- Existing patient videos
- 2. Why is isolation necessary, and to what extent semi-isolation can be provided to facilitate rehabilitation?
- Literature review
- Fieldwork: Interview with psychiatrists, (staff)
- Existing case studies
- 3. What design strategy can create an ideal environment for the rehabilitation of SMI patients?
- Literature review
- Typology assessments
- Case studies
- Fieldwork: observation and interview

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Who?

The target group of this research is the adults of ages 26-45.

Transitioning from the isolated environment back to the community is difficult for patients discharged from psychiatric hospitalization. Often patients that are discharged from psychiatric facilities attempt to commit suicide or get rehospitalized.



if there was a semi-isolated environment where they could learn to control their symptoms in contact with **Hypothesis** the outside world while also following treatment routines under their doctors' orders, there would be fewer suicides and readmissions

#### **Research Question**

In what way can a semi-isolated living environment provide rehabilitation to adults living with severe mental illnesses (SMI) to facilitate their transition from psychiatric hospitals into society?

Why?

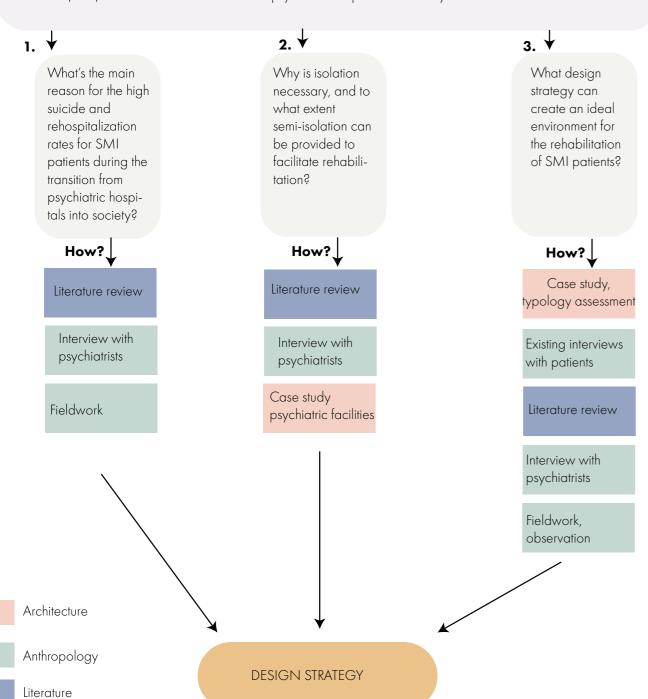


Figure 8: Research Plan Diagram

#### -Methodology -

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observation and interviews during the fieldwork,

research, interviews with a psychiatrist, and existing YouTube videos of patients will be reviewed. The With these sub-questions the research question "In what proving my hypothesis and presenting a possible solution: semi-isolated rehabilitation environments.

With the second sub-question, the slow transition from theoretical information to practical information will be achieved by finding out to what extent certain environmental changes would be possible and safe. The literature review and the interview with a psychiatrist will help to find out the reasoning behind the isolation of the patients and to what extent this could be changed. With this, it is intended to figure out to what extent changes in isolated environments can be done for better rehabilitation. This outcome will be used to translate theoretical information to practical, hence design. If for instance, the outcome of the research indicates that community integration is important, a possible solution could be to design a facility inside a neighborhood. Additionally, with case studies it is also expected to compare how the theoretical knowledge was reflected to design from past to present in terms of isolation.

It is aimed that the sub-questions will be used as Furthermore, the last sub-question intends to gain the steps to unfold the problem that started the knowledge on rehabilitation and reflect this into a research, gathering information on the problem, design. In the second sub-question, the aim was and lastly to produce solutions to the problem which to do this with the topic of isolation, but the last will form the design principles that will be used question focuses on a more general term which is in the design. To answer the different questions, rehabilitation. Therefore, the intended output is to various methods will be used: literature review, first compare and gain knowledge on rehabilitation and ideal environments for rehabilitation in theory existing videos, and lastly architectural research with literature reviews and interviews. Furthermore, in methods such as case study and typology analysis the fieldwork, the intention is to see how this works in practice and get insight from the target group. The first question was already researched in the And lastly, from the case studies and typology literature review to investigate the problem in assessments, the intention is to again compare how the topic of SMI. However, additional literature knowledge was and is reflected in architecture.

intended output is the negative information and way can a semi-isolated living environment provide opinions on the current handling of the transition rehabilitation to adults living with severe mental illnesses from isolated psychiatric hospitals to society for (SMI) to facilitate their transition from psychiatric patients which shows that isolation has a negative hospitals into society?" will be answered and design impact on patients' transition into society hence principles for the rest of the project will be created.

#### **Sub-Question 1**

What's the main reason for the high suicide and rehospitalization rates for SMI patients during the transition from psychiatric hospitals into society?

Literature review How? Interview with psychiatrists

The intended output is the negative information and opinions on the current handling of the transition from isolated psychiatric hospitals to society for patients which shows that isolation has a negative impact on patients'

transition into society

#### **Sub-Question 2**

Why is isolation necessary, and to what extent semi-isolation can be provided to facilitate rehabilitation?

How?

Intended Interview with output? psychiatrists

Intended

output?

Case study psychiatric facilities

Literature review

Fieldwork

The theory behind isolation of patients and the changes of this method from past to present. Intention is also to see the future on possible changes and pushing the boundaries in a safe way.

From the case studies, the intention is to compare old and new rehabilitation environments and see the reflection of the theory into architecture.

#### **Sub-Question 3**

What design strategy can create an ideal environment for the rehabilitation of SMI patients?

How?

Literature review

Intended

output?

Interview with psychiatrists

Fieldwork, observation

Existing interviews

with patients

Case study, ypology assessmen

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Intented outcome is to first gain knowledge in theory. What are the important steps in rehabilitation, how can this be reflected into architecture?

Intention is to observe and listen the needs of the target group. How is the situation now, how can this be improved?

Lastly, the intention is to compare the reflection of theory behind rehabilitation into architectural environments. Again, compating new and old.

Figure 9: Methodology Diagram

### -Theoretical Framework -

The theoretical framework describes various research real-life society experience under their psychiatrist's on severe mental illnesses and divides the research into three categories: rehospitalization and suicide current psychiatric facilities for an easier transition. attempts, severe mental illness and isolation, and lastly, rehabilitation. Various research on these Severe mental illness and isolation different topics was collected to position me on the topic of severe mental illness. This chapter includes the In the CGLPL report, isolation of the mental illness ideas that different researchers defend, my position on this topic, and the hypothesis that I formulated.

#### Rehospitalization and suicide attempts

According to the article published in Frontiers in Psychiatry journal written by Anna Hegedüs, the first month after discharge has the highest rehospitalization rates. (Hegedüs, Kozel, Richter, & Behrens, 2020). In addition to this, according to studies by Forte et al, suicide rates of SMI patients of the general population. 26.4% of the suicides are attempted within a month of discharge, 40.8% within 3 months, and 73.2% within a year (Forte, Buscajoni, Fiorillo, Pompili, & Baldessarini, 2019).

Laboratory of Neurosciences, psychiatric facilities offer artificial and controlled environments where patients learn to adjust their symptoms accordingly. However, as in social life, this controlled environment homes (Hegedüs, Kozel, Richter, & Behrens, 2020). doesn't exist, and it is harder for them to adapt. Therefore, he claims that it is important for patients to Furthermore, in the article Penny D. Xanthopoulou learn readaptation skills during their stay (Loch, 2014).

the direct transition from this isolated environment illnesses and increases the symptoms of psychosis. to society and, the research of Hegedüs and Forte Furthermore, she argues that being included in the where they show the statistics that the first month in community can create a reliable support system, the period after discharge the rehospitalization and frequently considered essential to recovery, and suicide rates are the highest, it can be defended that an creates higher life satisfaction (Xanthopoulou, additional phase right after discharge where a semi- Mbanu, Chevalier, Webber, & Giacco, 2022). isolated environment in which the patient can have a

surveillance can be beneficial to integrate into

patients is criticized. The author also criticizes the psychiatric facilities to be dehumanizing as the patients are deprived of contact with their families, are in constant surveillance, and are physically restrained by the nurses under certain circumstances. On the other hand, several reasons for isolation are also described to be useful for the treatment of the patients: to reduce the stimulation, prevention of self-harm, and reduce the possibility of a therapeutic rupture (CGLPL, 2016). Since the patients requiring inpatient care can have severe cases and be self-harming or after discharge are 23 times greater than those suicidal, these preventions can also be appreciated.

In addition to this, in the article of Hegedüs, she also writes about the benefits of "transitional interventions with bridging components" which is the support given to the patient before and after in-patient treatment According to Alexandre Loch, a researcher in the to facilitate their transition into society. For this, she argues that patients' community integration can be improved by transitional interventions at various social support levels, such as community care and support

wrote in Community Mental Health Journal, she claims that the lack of support and isolation from society has Based on the research of Loch where he criticizes a negative impact on patients with severe mental

## **THEORETICAL**

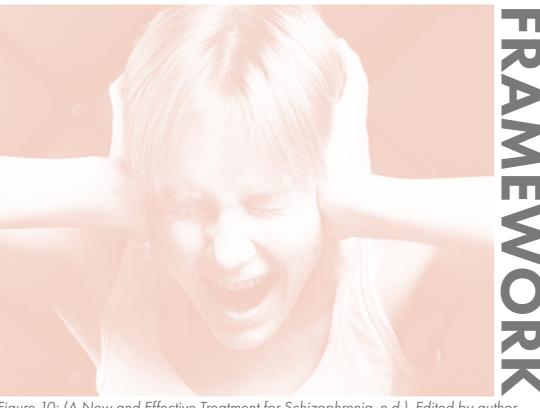


Figure 10: (A New and Effective Treatment for Schizophrenia, n.d.), Edited by author

#### Rehabilitation

In the book A Primer on the Psychiatric Rehabilitation Process, the goal of Medicaid's rehabili- Hypothesis tation of psychiatric patients is described as "the dence or self-care" (Anthony & Farkas, 2009).

Takasaka, Tada, and Kawanishi conclude that self-ef- there would be fewer suicides and readmissions. ficiency is very important for rehabilitating psychiatric patients to improve their social and cognitive performance. Therefore, they advise the caretakers to incorporate programs where the patients improve their ability to complete daily tasks instead of getting them to follow strict rules and routines (Tanioka, Mano, Takasaka, Tada, & Kawanishi, 2006).

Therefore, from these two pieces of research, it can be concluded that it is important that SMI patients learn to live independently to complete their rehabilitation and integrate into society.

### My Position

Considering the theoretical framework, I defend that the main cause of the high suicide and readmission rates is the isolation that psychiatric hospitals offer and the lack of preparation of the patients for the community. As patients must follow strict routines under the rules of the hospital, even though they learn to alter their symptoms in these facilities, it becomes much harder to control their symptoms in their daily lives after weeks of isolation. In addition to this, during their stay, since they have little contact with the outside world, when they come out, they must readapt their social skills as well.

Therefore, I position myself in defending the idea that it is important for SMI patients to obtain social and personal autonomy skills for good rehabilitation and that this is more likely to happen in a semi-isolated environment where they are in contact with the community and have individual spaces.

goal to attain or retain capability for indepen- I hypothesize that a semi-isolated environment where they could learn to control their symptoms in contact with the outside world while also following certain In addition, Japanese researchers Taniok, Mano, activities and therapy under their doctors' orders,



Figure 11: Theoretical Framework Diagram

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# **PLANNING**



Figure 12: (Ellis, 2019), Edited by author

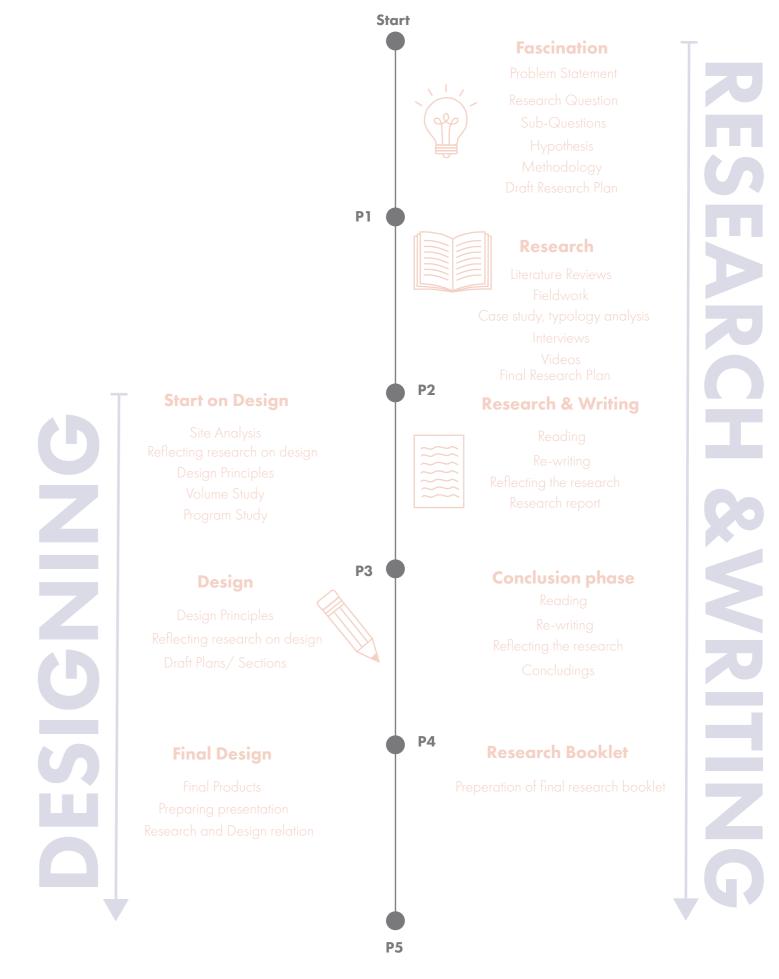


Figure 13: General Planning Diagram

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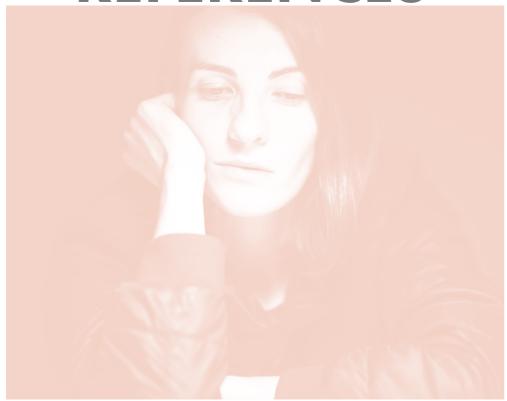


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Figure 8: Author's work

Figure 10: A New and Effective Treatment for Schizophrenia. (n.d.). Retrieved October 16, 2022, from AFC Counselors: https://afccounselors.com/schizophrenia/

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