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Healing Environments

How does the design of Architectural Openings in Eating Disorder Wards affect the Recovery Rates of Inpatients?

Critical Paper – ADB616 – AE1 – 2025

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Abstract

This research paper looks at the role of physical and spatial environments in which patients inhabit whilst undergoing treatment for eating disorders. Through both quantitative and qualitative methodologies, participants described their experiences with treatment environments. Showing how elements such as natural light, spatial openness and aesthetics influenced their emotions and recovery outcomes. Environments featuring large windows, natural views and open layouts were continuously associated with positive emotions relating to feelings of calmness and motivation. Whereas clinical, sterile and restrictive environments often created feelings of entrapment, anxiety and disconnection from the recovery programme as well as the external environment. A key finding indicated the need and want for patient-centred design, focussing on retracting from a one size fits all approach and emphasising design with individual recovery needs at the fore front. Natural light emerged as a critical factor in reducing stress and maintaining positive emotional well-being. The studies highlight the importance of rethinking inpatient and day patient unit designs to incorporate natural elements and address the different needs of patients. In turn improving recovery outcomes. These findings confirm and expand upon existing literature on therapeutic environmental design.

Acknowledgements

I would like to thank everyone who has helped and supported me through my university journey. I would like to thank my lecturer, Alan Manley who has helped and guided me through the writing of this critical paper, offering advice and guidence throughout. Thank you to everyone who participated in each of my primary studies as well as my friends and family who have supported me throughout my degree.

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Aims and objectives can be seen in appendices section 7.1

1.0 Title / Introduction

1.1 How does the design of Architectural Openings in NHS Eating Disorder Wards affect the Recovery Rates of Inpatients?

1.2 Introduction

This thesis study explores how the built environment can support the recovery of those struggling with eating disorders. The thesis begins with investigating what it means to have an eating disorder and then attempts mapping out the specific needs of those people. It is then investigated how those needs can be accommodated through architecture. “Physical environment can trigger a relapse in mental health disorders.” (Karlin and Zeiss 2006). This statement suggests that if patients are not provided with the correct environment, including architectural openings, this negatively impacts the recovery and prognosis of this for the patients. Eating disorders themselves are amongst the most life threatening mental illness’ and often physical symptoms are mistaken for the mental strain and discomfort of the individual. When considering mental illness environment can be a huge factor in improving the mentality of the inhabitants. These openings are important to research over other interior architecture elements because of the connections to people, nature and space which openings can lead to.

2.0 Literature Review

2.1 Understanding Eating Disorders and the current prognosis for recovery.

There are a multitude of eating disorders that are diagnosed and treated in the population and it is of interest to the study which ones are identified to establish the needs of them in recovery. Following this, linking to the recovery process and how interior architectural design can improve this.

"*Anorexia nervosa has the highest rate of mortality of all mental health disorders*."(Fisher 2003) The statement signifies the severity of this mental health illness. The current prognosis for Anorexia recovery is stated in the following quote "*Estimates Suggest that 46 – 60% of people will fully recover*" (Fisher 2003) however this follows on to say that this is more appropriate for individuals who are younger and haven't had the illness for a long duration. Suggesting that there is a further population who are unable to fully recover due to other factors, one of which could be the built environment.

Eating disorders affect mostly young girls and women. Not to exclude the slight percentage of males who also suffer. These mental illnesses are also glamorized and romanticized in a way unmatched by any other disease. A book titled "*Ibland finns det inga enkla svar*" (2013) contains interviews with people who, have been affected by eating disorders. It highlights the issue that you can't really know why someone has developed an eating disorder. Making it hard to pin point a direct recovery process as the disease presents differently for each individual. Suggesting that the physical environment could be a universal factor for aiding recovery. Eating disorders are extremely individual which makes it a non-one size fits all disease. Which is why it is extremely important that designers take this into account when providing a design in a care based sector.

2.2 Eating disorders and their link to physical environment.

"By creating a welcoming space where you can get support when you need it, taking the first step towards recovery by seeking help becomes a smaller task". (Nilson, 2021). This quote suggests that if a person who is attempting recovery is placed in the correct treatment

environment then it becomes easier for them to take the plunge and commit to recovery. Further stated through the following quote *"Interior design can provide a correct treatment environment which positively affects the patients health and contributes to the treatment process" (Aljunaidy and Adi 2021*). Suggesting again that factors of interior design and architecture can have a positive effect on the inhabitants of the space which in turn will grant a more successful recovery experience.

As eating disorders are so individual it is important to focus on common traits which are present with those who suffer from eating disorders. As Nilson (2021) suggests *"Feelings connected to EDs are a range of negative feelings, such as anxiety, shame, and depression"*. An aim of soothing and relaxation should be the main priority when designing spaces for people with eating disorders, focussing on soft shapes, a sense of freedom and a feeling of safety.

2.3 Architectural Psychology In the clinical environment and the link to mental health.

According to (Sussman & Hollander, 2015). "Humans are wall hugging species." This means that humans tend to avoid open spaces where there are no walls to rely on for protection, again as (Sussman & Hollander, 2015) states "People who have anxiety especially avoid open spaces where they are vulnerable". This suggests that when designing architectural features in eating disorder wards such as walls, doors and windows, the designer must consider the impact this is going to have on the patients. If the openings are wide and do not feel contained enough this could cause feelings of anxiety, therefore inhibiting the recovery process.
(Evans, 2003) suggests that humans also "like to have an overview over the room they enter, giving a sense of control and safety". Another factor to consider when designing an inpatient ward. Sight lines and leading lines give a sense of direction.
"Psychiatric Hospital design is the importance of reducing an institutional feel of the facility and incorporating a home-like feel" (El Shamy 2021). A huge factor of recovery is gaining back a somewhat normal life so having a healing space which assists this is going to be hugely beneficial for inpatients in recovery. Directing the designs away from feeling clinical and sterile to creating a more familiar and relatable surrounding. This is similar to that of dementia centres and Maggie wards. "*Feeling at home or the sense that the environment or aspects of*

it were familiar to the person with dementia was seen as important" (R Fleming, F Kelly, G Stillfried, 2015)

2.4 Light quality, leading lines, views and the link to mental health.

The way in which humans connect to nature is through light which are factors, which also affect the impact of our environment on our mental health. Evans, 2003 explains that daylight in particular *"Lack of daylight has been linked to depressive symptoms. There is a strong connection between levels of light and mental health*" This means the amount of light truly matters when it comes to mental health. Natural daylight is generally only accessible through building openings such as windows on eating disorder wards. Making it vitally important that these openings are expertly designed to allow the most light in as possible to allow the inpatients to have this connection with nature.

"*Multiple windows with views of nature are valuable design features, they can reduce psychological disorders. Large Low windows may reduce paranoia*" (Bradley E. Karlin nd). This quote outlines certain features which are required from these openings to improve certain mental health difficulties.

"*Patients hospitalized for severe depression recover more quickly in sunny versus dimly lit rooms*"(Evans, Gary. W 2003) This statement suggest that people with depression have an improved recovery rate when they are in an environment with natural light. As anorexia sufferers tend to have a depressive nature the impact of light could be similar on their rates of recovery in a hospital setting.

2.5 Concluding the literature

To conclude the literature review, the main findings established were that there is a large number of cases of eating disorders which present themselves differently for each individual. Therefore, it is important that the treatment environment which these individuals seeks is focussed on generic diagnosis symptoms such as anxiety, depression and the need for feeling

secure. The design of these environments in the future could undoubtedly have a positive impact on recovery rates provided that symptoms are considered when designing. Other theories discovered are as follows, light and sightlines are key factors which help humans feel a sense of place, direction and security. An investigation into the way in which inpatients navigate and relate to their treatment space's architectural openings, will help to unpack whether there is a link between the design of eating disorder wards and the rates of recovery. This will be done through research questions which are apart of the primary objectives.

3.0 Methodologies can be see in appendices, section B

4.0 Primary Research Data Analysis

4.1 Study 1 - Questionnaire

Question one required the participants to describe the environments in which they inhabited during treatment for their eating disorders. P1 and P9 mention how natural light enhances mood and creates a welcoming atmosphere. P1 states that their space had large windows showcasing gardens and P9 mention that the upstairs area was well lit, both describing the spaces as promoting relaxation and connection with nature. In comparison P2, P3, P5 and P7 frequently highlight windows that are small, covered or non-functional. P8 describes spaces entirely without windows and P9 points to restricted window openings in bedrooms. Emphasising control and safety. P2, P3, P4 and P7 share common descriptions such as "*sterile*" and "*plain*" conveying an impersonal feel. Looking at the spatial design P1's description of high ceilings, large archways and open areas highlights the importance of spatial openness. In contrast, P3, P4 and P9 emphasise narrow corridors and enclosed spaces with P3 and P9 particularly highlighting locked doors, which restricted movement. P2, P6 and P7 repeatedly describe environments that prioritise function over form. It can be seen that the environment plays a huge part in the recovery process and confirms the literature in section 2.2.

Question two asked the participants to reflect on how the features described above made them feel. There was a solid mixture of emotional experiences described in the responses.

As can be seen in the table below, the responses from the participants indicate a range of emotions being elicited. They have been ordered into positive and negative responses and the spatial/design element that elicited the response. A more detailed analysis of the responses can be seen in appendix D. It can be seen that more negative responses were identified and confirms the literature in section 2.2.

Positive Reaction	Negative reaction
- Ceiling/corridors – freedom and reduce stress - Large windows – relaxed and safe	- Harsh lighting/Clinical setting – Intimidating - Doors/Small windows – entrapment, suffocation and anxiety - Plain and Sterile – Impersonal, unmotivating - Lack of open windows – disconnection from the outside, higher anxiety levels - Small rooms - Overwhelming

Table 1

Question three begins to explore whether these feelings created by the environment hindered or helped their recovery process. Participants 1 and 4 experienced views of natural surroundings which they felt promoted calmness and reflection in turn improving their recovery process. In contrast P11 reflected on temporary or outdated structures like the conservatory and dining areas triggered feelings of insecurity and anxiety. P3, P5, P8 and P10 all mentioned similar emotional responses to their spaces, saying they felt confined and restricted contributing to feelings of depression and a lack of motivation. P6, P7 and P9 described the environment as overly clinical, outdated and overwhelming which hindered recovery and motivation. The analysis highlights the critical role of the physical and social environment in recovery. Environments that feel clinical, restrictive or outdated can hinder progress. While those that incorporate natural views, personal space and a sense of trust

promote emotional well-being and recovery motivation. It can be seen that the environment plays a huge part in the recovery process and can actually slow down or increase recovery rate based on the design which confirms the literature in section 2.3.

In question four and five the participants were asked to choose whether they preferred door A or B and window A or B. The detailed analysis for each participants responses is present in appendix E. There was an overwhelmingly strong response with all participants choosing option A for both questions. From the data the researcher has identified key features of view and door A which suggest why it was a preferred choice. Door and window A both feature natural elements such as materiality and views of nature as well as having large windows to observe space and the outside.

Figure 1 – Door A

Figure 2 - Door B

Figure 3 - View A

Figure 4 - View B

Question six asked the participants if they felt that the design of inpatient units could be improved, all participants responded, Yes. Following on from this the researcher asked the participants why they felt this way in question 7. Further analysis can be seen in appendix F. The first theme identified was that there is a need for comfort and security. P10 states that "*People with eating disorders need to be able to relax to quiet the mind to tackle the disorder in a friendly nurturing environment to feel safe, secure in a homely less clinical space.*" The second theme identified is the importance of patient centred design. P2 and P4 highlight the inadequacy of one size fits all environments and the need for spaces designed with patient needs in mind as P2 states, "*It should be improved because of the consideration for who it is going to be in, not people that need to be fixed and sent off, but rather people who need help and just want to be listened to*." P5, P6 and P10 consistently express a preference for spaces that feel more homely and welcoming, arguing that clinical and sterile environments slow down recovery. It can be seen that the participants identify that the environments do not suit everyone and as eating disorders are so individual, the designs of the space need to accommodate these differences, confirming literature in section 2.1.

Question eight required the participants to imagine a space full of natural light and to reflect on how this may affect an individuals recovery. See appendix G for detailed participant analysis.

Natural light – Stress release, serotonin increase, positivity, calming and grounding.

Artificial light – Increased anxiety, depressions, tiredness, withdrawal from recovery programme. The responses confirm the literature in section 2.4.

The findings from the questionnaire study answered objective 8, as the researcher has explored the relationship between recovery of inpatients and ex inpatients and their architectural surroundings.

4.2 Study 2 - Interviews

The first question asked across the six participants was to describe the architectural features present in the inpatient setting in which they inhabited. Detailed analysis can be seen in appendix H. Following the first question, participants were asked to describe how the features mentioned above made them feel, further analysis can be seen in appendix I. As can be seen in the table below, the responses from the participants indicate a range of emotions being created. They have been ordered into positive and negative responses and the spatial/design element that created the response. Further analysis of these responses can be seen in appendix It can be seen that more negative responses were identified and confirms the literature in section 2.3.

Positive Reaction	Negative Reaction
Skylights - providing connection to the outside	- Clinical/Sterile Environment - Disconnection and discomfort. Feeding into the eating disorder. - Small windows – Trapped and Claustrophobic

	- Doors Locked - lack of autonomy and freedom - Corridors/Ceilings -Intimidating, Oppressive - Institutional/Hospital-Like - restricted opportunity to feel comfortable - Far from homely - hard to feel anything but like a patient. No sense of privacy. - Wall and floor colour – Void Like, unease and disconnection.

Table 2

Across the six participants it was identified that all participants felt that their environment should be improved to benefit the users of the space especially in recovery. Further analysis can be see in appendix J. Themes Identified in this question regarding whether the participants felt their environment should be improved are as follows.

Existing Design Features	Suggested Improvements
- Structured - Rigid - Black bars on the windows - Heavy, hard-to-open doors - Stark - Blocky	- Softer materials - Lighter colours - Natural textures - Softer shapes - Archways

Table 3

The lack of homeliness appeared to hinder recovery. P2 explained that they would have felt more at home in a comforting environment, improving their ability to heal. Many aspects of

the design heightened the participants anxiety. The stark and blocky layout with sharp edges and uniform designs were described as anxiety-provoking. The rigid, repetitive structure of the space reinforced feelings of unease and exacerbated existing mental health challenges. The data shows that the environments are lacking in feeling homely which seems to be a common factor between the data from the three studies.

The fifth question regards the quality of light within the interior of the inpatient unit in which the participants inhabited. The key themes identified were the same as the themes identified in Study 1. Please refer to appendix K for detailed analysis. The main findings are as follows. natural light contributes a calming environment. The absence of sunlight created feelings of disconnection from the outside world and increased participants institutionalised perception of the environment. Participants mentioned experiencing a heightened anxiety due to the poor quality of lighting. It can be seen through the data that the participants suffered from anxiety and depression when faced with poor light quality confirming the data in section 2.4.

Question seven refers back to the design of the architectural features within the inpatient wards and whether the participants felt they would have benefitted from a more homely design of these features. All participants expressed dissatisfaction with the clinical and hospital like nature of the doors, highlighting that the use of plastic materials and the heaviness of the doors made the space feel intimidating. The idea of homeliness emerges as a strong counterpoint to this clinical feeling. P1, P2 and P3 suggest that doors designed to be more welcoming or comfortable could make the environment feel less sterile and more familiar. There was an emphasis on the importance of homely materials similarly suggested in study 1. P4 mentions that a change in the door design could have reduced anxiety and made them feel more at ease, suggesting that environmental design can directly influence emotional states and potentially impact recovery, confirming the literature in section 2.3.

The following themes derive from question eight where participants were asked whether they had access to open windows or were able to open them themselves. All of the participants mentioned being unable to open any windows in their environment. A clear sense of restriction emerges from the data. The inability to open the windows or access fresh air is

described as making participants feel trapped with comparisons to being in a prison-like environment. P1 and P3 described that the inability to open the windows was the worst aspect of the environmental experience. The inability to access fresh air and the presence of window grates created feelings of claustrophobia and isolation.

The findings from the interview study answered objective 6, as the researcher has begun to explore the relationship between recovery and the building openings in the ex-inpatients surroundings. Discovering the relationship between the built environment and eating disorder recovery.

4.3 Study 3 - Focus Group

The responses from the focus group mostly mirror the responses from the interviews as the same questions were asked to all participants. However there are some more details and extra information provided which will be explained in the following analysis.

The first question required the participants to reflect on the space in which the focus group took place, a day patient unit. P1 and P2 commented on features having structured spaces, individual rooms and lack of communal areas which contribute to this perception of being isolated. The clinical design of the space reinforces its identity as a hospital, which had psychological implications for patients. P3 described the space as "*disjointed*" which suggests a lack of flow and integration between areas. The physical structure of the environment mirrors a feeling of fragmentation, affecting the patients sense of comfort. P4 highlights the challenge of leaving the hospital environment and reintegrating into a homely routine, particularly regarding eating habits. The environment appears to condition behaviour, making it hard to adjust to non-hospital life.

Question two and three asked the participants how these features made them feel. The participants feel unease within the space, suggesting that the environment fails to provide emotional comfort. P2 mentions that efforts to encourage a more normal life are undermined by the environment, which is describe as being *"far from normal"*, further supported by P3. These statements suggest that the treatment environment reinforces a sense of being a

patient. P3 mentions the space doesn't feel "*positive*" emphasising the oppressive feeling of the space. P2 discusses how navigating the physical layout, such as passing through areas associated with trauma "*the kitchen*" exacerbates their anxiety. This highlights the relationship between environmental design and mental health challenges, particularly in spaces meant for recovery. Both P1 and P4 reflect on how their first impressions of the unit influenced their willingness to engage with the programme. Similarly P1 mentions withdrawing initially because of discomfort in the environment, suggesting that the design and atmosphere of such spaces significantly affect initial engagement.

The fourth question asks the patients whether they believe improvements could be made to the architectural elements of the day patient unit to assist in their recovery. P3 suggests that making doorways bigger would create a sense of openness, which is particularly important for newcomers who are trying to navigate the space. The emphasis here is on spatial design and how it affects a person's ability to feel comfortable and oriented in the environment. The desire for more open space is further supported by P1 who suggests creating a more communal, open plan area. Highlighting the importance of reducing feelings of confinement and isolation within the environment.

The fifth question asks the participants about the quality of light in the day patient unit and expanding in question 6 on how this made them feel. P3 speaks about the negative lighting in certain areas by mentioning that the dining room is "*very dark*" with only small windows at the top of the wall. This creates a sense of imbalance in the environment, where one important space is lacking in the same beneficial lighting present in other areas. The lack of sufficient lighting contributes to a negative atmosphere, increasing anxiety and therefore inhibiting recovery. When asked to state how the lighting around the day patient unit made the participants feel there were common themes which appeared. P2 stated that darker rooms such as the dining area are anxiety-provoking, making it difficult to eat and focus. P1 agrees with the negative effect of lighting but adds that artificial light specifically in therapy rooms, makes them extremely tired which in turn affects their focus and hindering the effectiveness of sessions.

The suggestions for improvements to the treatment environment from the participants were identical between the studies, see appendix L for further analysis. The list below outlines the suggestions from the participants.

- Archways
- Softer shapes
- Lighter materials
- Natural textures
- Less clinical designs

Question eight asked the participants whether they are able to open the windows in the inpatient unit. P4 connects the inability to open windows with a sense of control being taken away. This points to the emotional outcome of a restricted environment, where the lack of freedom contributes to discomfort. P3 introduces the idea that restrictions on opening windows may stem from a perceived lack of trust in the individuals within the space. This adds an emotional layer to the issue, as the inability to access windows may evoke feelings of being unfairly judged. The findings from the questionnaire study answered objective 7, as the researcher has explored the relationship between recovery day patients and the environment in which they spend part of their time recovering in.

5.0 Triangulation of Findings

The findings were gathered from questionnaires, interviews and focus groups to explore the impact of inpatient and day patient environments on eating disorder recovery. Triangulation was used to identify common themes and areas of similarity across the methods. Across all methods, access to natural light and windows emerged as a key factor which influenced recovery. The absence of these features heightened anxiety, while natural light created calmness and emotional balance. All three methods consistently show that clinical environments hinder recovery by creating discomfort and unease. The findings align in identifying the need for homely, patient-centred design. Across the methods participants consistently identified spatial design as critical to recovery. Open spaces were linked to

freedom and reduced anxiety. While confined, rigid spaces created feelings of restriction and claustrophobia.

6.0 Primary Study conclusions

- Windows are seen to have strong impact on perception of spaces.
- There is a need for a more homely, less clinical environment to improve recovery.
- Existing design of architectural features have a negative impact on recovery.
- Wide open interior spaces create a feeling of intimidation and anxiety.
- Natural light is lacking in current designs creating an anxiety provoking and depressive environment.
- The inability to open windows creates a feeling a misjudgement and entrapment.

7.0 Overall Conclusions and recommendations:

7.1 Conclusion

These studies reinforce the findings from the literature review, which emphasize the importance of designing eating disorder treatment environments tailored to the diverse needs of individuals. Eating disorders manifest differently for each individual. However common symptoms such as anxiety, depression and the need for security must be addressed in the architectural design of treatment spaces. The research findings confirm that incorporating these considerations into inpatient environments can significantly enhance recovery outcomes.

Participants experiences reveal that factors such as natural light, views of nature, spatial openness and homely aesthetics contribute to a calming and secure atmosphere. Creating positive emotional well-being and recovery motivation. In contrast, environments with limited natural light, restrictive layouts and sterile aesthetics exacerbate feelings of anxiety, depression and disconnection which hinders the recovery process. These insights align with the literature, which highlights the critical role of light and sightlines in creating a sense of place, direction and security within therapeutic spaces.

By investigating how inpatients interact with and perceive architectural features such as windows, sightlines and spatial layouts, this study bridges the gap between theory and practice. It highlights the necessity of designing eating disorder treatment environments that not only address clinical functionality but also prioritise the psychological and emotional needs of patients.

7.2 Recommendations for further research

For a future design project, strategies must consider architectural elements to create environments that enhance recovery rates and improve patient well-being. The findings advocate for further exploration into the relationship between architectural design and recovery outcomes, providing a foundation for innovative and patient-centred solutions. Patient centred design should be the main focus of the design project to tailor the design to patients needs and wants in a space. Focussing on a not one size fits all brief to achieve a positive experience for all users and in turn improving recovery rates. Additional considerations might include thinking about collaborative spaces such as incorporating areas for family engagement and social interaction to support emotional well-being. Creating private spaces with customisable features that give patients a sense of control over their environment. Incorporating natural materials may help to create a softer and more homely environments which appeared to be a common want and desire from participants in the studies.

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Appendices

Appendix A - Aims and Objectives

Aim: How does the design of Architectural Openings in Eating Disorder Wards affect the Recovery Rates of Inpatients?

Secondary Objectives

Objective 1: To Understand the types of eating disorders and their standard recovery rates.

Objective 2: To review the ways in which Architectural psychology of Hospital interiors impacts the mental health of the inpatients.

Objective 3: Reviewing and analysing the impact of what architectural features have on inpatients, through literature reviews.

Objective 4: Reviewing and understanding the light and quality of view and their link to mental health through literature reviews

Objective 5: Exploring the notion of biophilic design and bringing the outside in, with natural views which are present in interior styling, design and architecture.

Primary Objectives

Objective 6: Hosting interviews to explore the relationship between building openings and recovery rates in psychiatric wards.

Objective 7: Hosting Focus groups to explore the relationship day patients experience with their architectural surroundings.

Objective 8: Hosting a Questionnaire to find out inpatient and ex inpatient experience with their architectural surroundings.

Tertiary Objectives

Objective 9: Collating information to form a conclusion and further research direction

Appendix B - Methodologies

The following methodologies have been used to collate data from participants in order to create channels for further research and help to conclude findings from the literature.

Questionnaire

A questionnaire was produced by the researcher in order to reach a large number of participants to collect quick and reliable data. A series of 10 questions were asked which were designed for participants who had experience with a built environment such as an eating disorder or psychiatric ward. The questions provided were open ended to allow for flexible answers. This was done to collect real quantitative data which was directly linked to the title of this paper. A quantitative questionnaire requires 60 participants (Robson 2024) to get statistical significance. The questionnaire produced for this research only asked 11 participants. This is because the sample needed to be specific as the study required participants which are purposefully sampled, individuals who have experience with eating disorder wards. Larger studies give stronger and more reliable results as they have smaller

margins of error. Larger sample sizes allow researchers to control the risk of reporting false-negative or false-positive findings. (CHARLESWORTH SERVICES, 2022). Ethics practice was carried out and cleared to ensure that this was an appropriate procedure. All participants were provided with a consent form and participation form with all of the information required so that they had an understanding of what was going to be asked of them.

Ethics Approval Email – For Research and Innovation Projects

Dear Sophie Criddle,

Your Questionnaire has been approved with comments.

You must ensure that any conditions attached to this approval are addressed prior to commencing the project.

Kind regards

Ethics Administration

Interviews

A set of interview questions were produced by the researcher in order to ask six participant to collect strong and reliable data. A series of 10 questions were asked which were designed for a specific sample of participants who have experience with a built environment such as an eating disorder or psychiatric ward. The interviews were semi-structured, less structured approaches allow interviewees more flexible responses (Robson, 2011) This was done to collect real qualitative data which was directly linked to the title of this paper. Interviews, as a source of evidence, have the potential to provide rich and highly insightful material (Robson, 2011). For interviews 20-60 participants are needed to gain statistical significance (Anon. 2023) however this research only uses six. For a qualitative study this is justifiable as there are limitations and restrictions of time and access to participants. Specifically because this study requires specific participants which were purposely sampled who have inhabited in a psychiatric or eating disorder wards. Ethics practice was carried out and cleared to ensure that this was an appropriate procedure. All participants were provided with a consent form

and participation form with all of the information required so that they had an understanding of what was going to be asked of them.

Ethics Approval Email – For Research and Innovation Projects

Dear Sophie Criddle,

Your Interviews has been approved with comments.

You must ensure that any conditions attached to this approval are addressed prior to commencing the project.

Kind regards

Ethics Administration

Focus Group

A focus group was carried out by the researcher, four participants were involved to collect reliable data. A series of 10 questions were asked which were designed for a specific sample of participants who have experience with a built environment such as an eating disorder or psychiatric ward. The actual focus group took place in a day patient unit which is similar to an inpatient ward. The questions asked were open ended, less structured approaches allow the participants more flexible responses (Robson, 2011). This was done to collect real qualitative data which was directly linked to the title of this paper. (Anon. 2023) states that you need 3-5 participants to get statistical significance and so the task remains manageable. This research only uses four. For a qualitative study this is justifiable as there are limitations and restrictions of time and access to participants. Specifically because this study requires specific participants which were purposely sampled who have inhabited in a psychiatric or eating disorder wards. Ethics practice was carried out and cleared to ensure that this was an appropriate procedure. All participants were provided with a consent form and participation form with all of the information required so that they had an understanding of what was going to be asked of them.

Ethics Approval Email – For Research and Innovation Projects

Dear Sophie Criddle,

Your Focus Group has been approved with comments.

You must ensure that any conditions attached to this approval are addressed prior to commencing the project.

Kind regards

Ethics Administration

Triangulation of Methodologies

Triangulation is a method used in qualitative and quantitative research to increase the strength of a study. Alongside minimizing the biases of the researcher and providing multiple perspectives. It also refers to the use of multiple methods or data sources in qualitative and quantitative research to develop a good understanding of data (Patton, 1999). Triangulation is seen as a qualitative research strategy to test reliability of information from different sources. It can help to successfully justify and confirm a theory where one set of findings confirms another set. Triangulation can help explain the results of a study. The main focus of triangulation is that methods leading to the same results give more confidence in the research findings (Carter, et al. 2014).

Appendix C - Study 2 – Interviews Thematic Analysis and Anonymous Informed Consent Form

Informed Consent Form | Solent University | Sophie Criddle

[redacted]

Study Title: How does the design of architectural openings in eating disorder wards affect the rate of inpatient recovery?

Informed Consent Form - I confirm that (please tick as appropriate and add your initials alongside):

1. I have been told about the purpose of the project and I understand this. [redacted]
2. I have been given the opportunity to ask questions about the project and participation. [redacted]
3. I voluntarily agree to participate in the project. [redacted]
4. understand I can leave the project at any time without giving reasons and that I will not be questioned about why I have left the project. [redacted]
5. The procedures regarding anonymity and confidentiality have been clearly explained tome (e.g. not using my real name, so that anything I contributed to this project cannot be recognized unless I give my consent; that only anonymised data will be shared outside the research team). [redacted]
6. The procedures regarding data anonymity have been clearly explained to me(e.g. not using my real name, so that anything I contributed to this project cannot be recognised). [redacted]
7. I agree to the use of voice recording if telephone, skype or in-person interviews are used. [redacted]
8. The use of the data in research, publications, sharing and archiving has been explained tome. [redacted]
9. I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the data and if they agree to the terms I have specified in this form. [redacted]
10. I agree to the use of direct quotations in publications provided that my anonymity is preserved. [redacted]
11. I understand what I have said or written as part of this project will be used in reports, publications and other research outputs. [redacted]
12. I, along with the Researcher, agree to sign and date this informed consent form. [redacted]

Participant: Name ……[redacted]e……
Date ……13/09/24……

Features – permanent – semi permanent

Description – size – a state – colour and style

Outcome/feeling – positive - negative

General descriptions

1. Could you give me a brief description of the environment in which you spent time in, focussing on the architectural features such as windows, doors, archways.

P1) It was very clinical, all the doors were locked at a certain time, doors could be locked from the inside and outside which felt very restricting. The corridors were Very wide and the ceilings were high. There were small windows all over the building but they didn't let a good amount of light.

P2) The bedrooms were tiny with very small windows. The door to the room was very clinical and almost like a fire door which were really hard to open. The ceiling felt quite low which didn't help with the feeling of being closed in. The lounge are was very small, the door way was very small and there was no window to back onto the ward, there were a few incidents where people tried to hurt themselves and no one could see or monitor that. The corridor was very long and narrow.

P3) The building itself felt very temporary, it didn't feel like a solid building and everything was tired and worn down. There was one corridor which was very wide and all identical doors down the corridor leading to bedrooms and therapy rooms. The windows in our bedrooms were very small and faced a brickwall, so didn't allow any light in.

P4) The environment I was in had a large door way which you walked through to get to the ward. Once on the ward you were faced with 16 identical doors which were all white and had industrial looking handles and locks. The corridor was long and narrow I liked the width because it felt safe and I could walk along the wall. However the length is what made it feel intimidating. There was a few skylights which was nice as it felt like there was a connection to the outside. And it allowed a lot of light in. The windows in the room, were small and quite high up so u couldn't really see out.

P5) The whole space was very clinical with large doors which were made of wood but painted white. The corridors were also very wide. The windows were small and had metal bars behind them. We couldn't open them either. The ceilings were quite high which felt quite intimidating and I didn't feel connected to the space.

P6) The unit which I was in was much like a general hospital, it felt sterile. The corridor was quite narrow with a low ceiling which felt quite trapping and claustrophobic. The doors were heavy and bulky and all painted the same dull off white colour. There were no features such as sky lights or large windows. The window in my room was fairly small.

Features – permanent – semi permanent

Impression / Outcome / feeling – positive – negative

Emotive Statement

Description – size – a state – colour and style

General Description

2. What was your impression of these features?

P1) My impression of them was that they felt intimidating and unnerving. I felt as though I was in a void. They say that they are trying to get us to live a more normal life however the environment is so far from normal it felt impossible to feel nothing but a patient. I didn't feel safe at all, I felt like I was being watched the entire time and there was no privacy

P2) My impression of these features were that they felt intimidating and un-homely. Everything was very clinical and hospital like which gave for a very institutionalised feeling. I felt safe and contained, which is both a positive and negative. The positives of this were that I felt secure in the environment, but on the flip side I felt like it was feeding into my eating disorder because there was so much control in what we did, ate this was enhanced by the environment.

P3) My impression of them was that these features felt very clinical and institutional, not homely at all. For me personally I believe that if you're in an environment which makes you feel relaxed and comfortable you will recover better, but this space just made me feel like I was in a hospital. Everything was symmetrical and there was no personality to the space. I felt very intimidated in the space, I also felt quite unsafe due to the lack of care and attention to the environment, everything was old and tired. The walls and the floor were both the same colour which felt like the space was never ending again making me feel unsafe as I felt like I was in a massive void.

P4) The large door way at the beginning was intimidating and as soon as I stepped through the door I felt unnerved by all identical looking doors and I wanted to leave immediately. The skylights and high ceilings were really nice as they allowed me to feel connected to the outside and it felt spacious. The features such as the doors made me

feel very uneasy and like I was about to be locked in a hospital for months which is not the way you want to feel when you decide to commit to recovery.

P5) My impression of these features were that they were very clinical and the environment felt quite sterile. The walls were al painted white which felt very stark and intimidating. I didn't feel safe in the space at all. I felt trapped and claustrophobic, I think this was due to the design of the windows, being small, they were also tinted so people couldn't see in but this also made the rooms feel even darker than they already were.

P6) My impression was that the entire space felt uncared for. The space was not designed well and done cheaply. I felt slightly claustrophobic in the space as the windows were so small, there was no way of getting or connecting to the outside, so I sort of felt trapped in the space. for the most part I felt safe as in secure but looking back now I think I must've felt quite scared because it was designed exactly like a general ward, everything white and silver with no character.

Features – permanent – semi permanent

Improvements – Permanent – Semi permanent

Benefits

Description – size – a state – colour and style

General Notes

Emotive Statements

3. Do you think they could be improved in anyway to benefit the users of the space? Especially recovery.

P1) There are obviously restrictions as it was an NHS hospital and it needed to be safe. However I feel the furniture could've been made to feel more homely such as the materials which doors and windows were made of. The grates on the windows were black and they could've been made a lighter colour to lift the space.

P2) I feel like the structure could've been much lighter in weight, everything felt heavy and bulky. Especially the doors, they were hard to open. In general these openings including the windows felt hospital like and not homely at all, from the materials to the door handles. If softer materials and colours were used I would have felt more at home. Personally I feel as though my recovery would have been better if I felt like I was in a more comforting environment.

P3) I feel the furniture could've been made to feel more homely such as the materials which doors and windows were made of or even just

the colour in which they were painted, it would have made the space feel more comforting and less anxiety provoking.

P4) The features and the design of the space entirely was too structured and ridged. It didn't feel like a home at all which actually made it really hard to transition from hospital to home because I had become used to the hospital environment. I think the space could've benefitted from some softer shapes such as archways and curves on corners so that it feels less blocky and anxiety provoking.

P5) Definitely, its really hard to recover in a space where you don't feel safe. Because all of the behaviours around my ED were escalated from feeling anxious. I think the doors could be painted a different colour, or left oak to give the space some character and personality. I wish there were no grates on the windows so it didn't feel so much like a prison. The corridors could be made to feel more welcoming by adding furniture so it didn't feel like such an intimidating space.

P6) Yes definitely I think they should be thinking of creating a more homely environment so that you don't feel like a patient. I think this could be done by introducing softer materials and colours which don't make you feel anxious. If there was anyway to include bigger and more accessible windows that would be nice to be connected to the outside or even bring the outside in.

Lighting – Artificial – Non Artificial

Description – Positive – Negative

Outcome/feeling – positive – negative

Features –

4. In the same building could you describe the quality of light?

P1) It was very dark the whole time with lots of artificial lighting. Which drastically increased my anxiety

P2) It was very dark throughout with no natural lighting. This definitely increased my anxiety and made me feel more institutionalised.

P3) There was lots of artificial lighting which was a bright yellow colour, which made it feel even more like a hospital/institution. Due to the lack of windows there was not much natural light.

P4) The quality of light was actually very good, the sky lights really helped with this bringing in natural light, this made me feel much calmer being able to see some outside space. However the lighting in the rooms was artificial and it was very dark. I almost felt a wave of

anxiety when I returned back to my room from the general ward. I believe this was due to the lack of natural light.

P5) The quality of light was awful and so artificial. I don't think there was any natural light in most of the rooms. The only room with big windows was the lounge area but it was still quite dark as the wall outside the hospital blocked any light from coming in.

P6) I guess the lighting was ok but it wasn't natural light, it was very bright and stark with those hospital like track lights. Like I said earlier the windows were small and generally faced a brick wall so not much light could get through to our rooms.

Outcome/feeling – positive – negative
Lighting – Artificial – Non Artificial
General Descriptions –
Emotive Statements

5. How do you think this influenced your feeling in the space?

P1) It made me feel very anxious and on edge and even more unsafe in the space.

P2) It made me feel very anxious and also depressed because we weren't getting much natural light. Also all lights had to be switched off at a certain time which meant we couldn't read.

P3) This actually made me feel confused at times because it was such an abnormal environment made worse by this artificial lighting. I definitely felt more anxious and uncomfortable with this lighting compared to being at home so I felt this feature inhibited my recovery.

P4) I almost felt a wave of anxiety when I returned back to my room from the general ward. I believe this was due to the lack of natural light. it made me feel much calmer being able to see some outside space.

P5) This made me feel anxious and on edge, I know that its because of the light because as soon as I was aloud out of the hospital for a walk I would instantly feel more positive and I think this is because of the daylight.

P6) It didn't bother me too much but I definitely noticed a difference in my positivity towards recovery when I left and went home and I genuinely do think that this is because of the natural light and the improvement this had on my general mood. `

Features

Description – size – a state – colour and style

Outcome/feeling – positive - negative

General descriptions

Improvements

6. Do you believe that having homely doors rather than sterile industrial ones would have improved your experience in the space?

P1) Definitely. I feel the doors were unnecessarily heavy and bulky and they were plastic which just felt so clinical and hospital like. I feel if they were more homely I would've felt less intimidated by the space and it may have felt a bit more personal.

P2) Yes, for me the doors were the worst part as they were just horrible to look at and use. By making them a brighter colour or even a different shape, it would've felt like a much more relaxing space. The doors were the first thing I saw when I arrived at the inpatient unit and I instantly felt afraid of what was to come.

P3) The doors were made of wood but they were painted white, very similar to general hospital doors. I believe if they left them a nice oak

colour it would've broken the space up slightly and made it feel more homely.

P4) I think it would have improved it yes, because it would've made the space a little less stark and anxiety provoking. Which could potentially have made me feel slightly more at ease in the environment.

P5) Yes definitely it would just soften the space and make it feel more homely which I think is important in recovery. It would be even better if they could arch the doorways to add a bit of interest and excitement to the place.

P6) Yes I think so, an introduction of familiar homely materials whether it be on the doors or the soft furnishings would have made me feel more comfortable and able to relax in the space.

Open? Yes – No

Outcome/feeling – positive - negative

General descriptions

7. Were you able to open the windows fully? If not how did this make you feel?

P1) We could not open the windows fully and there were grates on the windows so no one could get out. Which made it feel very dark and prison like. This was probably one of the worst parts of my experience because of how trapped it made me feel, and also I couldn't get any fresh air.

P2) We could not open the windows fully. We weren't able to get any fresh air.

P3) The windows did not open at all meaning I couldn't get any fresh air. This was one of the worst features for me because I just felt so contained and you spend 90% of your time in the bedroom so having no light or no fresh air felt very restricting.

P4) The windows did not open fully due to safety reasons which is another reason why I felt anxious in my room, however I do understand now why we weren't allowed.

P5) No we weren't, this again felt quite trapping. We couldn't get any fresh air when we were inside.

P6) The windows were small but we still weren't able to open them, even though I was on a ground floor level, I think they should've allowed us to get some fresh air in our rooms.

Appendix D - Study 1- Question 2 Participant Analysis

Question one required the participants to describe the environments in which they inhabited during treatment for their eating disorders. P1 describes feeling relaxed and safe in environments with large windows and greenery, which reduced feelings of claustrophobia. This participant felt safe and relaxed in homely spaces with access to natural elements. P10 mentions a sense of safety despite harsh lighting and heavy doors, suggesting that safety is tied to structural elements. P2, P8 and P9 report feeling trapped, insecure or hidden in more clinical settings. P9 associates the environment with intimidation and insecurity. P8 describes the clinical setting as feeling like a prison. Overly restrictive or clinical elements undermine feelings of comfort and exacerbates anxiety. P1 suggests that open spaces with high ceilings and wide corridors provide a sense of freedom and reduce stress. P1's access to outdoor spaces, further supported a sense of reduced confinement. In comparison to this, feelings of entrapment were consistently expressed in spaces with closed doors, small windows and cramped layouts. P3 summarises this as feeling trapped, suffocated and anxious. P5, P7 and P10 similarly highlight the role of closed, heavy doors and lack of open windows in promoting claustrophobia. P10 describes the upstairs dining and meeting rooms as freeing due to the natural light compared to darker, more enclosed spaces downstairs. P5 emphasises these factors created a sense of disconnection from the outside world. Cramped, crowded spaces were associated with heightened anxiety and difficulty coping. P4 recalls feeling overwhelmed in small rooms with many people, stating, "*I felt like I couldn't breathe... I needed to escape*." P10 similarly notes that the downstairs dining room's limited space led to micro-analysing others behaviour's, which could be triggering.

Appendix E - Study 1- Question 4 and 5 Participant Analysis

The following information is a break down of the themes identified in question four where participants were asked to state whether they preferred door A or B. P1, P4, P6, P8 and P10 strongly preferred Door A because it had warmer colours and a natural wooden effect, which created a homely and comforting feeling. It was repeatedly contrasted with Door B, which was described as clinical, sterile and hospital like. The design elements such as the size of the window and choice of materials were noted to have a significant psychological impact. The larger window on Door A was perceived as inviting, less restrictive and more open by P3, P5, P9 and P11 . Door B's sterile design was associated with feelings of confinement, restriction and discomfort consistently mentioned by P2, P7 and P9. The larger window in Door A was highlighted by P5 and P11 as creating a sense of openness and trust. Participants felt it was easier to approach and interact within a space that was inviting. Door A, with its natural design was seen as supportive of mental well-being and recovery. Whereas according to P7, P8 and P9 door B promoted a sense of sterility and being part of a medical or experimental setting.
Question five required the participants to choose whether they preferred view A or B. The following information is a break down of the themes identified. P1, P3, P10 and P11 express that views of green spaces in Image A created calming and peaceful emotions, contrasting with the feelings created by Image B. The feeling of being surrounded by nature could promote a sense of serenity. P4, P5 and P6 highlight the sense of openness and freedom associated with Image A. Image B is perceived negatively, with participants describing it as intimidating, oppressive and creating a sense of being trapped. P4 and P5 link their emotional recovery and well-being to views of nature, emphasising its therapeutic value and ability to reduce isolation.

Appendix F - Study 1 – Question 6 Participant Analysis.

Question six asked the participants if they felt that the design of inpatient units could be improved. P3, P4, and P8 underline how the environment can inspire hope, improve mood whilst facing recovery. P3 explicitly states "*Your environment plays a huge part in how you feel. The environment needs to, at the very least, inspire hope*." P4 and P11 mention the benefits of open spaces, natural light and access to greenery in creating a positive recovery

environment. P4 mentioned improvements such as adding more windows and skylights to let natural light in. Whilst P11 suggests the spaces in general being bigger as patients would feel less confined against their will in a bigger space. Participants stress the importance of acknowledging the complexity of eating disorders and the need for environments that reflect this. P4 mentions "*Eating disorders are complex mental illnesses, and this is neglected when you're placed in a stereotypical hospital ward*." Suggesting that individuality in design is desired to improve recovery.

Appendix G - Study 1 – Question 8 Participant Analysis

Question eight required the participants to imagine a space full of natural light and to reflect on how this may affect an individuals recovery. P1 and P2 emphasise how natural light creates a calming and grounding environment, reducing anxiety and promoting a sense of peace. P3 and P4 expand on how natural light is associated with inspiring hope and encouraging a broader perspective. Helping patients see past their struggles. P4, P5 and P8 highlight the proven mental health benefits of natural light, including mood enhancement and stress reduction suggesting that this would have a positive impact on an individuals recovery journey.

Appendix H - Study 2 – Question 1 Participant Analysis

The first question asked across the six participants was to describe the architectural features present in the inpatient setting in which they inhabited. The findings show that across the six participants it was identified that they mentioned the eating disorder inpatient unit they were in felt clinical when being asked to describe the environment. Suggesting that there's is a common perception of these types of environment having a clinical and sterile aesthetic mentioned by P1, P2 and P5. P1 mentions doors being locked at certain times of the day which created a restricted feeling and emphasising a lack of freedom. The sterile design of the space contributed to feelings of disconnection and discomfort. Amongst the participants all 6 of them consistently described the windows as small and often high up with some facing brick walls or having metal bars**.** The outcomes and feelings identified from this design aspect resulted in feeling trapped or claustrophobic. P4 commented on there being skylights and

expanded by saying they felt this feature provided some connection to the outside and this was positively received. Corridors were either very wide or long and narrow, which created a cluster of feelings amongst the participants. P1, P3 and P5 mentioned the corridors being wide created feelings of intimidation. Whereas the P2 and P4 described the corridors as being long and narrow which made them felt trapped and claustrophobic. High ceilings were noted as both oppressive and intimidating. The space was described as lacking personality, with identical doors and dull off-white colour reinforcing its impersonal nature**.** P3 described the space as temporary, tired or worn down which removed the sense of security and stability. The emotional responses towards the environments were consistent across all six participants, feelings included, being trapped, closed in and claustrophobic. Spaces such as small lounges and bedrooms added to a sense of restriction, discomfort and assisted in creating an unsafe environment.

Appendix I - Study 2 – Question 2 Participant Analysis

Following the first question, participants were asked to describe how the features mentioned above made them feel. All participants repeatedly described the environment as clinical, institutional and hospital-like. This sterility created a sense of being a patient with restricted opportunity to feel comfortable in the environment. Across the six participants it was identified that four (P2,P3,P4,P5) out of the six participants mentioned that the environment they were in made them feel intimidated whilst the remaining two (P1, P6) out of the six mentioned feeling unsafe. P1 and P3 stated that although the idea of the inpatient unit is designed to help the patients live a normal life, the environment is so far from being homely its hard to feel anything but like a patient. Amongst the participants there were mixed feelings about safety P2 felt safe and contained which they recognised as a positive aspect. However, P1, P3, P4, P5 and P6 described feeling unsafe and watched with no sense of privacy or control. The emotional responses to the design elicited strong negative emotions, words like intimidating, unhomely, unnerving and trapped frequently appeared in the participants responses. P1, mentioned feeling as though they were in a void, exacerbated by monochromatic walls and floors, which added to feelings of unease and disconnection. The overall environment was seen as counterproductive to recovery. Participants felt the sterile

and rigid environment hindered the recovery process. The controlled, clinical setting was linked to participants struggles with their conditions, such as feeding into their eating disorder. The absence of homely, personal touches made the space feel uninviting and counter productive to healing.

Appendix J - Study 2 – Question 2 Participant Analysis

Across the six participants it was identified that all participants felt that their environment should be improved to benefit the users of the space especially in recovery. Themes identified in this question regarding whether the participants felt their environment should be improved are as follows. The space was described as too structured and rigid. Resembling a hospital rather than a comforting or homely environment. P1 and P4 mentioned that the black bars on the windows and heavy doors emphasised a lack of comfort and normality. Making the space feel more like a prison than a place of care. Throughout the interview responses there was a strong emphasis on the need for the environment to feel more homely**.** P1, P2, P3 and P5 suggested softer materials, lighter colours and natural textures to create a more welcoming atmosphere. The lack of homeliness appeared to hinder recovery, with P2 noting they would have felt more at home in a comforting environment. Improving their ability to heal. Many aspects of the design heightened the participants anxiety. The stark and blocky layout, with sharp edges and uniform designs were described as anxiety-provoking. The rigid, repetitive structure of the space reinforced feelings of unease and exacerbated existing mental health challenges. P4 suggested adding softer shapes, archways and curves to reduce the clinical feel and make the environment less intimidating. Small, inaccessible windows limited participants ability to connect to the outside world. This lack of connection heightened feelings of confinement and disconnection.

Appendix K - Study 2 – Question 5 Participant Analysis

The fifth question regards the quality of light within the interior of the inpatient unit in which the participants inhabited. The key themes identified are as follows. All six of the participants mentioned a lack of natural light. All participants consistently noted the absence of natural

light as a significant issue, rooms were dark throughout with little natural lighting. The absence of sunlight created feelings of disconnection from the outside world and increased participants institutionalised perception of the environment. P4 mentioned that the presence of "*skylights*" helped bring in natural light and made them feel much calmer. Artificial lighting was described as bright yellow, stark and hospital-like. These characteristics contributed to the space feeling clinical and institutional. The emotional responses to lighting were mostly negative. All participants mentioned experiencing heightened anxiety due to the poor quality of light. Phrases such as "*drastically increased my anxiety*" and "*wave of anxiety*" were used to describe the emotional impact when entering a room with no natural light. The dark, artificial lighting created a sense of discomfort and unease, particularly in personal spaces like bedrooms. In contrast, spaces with more natural light were described as having a calming effect.

Appendix L - Study 3 – Question 6 Participant Analysis

Following on from question five, the participants were then asked to describe how the quality of light in and around the space made them feel. P1, P2, P3, P4 and P5 described feeling anxious, on edge or uncomfortable in the space, suggesting these feelings to the lack of natural light and the presence of artificial lighting. The lighting seems to enhance feelings of unease. Suggesting that an artificial, controlled environment could impact mental health in negative ways. P5 explicitly links anxiety to the lighting, noting a marked improvement when stepping outside for a walk in natural daylight. There is a recurring mention of the positive effect of natural light in the environment. Participants express feeling calmer, more positive and less anxious when exposed to natural light or being able to see outside. Suggesting the therapeutic need for natural daylight for mental health recovery. P6 said how the improvement in mood after leaving the hospital influenced their recovery, hinting that light plays a role in psychological well-being beyond just the clinical environment. P2, mentioned feeling depressed when only exposed to artificial light. The absence of natural light is tied not only to anxiety but also to feelings of depression. Two of the participants suggested that the lighting environment affected their recovery. P3 mentions that the artificial lighting inhibited their recovery and P6 suggests that the change in lighting upon leaving the hospital positively

affected their mood, suggesting a broader connection between environmental factors and the pace or quality of recovery.