HEALING SPACES

A Design Framework for Care Centers for Human Trafficking Survivors

BUILDX STUDIO

Antislavery
Knowledge
Network

Dream
Revival
Centre

Design Framework

"Healing is a holistic, transformative process of repair and recovery in mind, body, and spirit resulting in positive change, finding meaning, and movement towards self-realization of wholeness, regardless of the presence or absence of disease."

(2015). Healing, a Concept Analysis.
Global Advances In Health And Medicine

PREFACE

Modern-Day Slavery

Human trafficking, a form of modern-day slavery, is one of the fastest-growing crimes around the world today, with an estimated 24.9 million human beings enslaved globally. The primary motivation for human trafficking is financial, whereby the perpetrators attempt to make money and exploit cheap labour. Traffickers commonly take advantage of people seeking opportunities to improve their economic conditions, who subsequently become victims.

Source: Myths about Human Trafficking in Africa,2019

"At any given moment, 3.5 million people are being trafficked in Africa."

Human trafficking takes on varied forms, which continuously evolve as technology advances. These include forced labour, sexual exploitation, orphanage trafficking, child marriage, child sacrifice, abduction for illegal and war-related activities and virtual trafficking. Men, women and children have all fallen victim to human trafficking, however, most victims are women and children making up an estimated 71% of all victims globally (International Labour Organisation, 2017).

East Africa is affected by both internal and transnational trafficking. Urbanisation and lack of secure rural connections are essential factors in Kenya, Tanzania and Uganda. Labour-intensive industries and military recruitment are two of the many reasons for human trafficking in Uganda. The Trafficking in Persons Report of June 2019 highlights that similar to other East African countries, Uganda ranks as a Tier 2 nation according to the United States Trafficking Victims Protection Act (TVPA) tier placement categories. This ranking means that the country has made significant efforts to eliminate trafficking but does not fully meet the minimum requirements.

Human trafficking does not only begin at the point of movement of persons but from the coercion of victims. This is done physically through starvation, isolation, controlled movement, physical and sexual abuse; or psychologically through promises of love and a bright future, threats of shame or physical harm to themselves or family members, deportation or extortion.

During trafficking, victims often experience incredibly harsh physical and socio-economic conditions, which have adverse effects on their physical and psychological health. The survivors often suffer from mental illnesses such as depression, anxiety, post-traumatic stress disorder (PTSD) and secondary psychological issues such as alcohol and drug abuse. Levine (2016) also highlights that survivors may suffer from Disorders of Extreme Stress (DESNOS).

Once victims escape or are rescued from their situation, they frequently cannot access the right care required, due to not having proper identification or trusted past family contacts, which can lead to victimisation again.

Importance of Care Centres

There is a scarcity of purpose-built care centres for survivors of human trafficking. Those that do exist are served by organisations also supporting domestic violence shelters or refugee assistance programs, each having its strengths and limitations as their needs are different from those of trafficking survivors (Shigekane, 2007). These options are primarily rooted in national healthcare frameworks, where adequate environments for psychological issues are often absent or inadequate.

Convictions for trafficking-related crimes are generally low in numbers, partly due to the fact that survivors are often unable to participate in the legal process because of PTSD, anxiety and depression. Rehabilitation centres can strengthen the justice system through the provision of supportive healing to the survivors, enabling them to take part in the legal process and increase the number of convictions. This process is in line with achieving the UN's Sustainable Development Goal 16 of Peace, Justice and Strong Institutions.

Importance of Design in Care Centres

Research has shown that our surroundings, and specifically the built environment, have an impact on our physical and mental health. Ulrich et al. (2008) revealed strong evidence of the impact of specific design characteristics on healthcare outcomes. However, most studies prioritise physical recovery over psychological health when measuring results. This demonstrates the need for research focusing on the psychological benefits of treating and supporting sufferers of human trafficking in well-designed physical environments. In creating healing spaces for trauma rehabilitation, there should be a focus on minimising or eliminating physical discomfort, and the employment of sensory strategies to alleviate or positively distract from emotional or mental stress.

Design can impact health and well-being, both positively and negatively. The importance of high-quality, dignified design in the development of the built environment is evident, even more so when considering spaces designed for vulnerable groups. Survivors of human trafficking are one such group, and the role of design in supporting their healing process is critical.

'I feel that more needs to be done don't think overall services provided in the country are adequate Not all other centres, NGOs or Government facilities have rehabilitation centres no government structures provide shelter to survivors of human trafficking"

File No: CN_IN01
Role: Social Worker'

THIS FRAMEWORK

Framework Guide

This document aims to provide a unique insight into the distinctive spatial requirements of victims of human trafficking in Uganda. Drawing on the direct testimonies from survivors, this framework outlines their needs during the healing process in order to better inform the development of safer and healthier care centres in the future.

This is a guide for designers and care professionals to better understand the needs of trafficking survivors and their caregivers to develop project briefs and designs.

The contents of this document should be supplementary to existing building codes and guidelines. It should be noted that the materials are not exhaustive, nor do they serve as a replacement for professional advice from architects, engineers, construction specialists etc. As such, this framework has no legal status and regulations within the given context prevail.

The framework is divided into six main sections:

- **Introduction:** Human trafficking background and current care centre conditions;
- **Research:** Outline of the research undertaken and the sensitivities that have emerged from the findings;
- **External Drivers:** Constraints for site selection, the overall planning and materials of care centres. These findings are based on the centre managers', caregivers' and survivors' insight;
- **Spatial design:** The activities, program organisation and individual space qualities found throughout the centre through the research.
- **Design Criteria:** Recommendations based on the above on key criteria for designing facilities for human trafficking survivors.
- **Conclusion**

Any participant or initiator of a design and construction process for care centres is encouraged to familiarise themselves with this framework and use it as a baseline for further investigation. Additional research is needed to tailor the spatial environment to the particular needs and sensitivities of the organisation and their specific users.

"A place that has love, that feels comfortable for someone to have privacy, comfort for people to share,
a place that has people who do not pity but understand,
a place that has people who see survivors as yes fragile –
but normal people."

Excerpt from file no. FGD_001
Staff at Retrak

GUIDE

Figure 1. The environment at home for many.

"stayed with my stepmother
used to mistreat me
she sent me to go fetch water from the well
came back
there was no one at home
spent one whole night looking for my stepmother"

File No: NS_IN01
Survivor one-on-one interview

Design Framework

✕ INTRODUCTION

"The importance of such a centre to the survivors and the community is withdrawing the survivors from the threats. When we identify them, we are able to pick them up and bring them here. Being withdrawn from the threat ignites the sense of recovery in the survivor. When we receive a survivor here, we are able to provide them with accommodation, food, vocational skills training, psycho-social support – all that is important and helps the survivor to heal"

Excerpt from file no. MK_IN01
Interview with social worker at UYDEL, 2019.

i. BACKGROUND

i.1 About Human Trafficking

Human trafficking, as we know it today, takes precedent from different forms of human exploitation that have been practised over centuries. The Uganda Trafficking in Persons Act of 2009, defines "trafficking in persons" as the "recruitment, transportation, transfer, harbouring or receipt of a person using threats, force, the abuse of power or exploitation of vulnerabilities alongside other forms of coercion, abduction, fraud and deception" (Trafficking in Persons Act, 2009).

One of the strategies commonly used by traffickers is to provide payments and benefits to perpetrators and families to secure consent and trust. For example, a trafficker may approach a vulnerable family with gifts or money with the condition that they allow their young children to be taken to the city to work and go to school. In several cases, the trafficker is a relative or a trusted member of the community, like a teacher or religious leader. Traffickers tailor their tactics to the unique vulnerabilities of each victim.

Additionally, a human trafficker is someone who "hires, maintains, confines, harbours or receives a person through force or coercion and engages them in prostitution, pornography, sexual exploitation, forced labour, slavery, involuntary servitude, death bondage and forced or arranged marriage" (Trafficking in Persons Act, 2009).

East African countries are both sources and destinations of international and internal trafficking. The Trafficking in Persons Report (2019) highlights that in Uganda, traffickers exploit domestic and foreign victims of trafficking internally, while also exploiting Ugandans abroad in international trafficking situations. Due to the growing economic disparity and lack of employment opportunities, the vulnerable populations are at higher risk to the crime of human trafficking. Rural and economically vulnerable communities are key points of origin, while urban, intensive agricultural, mining and tourist centres are common destinations within East Africa, (Anti-Slavery/ANPPCAN, 2005; ILO, 2006; United States Department of State, 2006).

Children are reported to be highly vulnerable to trafficking according to the Trafficking in Persons Report (2019). The exploitation of children in forced labour takes place in industries that include agriculture, mining, fishing, forestry, cattle herding, mining, stone quarrying, brick-making, carpentry, steel manufacture, street vending, food service industries and domestic servitude. Young women are also highly vulnerable to international trafficking where they are taken to destinations such as the UAE for domestic labour.

Victims of trafficking are subject to human rights violations including rape, torture, forced abortions, starvation, and threats of torturing or murdering family members.

Young boys and girls between the ages of 13 and 24 in Uganda are usually exploited in prostitution and domestic sex trafficking.

Those that escape suffer from both physical and psychological illnesses and for those that return there is currently very little support for their recovery. For the few places that do offer the support needed, minimal thought has been given to the design of the facility and its impact on the survivors.

i.2 Evidence-based healthcare design

There is a growing body of research on evidence-based healthcare design which has informed the creation of better and safer health facilities globally. This research project started in January 2019 builds on that existing research, though it is entirely unique in its focus on the psychological health of human trafficking survivors.

Globally, there are no known examples of care centres supporting this segment of society whose design has been drawn from the direct testimony and experiences of its primary user group. In addressing this knowledge gap, this research aims to highlight the impact of design on health and well-being, foregrounding architecture as a critical component of excellence in the provision of healthcare and social support services to human-trafficking survivors and other vulnerable groups suffering from psychological trauma.

Information on existing care centres, its users, the findings of this research and recommendations by BuildX Studio can be found throughout this document.

Introduction

"Such young people must be in a supportive environment- an environment that accepts them the way they are. They need an environment where they are engaged in activities that distract [them from] the negative thoughts that they have."

Excerpt from file no. CN_IN01
Interview with social worker at UYDEL, 2019.

ii. EXISTING CENTRES

ii.1 Models of Care

The centres prioritise on providing the survivors with the basic human needs, such as food, shelter and clothing, as well as physical and psychological healthcare. The primary care objectives of the rehabilitation centres are:

i. Primary physical healthcare is a significant component considering the variety of illnesses and physical injuries that survivors may have experienced during trafficking and transition. These include bodily injuries and wounds, sexually transmitted infections, diseases related to poor nutrition and poor hygiene.

ii. Psychological healthcare aims to treat mental trauma developed during the trafficking experience as well as preparing the survivors for reinstatement into the community. Mental health professionals suggest forms of approved therapies, such as Cognitive Behavioural Therapy (CBT), and a diverse range of social and life skills training to aid in the rehabilitation process.

iii. Building resilience against socio-economic and psychological factors that may have led to trafficking is a necessary skill taught at the centres. It involves the provision of various forms of education to equip survivors with knowledge and appropriate skills that they can use once they are integrated back into their communities.

The secondary care objectives of the centres are:

i. Formal and non-formal education, a need among survivors who are children and adolescents, and even adults, as their education may have been interrupted during trafficking and transition.

ii. Supplementary Programmes such as vocational skills training which include, but are not limited to, tailoring and hairdressing, can be implemented to complement the rehabilitation of human trafficking survivors.

ii.2 Centre types

Due to the lack of purpose-built centres with acceptable standards for trauma rehabilitation, care centre typologies vary depending on the services covered by each organisation. Some include survivors of domestic violence while others are also shelters for refugee assistance programs.

The centre types include:

i. Drop-in centres:

Drop-in rehabilitation centres are located in communities with a demographic vulnerable to various forms of trafficking. They cater to the needs of individuals whose immediate surroundings do not impact or interfere with their ability to undergo rehabilitation. These centres primarily focus on providing counselling, health and well-being services with a vocational skills training program to supplement them.

Drop-in centres are usually accessible to a wider population since they are mainly targeted towards survivors that do not require residence at a care centre. They reach more survivors within the communities by occupying smaller spaces within urban neighbourhoods or by using mobile structures for their operation.

ii. Residential centres:

Residential centre services are targeted to individuals whose immediate environments pose a significant risk to their overall well-being, and thus must be physically removed from such settings for the time they spend rehabilitating. These centres are typically located away from urban centres to maintain privacy and security for the survivors, and can also provide accommodation for domestic violence survivors.

An average rehabilitation program lasts between 3 and 9 months, however, this duration often fluctuates depending on the survivor and their progress. The stay may also be extended in circumstances where the survivors' psychological health does not improve significantly within the set period. In some cases, the survivor may be unsuccessful in re-tracing their home or may be required to attend court proceedings which can extend over several months.

On completion of the program, the survivor is resettled back into their community if deemed ready by the caregivers. In instances where this is not possible, the survivor is resettled in alternative homes of their choice or receives assistance to start a new life on their own.

iii. Combination of Drop-in and Residential centres:

Service provision may in some instances encompass both residential and drop-in components. This type of facility fits a context where the centre is located in proximity to the target population for easy access but is also distant enough to completely separate the survivors from the risks of their environment.

Introduction

"You are assured of food on a daily basis – there is no worry. You have someone to hug you. That helps them feel at least better, and they tend to change. They tend to become relieved of the stress that they come with."

Excerpt from file no. ON_IN01
Interview with social worker at Retrak, 2019.

iii. CENTRE USERS

Survivors and **caregivers** are the primary users of the centres alongside occasional visitors and guests.

iii.1 Survivors

The survivors of human trafficking within these centres are either male or female whose ages range from early childhood to adulthood. However, a majority of the survivors are females between the ages of 12 and 15 years.

During trafficking and transition, the victims' human rights and needs are often denied or not met adequately. Physiological needs such as food, shelter, clothing and healthcare are commonly lacking, and the social environment is harsh, psychologically damaging and unsafe. Consequently, self-esteem and self-actualisation needs are neglected entirely.

Trust is a significant concern for the survivors, and they often do not have a home to go back to after they escape from trafficking. It's at this point that care centres come in, to provide the basic needs and assist in their rehabilitation process.

iii.2 Caregivers

Social workers, primary health workers and **education and skills training staff** play a significant role in the survivors' lives at the centre. Social workers are the primary caregivers to the survivors. They also provide psychological care and are vital for maintaining safety and care at the centres.

Positive relationships with caregivers are essential to the survivors' healing. The Uganda Approved Homes Rules (2013) recommends a maximum ratio of 1:8 (one social worker/staff member paired with eight survivors).

iii.3 Visitors

Visitors usually include the family and friends of the survivors, as well as representatives of partner organisations. Family and friends play a crucial role in fulfilling the social support needs of the survivor while partner organisations engage them in activities which fulfil their respect and 'pride in activities' needs.

Visiting partners often hold public gatherings with the residents at the centres for demonstrations or talks. These talks can include theatre performances organised by Dream Revival Centre (DRC) which sheds light on the trafficking experience for the community. The gatherings are crucial for the centres and for the cause of human trafficking to raise awareness and support.

Figure 2.
Searching for a
better future

"receive a young person who is hopeless
don't know what they want to become in future
always say 'Now, I'm here and I don't know what I'm going to do"

File No: CN_IN01
Role: Social Worker

✖ RESEARCH

"...unlike before this research wants survivors to inform architectural design. Governments have started to realise that rehabilitation centres are important, before they start building and getting creative there is something to base it on.... The more research we do the better it will inform our interventions."

Interview: Agnes Igoye

1. ABOUT

1.1 Research Summary

BuildX Studio, in partnership with the Antislavery Knowledge Network (AKN) from the University of Liverpool and the Dream Revival Centre (DRC) in Uganda, has carried out the Healing Spaces for the Survivors of Human Trafficking Research over the past year and a half, with the support from a diverse team of professionals, care centres within Uganda (UYDEL, Retrak, Set Her Free), and volunteers from Arts for Change. The primary goal of the study has been to establish this design framework for a human-centred, evidence-based, and user-led approach for the design of care facilities.

The research team* included:

Professionals:
- Agnes Igoye, Dream Revival Centre's representative
- Dr Jill Morgan, a performing arts based psychologist and lecturer at The Royal Conservatoire of Scotland
- Jonny Campbell, Award-winning filmmaker
- Media 256, media company in Uganda
- Professor Christopher Platt, Chair of Architecture at the GSA's Mackintosh School of Architecture (MSA)

Centers:
- Dream Revival Centre (DRC)
- Retrak
- Set Her Free
- UYDEL

Other key members:
- Volunteers from Arts for Change
- Survivors who were residents at the centres
- Staff members of the centres (caregivers)

BuildX Studio:
- Elizabeth Sitati, Architectural Researcher
- Catherine Barasa, Principal Investigator
- Carolina Larrazábal, Co-founder & Design Director
- James Mitchell, Co-founder & CEO
- Sheeba Sima, Research assistant
- Shivani Patel, Project Lead

*More information on the collaborators included in the Appendix.

The study utilised qualitative data produced by deploying arts and humanities tools and media. These included one-on-one interviews with survivors and caregivers, performing arts (community theatre workshops organised by DRC), the use of photography and digital documentation, and an architectural form of interviews conducted via sketching out spaces.

This framework identifies many design characteristics where positive impacts on healthcare outcomes already have supporting evidence. It also further confirms these as key factors in the design for centers treating trafficking survivors. However, it also places a particular emphasis on identifying and evidencing design characteristics which are unique or of heightened importance in positively affecting survivors' mental health.

1.2 Data Collection Process

The various data collection tools used provided very detailed information that gave perspective on the multi-layered and complex issue of human trafficking and its impact on the survivors.

- 22 survivors participated in the study, and 3 out of the group were male while 19 were female. They were all Ugandan citizens. The age details of 19 of the participants were revealed to the research team.
- 8 of the participants in the sample group were between the ages of 13 and 15, making it the majority age group.
- 6 were between the ages of 16 and 20, while 3 were between the ages of 10 and 12 Years. 9 caregivers also took part in the study.

The randomly selected participants' profiles were found to echo global statistics as the majority of the participants were young children, teenagers and females under the age of 18 and of school-going age. They all had their origins from smaller regions within Uganda and were trafficked to Kampala, the capital city. It was also revealed that the residents might, in some cases, be parents with young children.

Excerpt from File No. MK_IN01 Interview with social worker at UYDEL, 2019.

"We do receive cases here whereby we may not have the services to work on that particular case. We make referrals, for example, some of the girls have children, they are teen mothers and have children as young as 2 years old"

The sketch interviews linked the participants' understanding of space with that of the research team. The interviews gave the team insight into the participants' awareness about the spaces they were describing. A stakeholder dialogue took place in October 2019 which brought in members from the wider community who shared their experiences regarding space while being trafficked or working with the survivors. This dialogue gave depth and variety to the data collected from the core sample group.

Tools such as the daily journal recordings provided information that went beyond the content of the recording itself, as the researchers could interpret the different moods and attitudes of the participants. This also gave insight into their daily interactions, resulting in comprehensive findings.

The community theatre performance, in which the survivors told their stories through drama, revealed the survivors' experiences of spaces through trafficking in a visual manner.

1.3 Research Limitations

This research was the first of its kind within the region of East Africa, hence existing references were limited.

The geographical scope was limited to Kampala and its environs due to the location of the partner centres. The findings were therefore limited to participants within an urban environment.

The majority of participants for the research were female, and hence the findings may be skewed to the female perspective. Further research and studies could be done with more male participants to identify similarities or differences between the responses and perspectives of space.

The sample group chosen for the study were at an early to intermediate stage of their healing process. Survivors who are at an advanced stage of healing can be considered as a sample group to identify similarities and differences in their current perceptions of space.

The research is yet to be validated by the group participants, which was not possible due to the COVID-19 outbreak happening at the time when the workshop was to take place. Further, the findings and subsequent framework should be validated against a centre prototype, which would be designed from the findings on this study to assess the impact of the design on the healing process of the survivors.

"...floor was always cold...
...always up before the sun came out...
For 2 years never had a bath or shower
only showered when it rained heavily
this was my only source of water"

File No: NE_IN01
Survivor one-on-one interview

2. FINDINGS

2.1 Experience during trafficking

In the majority of cases, the survivors were trafficked by trusted members of the community, such as teachers. Victims would then be deceived into leaving their homes for different forms of exploitation. In other cases, survivors would leave their home environment voluntarily and take extreme measures to get to their intended destinations. This was mainly due to the economically and socially difficult environment in their homes.

Figure 3. Victims are often separated from friends and family.

There is little or no provision for shelter while they are being held captive, which leads the victims to experience homelessness. The victims took refuge on the streets and were exposed to extreme temperatures, dirt and insecurity. Limited access to sanitary facilities also affected their personal hygiene and resulted in the development of illnesses.

In cases where victims managed to find some shelter under the trafficker's watch, it was in the form of confinement. This type of shelter is characteristic of small spaces, lack of ventilation and lighting, burglar proofing, and lack of views to the outside world.

Codes from File No: NE_IN01 Interview with survivor at UYDEL, 2019.

"on the streets
used to sleep on the floor or compounds of different homes/places
cover myself with a sack because I could not afford beddings
floor was always cold
always up before the sun came out For 2 years never had a bath or shower only showered when it rained heavily"

2.2 Escape from trafficking

The survivors leave the trafficking situation through various means including abandonment by their traffickers, rescue by rehabilitation organisations, intervention by community members and escape with or without violence.
As survivors transitioned out of the human trafficking experience, homelessness often becomes a critical issue as a result of not being able to find help.

Police stations emerged as a critical transition point between the trafficking context and the survivors' rescue and rehabilitation. Survivors would often be accommodated within police cells, as there is a lack of government facilities that cater to the needs of victims rescued from human trafficking. The experience at the police cells was often characterised by a lack of privacy, lack of designated sleeping areas and bedding provisions and victimisation, which often aggravates the psychological distress experienced by the survivors.

Figure 4. Police stations lack suitable accommodation which often aggravates the psychological distress.

The experiences during trafficking lead to trauma that is triggered in the survivors after they have escaped the trafficking situation. It is caused by spaces that bear similarities to the environment in which they were exploited. Since trauma is a personal and subjective experience to an individual, emotional responses to physical elements and qualities of space are highly varied.

The survivors' perception of space was influenced by a person or activity that supported their rehabilitation and personal well-being. The qualities of the space would seldom be apparent or conscious contributors to the survivor's attachment to it.

Figure 5. Spatial similarities to the situation in which they were exploited can trigger traumatic memories or flashbacks.

2.3 Centre Findings

The research reveals that there are significant differences between the centres in terms of overall spatial design and service provision, which are dependent on the individual organisations' core values and philosophy, ambition, size and funding. To illustrate these variables, below is an overview of what was found through the research.

2.3.1 Core Values

Along with variations in types of centres or target groups, centres also differ in their mission and core values based on what they provide for the survivors. From the centres that took part in the research, key values and missions are outlined below:

Economic Empowerment:
Some centres focus on building financial resilience in the survivors through education and vocational training. This approach deals with the primary cause of trafficking, which is the economic vulnerability of the victims in most cases. Equipping the survivors with various skills gives them economic sustainability and promotes self-actualisation. Spatial provisions and resource allocation for the different vocational skill training programs will feature as a significant component of these centres.

Social Support:
Some centres use an approach that is focused on creating a supportive social network for the survivors to promote healing. This approach aims to ease the psychological trauma associated with the verbal, emotional and physical abuse that the survivors may have experienced during trafficking, and in the hands of traffickers. These forms of abuse often result in the survivors' negative perception of people which manifests as aggression towards others, mistrust and anti-social behaviour. Provisions for activities that encourage social interaction and promote self-esteem are a typical feature in such centres.

2.3.2 Financial Model

The centres may use donor funding, self-sponsorship or a combination of both financing models to run their operations. The model in use typically has implications on the availability of funds. Donor-funded organisations have stakeholders who have specific interests within the organisations and may fund particular activities or programs within the centres. In instances where the organisation uses a self-sponsoring model, centres tend to include income-generating components within their program for financial sustainability.

The availability of financial resources directly influences property acquisition and use. This may range from provisions for centre-owned and built structures to rented or mobile facilities.

2.3.3 Centre Type & Size

The spatial needs at the centre vary depending on the facility type, i.e. whether it is a drop-in centre, residential rehabilitation centre or a combination of both. The type of centre also influences its operational size. This framework must be used in conjunction with the context-specific regulations and codes encompassing the proposed functions on site.

The findings reveal that the centres often receive guests from partner organisations or institutions, as well as the survivors' guests. There is also a possibility of the survivors bringing their children to the centres as they receive the services. Accommodation for the intended guests at the centres can vary. The resident population at the centres also continuously fluctuates due to the influx of new residents and resettlement of residents who have completed their rehabilitation programs. In certain instances, there may be an influx of population as a result of mass rescuing, or a drastic reduction in cases of mass re-integration of residents. The population may also fluctuate along with the flexibility and availability of resources.

2.3.4 Current Centre Characteristics

The centres run their operations either from retrofitted residential homes or from buildings not purposely-built for the survivors' rehabilitation. The buildings have a relatively modern architectural style due to their proximity to urban centres.

The residential homes are usually located in low-density neighbourhoods, comprising bungalows and maisonette building typologies. These buildings are up to 2 storeys high. A bespoke building would also be found in a similar neighbourhood, or within a semi-urban zone where land costs are relatively lower.

Clay bricks are the most commonly used construction material for walling. The walls are either rendered in cement plaster and paint or left with the natural brick finish. The most prevalent roof form is a simple pitched roof with galvanised iron sheets which are widely used due to their low cost, availability and durability. Openings consist of standard-sized glazed windows and doors. Steel and timber casement windows are typically used with open-out and side-hung windows.

The urban areas feature relatively smaller outdoor spaces, while semi-urban areas allow for relatively large, typically greener spaces. Solid masonry walls at the perimeter are implemented as a security feature, with a highly controlled vehicular and pedestrian access point.

"By breaking the concept of healing into antecedent components (emotional, psychological, social, behavioral, and functional) … The environmental variables found to directly affect or facilitate one or more dimension(s) of healing, which were organized into six groups of variables—homelike environment, access to views and nature, light, noise control, barrier-free environment, and room layout."

Exploring the Concept of Healing Spaces,
Health Environments Research & Design Journal

3. HEALING FACTORS

The survivors' positive and negative responses are quantified by Tay and Diener's (2011) Needs and Subjective Well-being model, which defends that well-being is relative to the fulfillment of the basic needs of food and shelter, safety and security, social support, respect and pride in activities, mastery and self direction and autonomy. They also state that these needs do not have to be fulfilled in any particular order to ensure life enjoyment and a positive self perception.

3.1 Survivors

The data revealed that the factors that influence their perception of space are:

3.1.1. Social Environment

In a paper titled "Healing Landscape: Patients, Relationships and Creating Optimal Healing Places" ; (Miller & Crabtree, 2005), the authors describe healing as a process that involves a complex individual and an enabling relational, social, biological and cultural environment. Healing experiences include one or more critical relationships which can be transforming to the life of the individual.

The social environment, which is composed of peers, friends, staff, family, community and guests, fulfils the needs of safety, security, social support and respect amongst the survivors. These connections and relationships provide emotional and social safety, as well as a sense of belonging. This environment is established through contact, presence and care shown by these actors to the survivors. The lack of access to these relationships was found to be detrimental to the psychological well-being of the survivor.

Positive relationships with caregivers are essential to the survivors' healing.

Excerpt from file No: IM_IN01 Interview with caregiver at Retrak, 2019

"It is very important for the caregivers to be open and welcoming to the children because for where these children have been, they have not had enough love. They are missing out on that and they need somebody to lean on. It's upon us, the adults who are here, to listen to these children because they need somebody to listen to them and share with them their burdens."

The presence of family members at the centre through visits is vital to the psychological well-being of the survivors. For them, a familiar presence within the unfamiliar context of the centre gives them a sense of safety and allows for social support. Where this is not possible, contact through phone calls or visits to the home accompanied by a social worker achieves this familiar presence.

3.1.2. Physical space

Our environment impacts us through all of our senses and has subtle but powerful effects on us. Survivors of human trafficking feel strong connections with the places they have been confined in, where they tend to experience physical, social, psychological and emotional distress and imbalance. There is often a lack of familiarity, belonging, safety or love. A healing space enables the restoration of wholeness and balance of their physical and psychological health, and positively influences self-perceptions.

At the centres, the survivors' perception of space was influenced by the person or an activity that supported their rehabilitation and personal well-being. The qualities of the space would usually not be apparent or be conscious contributors to the survivor's attachment to it.

Visual aspects such as lighting and colour impacted the survivors' mood in different ways. They also generally preferred spaces with minimal noise as well as smooth textures, which had a calming effect on them.

File No: NE_IN01
Survivor one-on-one interview

floor was always cold
always up before the sun came out
For 2 years never had a bath or shower
only showered when it rained heavily
this was my only source of water

Maintaining the occupants' health through lighting, ventilation and air temperature regulation emerged as a critical consideration for comfort. The definition of personal space, as well as the adaptability of one's space, displayed as a key factor to be considered in spatial design. Green space also appeared as a leading factor in contributing to the healing of survivors. Design elements that emphasized confinement, such as burglar proofing, a lack of privacy or poor maintenance resulted in triggers to the survivors. Besides the provision of shelter, space influenced their sense of safety, respect and autonomy in the survivors.

Figure 7. A healing space enables the restoration of wholeness and balance.

3.1.3. Programmed Activities

Activities that encourage social interaction and personal expression were seen to have a positive impact on the survivors as they fulfilled needs of support and achieving a sense of pride. These included games, sports and music. Additionally, activities such as learning vocational skills met the needs of respect and pride in activities, mastery and self-direction. Solitary activities such as mindfulness meditation combined with relaxation breathing training helps reduce physiological symptoms of anxiety within the present moment, and replaces them with feelings of comfort and clarity of thought (CBT Exercises — Cognitive Behavioral Therapy Los Angeles, 2020).

3.1.4. Self-Perception

Personal experiences that revolved around instilling a sense of pride and respect had a positive impact on the survivor's self-perception. These experiences included their self-care, personal development, aspirations and psychological well-being. Experiences that inhibited growth in these aspects had a negative psychological impact on the survivors.

3.2 Caregivers

These same factors listed above also affect the caregivers and social workers at each centre, albeit in a different manner. From our findings, respite and privacy emerged as two core needs for staff. These are essential for the caregivers' psychological well-being and ability to care for survivors adequately while protecting themselves from emotional, physical and psychological drainage or numbing. It is also essential that they are able to supervise and maintain safety at the centres.

Figure 8. Self development fulfils the need for mastery and self-direction.

Research
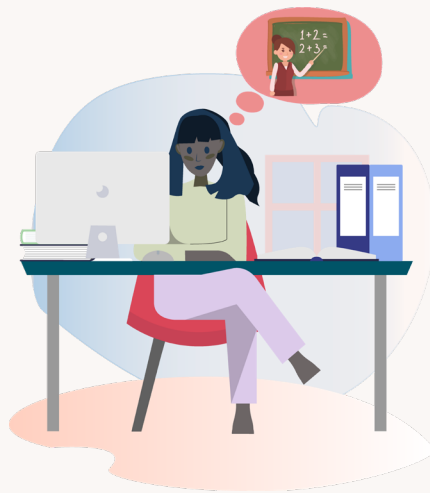
"Human sensory organs and systems evolved to respond to natural geometries, which are characterized by colors, fractals, scaling, and complex symmetries. Fine-tuned to distinguish positive aspects (food, friends, mates) from negative aspects (threats) in the environment, our perceptual systems generate positive emotions from surroundings that resonate with our biophilic instincts."

Nikos A. Salingaros (2015) "Biophilia and Healing Environments",2019.

4. EMERGING THEMES

From the findings and analysis, six central themes have emerged which have heavily influenced the design framework content. The overarching theme however, which appears across all findings, is that of balance. Not only are survivors' experiences extremely varied, but also the psychological reaction and needs for certain conditions can be different from survivor to survivor. What might be a trigger of distress to some (darkness, solitude, tight constraints, a certain smell), might be a calming effect to others. As such, the design characteristics of a centre will vary depending on the fine balancing act of these opposite concepts.

4.1 Experience Over Time

The psychological health of the survivors' tends to change and improve steadily during their stay at the centre. When they first arrive at the centre, they often present fear and anxiety, having just escaped from the trafficking experience and being in a new and unfamiliar environment. The symptoms of various mental illnesses such as depression and PTSD are also present actively during this time. This can have implications on the level of supervision and the amount of respite required during this stage of the healing process. Some survivors have specific individual needs which require them to be separated from the rest of their peers until they are able to join them.

Excerpt from file No: ON_IN01 Interview with caregiver at Retrak, 2019

"What happens when a child has come and is scared - we have experienced this with children who are 7 to 11 - those ones fear. They tend to be scared of the bigger girls, they get scared of the environment, some fear sleeping in rooms, some have never slept alone in their own beds"

The survivors' continued engagement in therapy and the programs at the centre causes an outward change in their behaviour and an improvement in their psychological health, leaving them feeling physically rehabilitated as well.

Their needs at various stages of healing can have an influence on spatial organisation and qualities of spaces experienced. For example, in early stages, survivors are clustered into small groups of 3-4 children to form peer groups. As they progress in healing, they begin to develop relationships with their other peers and caregivers.

At the later stages of healing, social connection is a significant component of the survivors' well-being. They are able to interact in larger groups and are moved to bigger clusters within the sleeping areas too. The clustering of survivors in this manner creates continuity in their healing process and reinforces peer support around them. This also minimises any distress that could arise from the separation of peers who are at different stages of healing, especially where one is reintegrated back into the community and leaves their peers behind.

4.2 Respite

Respite is equally vital for the caregivers for their own psychological relief as they care for survivors with traumatic memories and negative thoughts.

"Some of them may be [living] in a nightmare of what happened before, they may think that it may occur [again] in the new place that they are in"

There is a need to detail spaces at the centre with sensory and therapeutic elements that act as positive distractions for the residents. These elements may include visual art, patterns, textures on surfaces, calming sounds, beautiful natural landscapes and vegetation, auditory therapy and pleasant smells.

"As the caregiver, it gets hectic and you need time to go off and be alone, "
"I think we would need a place where we could at least relax"

4.3 Control vs Flexibility

The need for flexibility arises from the survivors' varied needs from the spaces, where each survivor has their own preferences in terms of openness, colour choice and natural and artificial light levels stemming from their past experiences. Despite the need for more flexibility, there is also a need to maintain order and control how flexibility affects different individuals and their rehabilitation process.

Frequent variation in population occurs over time as survivors are brought in and are resettled into their communities continuously after rehabilitation. This has an implication on space and its functionality, as well as its ability to accommodate various needs and functions over time.

The centres may also face various funding challenges concerning space. The adaptability of space serves to optimise the given area where financial constraints may not allow for the creation of dedicated spaces for each function.

4.4 Privacy vs Supervision

While the survivors require privacy in individual spaces, such as sleeping areas, spaces where they seek respite or when interacting with their family members when they visit, there is also a need for constant supervision by the caregivers.

This is also important to bear in mind for caregivers, whilst they need to be constantly vigilant, they also require spaces of respite for when they are off-duty, in order to recharge.

"I think it is important that our quarters are closer to the young people. Sometimes it's not private, and they always intrude on our privacy, but it is better because you can easily monitor what is going on. If the young person is unwell, they can come and report to you and you can act immediately"

4.5 Protection vs Freedom

Security is crucial to the survivors' physical and psychological well-being. However, there is a need to avoid creating a sense of confinement through security detailing and the addition of open spaces. Visual and spatial links can be established between the centre and the adjacent neighbourhood to avoid implying seclusion, which can reinforce stigmatisation of the centre within its community.

"Burglar-proof bars on the windows
trigger feeling of being constricted
happens during trafficking
unfavourable room to a survivor
where they experience confinement"

4.6 Social Connection vs Solitude

The survivors require both social connection and solitude at different times during rehabilitation. Social connection fulfils the survivors' love and connection needs; however, privacy and solitude are of equal importance to them and are necessary for some therapeutic activities and their own psychological respite.

Figure 9. The design of the centres should stimulate social connections but also allow for solitude and privacy.
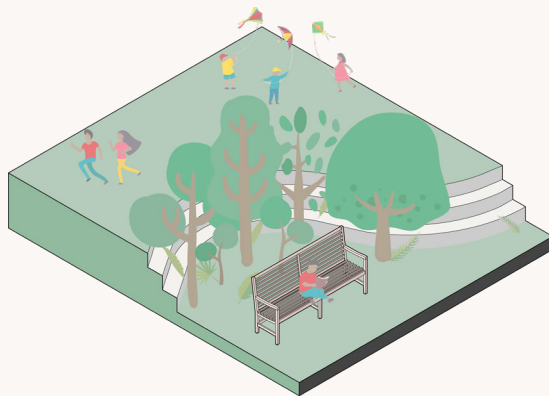
Safety has a direct correlation with personal space. As revealed by the data, this factor influences social safety as the invasion of personal space has the potential to cause social tension among residents.

Figure 10.
Kidnapped and
deceived

"Someone just finds a child and is like 'In Kampala, there are jobs there.' Coercing…and this child is just pulled like that and just left in the park over there so that they take care of themselves."

Excerpt from file no. ON_IN01
Interview with social worker at Retrak, 2019.

Design Framework

✕ EXTERNAL DRIVERS

"You have your own bed, which is clean, in a room with other people. You have people who care for you around you. You are in a safe environment where you know no one is going to come to attack you – it is enclosed. You are assured of food on a daily basis – there is no worry. You have someone to hug you. That helps them feel at least better, and they tend to change. They tend to become relieved of the stress that they come with."

Excerpt from file no. ON_IN01
Interview with social worker at Retrak, 2019.

5. CENTRE VARIABLES

The research reveals that there are significant differences between the centres in terms of overall spatial design and service provision, which are dependent on the individual organisations' core values and philosophy, ambition, size and funding. To illustrate these variables, below is an overview of what was found in the research.

5.1 Core Values

Along with variations in types of centres or target groups, centres also differ in their mission and core values based on what they provide for the survivors. From the centres that took part in the research, key values and missions are outlined below:

5.1.1. Economic Empowerment

Some centres focus on building financial resilience in the survivors through education and vocational training. This approach deals with the primary cause of trafficking, which is the economic vulnerability of the victims in most cases. Equipping the survivors with various skills gives them economic sustainability and promotes self-actualisation. Spatial provisions and resource allocation for the different vocational skill training programs will feature as a significant component of these centres.

5.1.2. Social Support

Some centres use an approach that is focused on creating a supportive social network for the survivors to promote healing. This approach aims to ease the psychological trauma associated with the verbal, emotional and physical abuse that the survivors may have experienced during trafficking, and in the hands of traffickers. These forms of abuse often result in the survivors' negative perception of people which manifests as aggression towards others, mistrust and anti-social behaviour. Provisions for activities that encourage social interaction and promote self-esteem are a typical feature in such centres.

5.2 Financial Model

The centres may use donor funding, self-sponsorship or a combination of both financing models to run their operations. The model in use typically has implications on the availability of funds. Donor-funded organisations have stakeholders who have specific interests within the organisations and may fund particular activities or programs within the centres. In instances where the organisation uses a self-sponsoring model, centres tend to include income-generating components within their program for financial sustainability.

The availability of financial resources directly influences property acquisition and use. This may range from provisions for centre-owned and built structures to rented or mobile facilities.

5.3 Centre Type & Size

The spatial needs at the centre vary depending on the facility type, i.e. whether it is a drop-in centre, residential rehabilitation centre or a combination of both. The type of centre also influences its operational size. This framework must be used in conjunction with the context-specific regulations and codes encompassing the proposed functions on site.

The findings revealed that the centres often receive guests from partner organisations or institutions, as well as the survivors' guests. There is also a possibility of the survivors bringing their children to the centres as they receive the services. Accommodation for the intended guests at the centres can vary. The resident population at the centres also continuously fluctuates due to the influx of new residents and resettlement of residents who have completed their rehabilitation programs. In certain instances, there may be an influx of population as a result of mass rescuing, or a drastic reduction in cases of mass re-integration of residents. The population may also fluctuate along with the flexibility and availability of resources.

External Drivers

"neighbourhood of centres determines safety
...compromised or enhanced
Proximity to police stations or posts
Closeness to a health facility
area is usually large
more guards may be required
Currently have one guard
a challenge for night patrols"

File No: FGD_01

6. SITE SELECTION

6.1 External Factors

The following are external constraints and priority considerations found throughout the research for selecting a site for a care centre:

6.1.1. Access

Drop in centres prefer to be located within the city to be accessible to more survivors. Counselling sessions, vocational training, social and life skills can be provided through a drop in centre. Not all survivors need to be removed from their existing context for rehabilitation.

Figure 11. Conveying the ways in which the building can be sited to avoid visibility to the public.
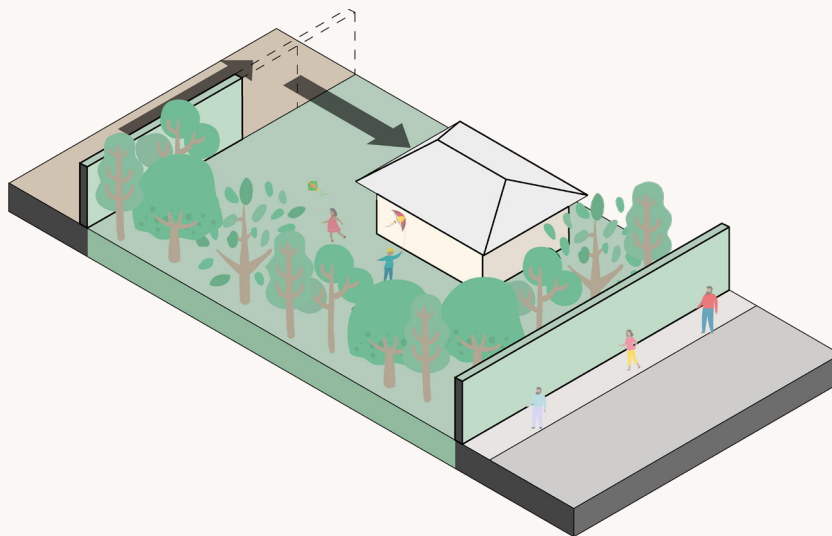
For residential care centres, sites should be located away from busy roads and city centres to have a low profile, prevent distractions and ensure safety during the rehabilitation stage. The main entrance should be away from busy main roads for privacy and the site should not have a prominent address that can be found easily.
At the same time, the location should not be so remote that they are difficult to access. Most centres tend to be located in rural areas which allow for future growth and expansion while also being accessible.

6.1.2. Proximity to a local hospital

The findings highlight that a healthcare facility should be located no further than 5km from the site selected. The health facility should be equipped with adequate facilities and medicines to aid in restricting any spread of potentially adverse diseases. The overriding principle for the establishment of new health centres, according to the Guidelines for Designation, Establishment & Upgrading of Health Units (2011), is to provide health services within a 5km distance of any community.

6.1.3. Proximity to a local police post

A police post should be in close proximity to help recover trafficking victims who may have escaped and to report any cases regarding trafficking. This proximity also helps in keeping the centres safe. For the centres' studied in the research, police posts were located 1-2 kilometres from the site.

6.1.4. Link with community

Community links should be established to communicate a sense of inclusivity for the residents. These links can be initiated through community activities or specific services

Figure 12. Undesirable environments such as industry, dumpsite or main roads.
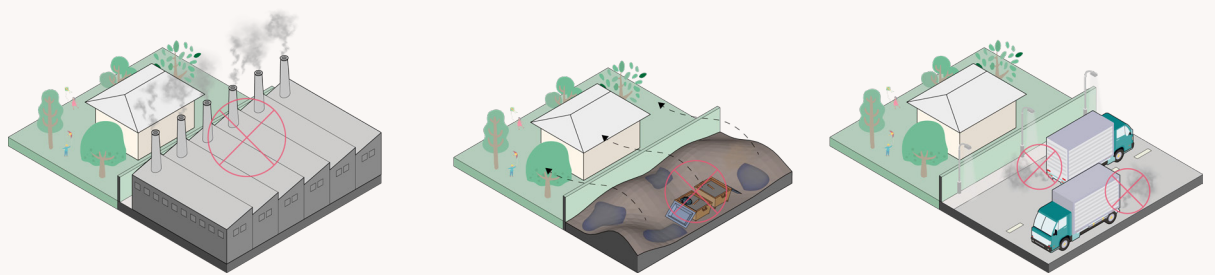
that the community may receive from the centres. However, the links should still maintain the safety of the residents within the centres.

Figure 13. Showing the proximity links that centres should strive to maintain.
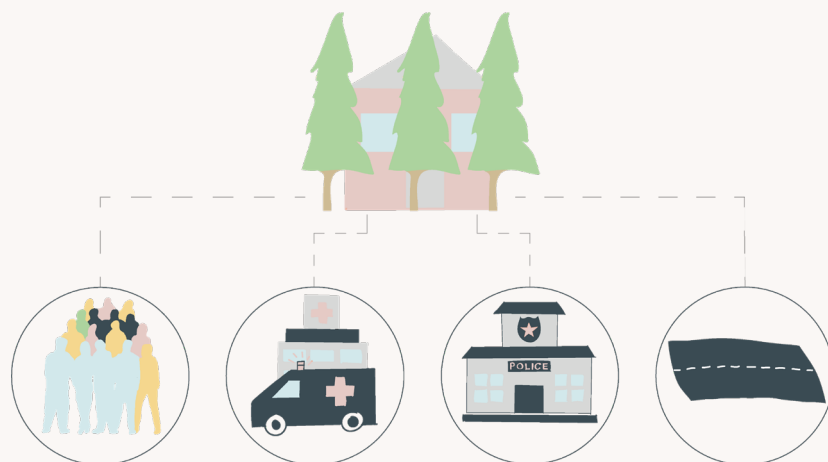
6.1.5. Neighbourhood characteristics

Sites must not be located within areas exposed to high risks of air or water pollution. These areas include locations next to industrial plants that extract or produce raw materials, consequently releasing toxic by-products. The adjacent neighbourhood characteristics also plays a vital role in the level of safety at the centre: the security levels in the surroundings will directly influence the safety at the centre.

6.1.6. Amenities

Amenities in the area can go a long way in helping survivors through their rehabilitation program. These can serve as a tool for victims to integrate and interact with the local community when they are ready to be reinstated.

6.1.7. Existing Structures

Where any existing building is being reused and re-purposed to serve as a centre, it must be deemed fit for use before any work can commence. This step will help bring to light any underlying issues and potentially dangerous situations that could impede the centre's rehabilitation efforts. It will also help clarify whether it would be more cost-effective to build a new building, as opposed to re-modelling an existing building or parcel of land.

While this framework may be referred to for renovation, further investigation is needed to outline design guidelines for existing structures.

"space is small and inadequate
limits privacy
survivors require private space
meditation and reflection
usually occur outdoors
especially on hot days
Fresh air (outdoor space)
requirement for survivors
they like flowers
part of stress management
spend time in the garden
admiring flowers
using them to celebrate
achievements including birthdays
also like distraction by vegetable gardens
Due to inadequate space
all these benefits to healing
not easily attained"

File No: FGD_01

7. SITE PLANNING

7.1 Planning Guidelines

The placement and design of buildings can help foster positive and healthy relationships between the survivors and their context, which contributes to their healing. The following key values were extracted from the research to guide the general design of new care centres:

7.1.1. Fitting in

Most pre-existing vulnerabilities of survivors are unresolved when they start their rehabilitation at a centre. The centres and their location protect the safety, privacy and dignity of all users. Besides physical security measures like perimeter walls or burglar bars, safety is also created by the building not standing out from its surroundings.

An anonymous building has its advantages. It will attract minimal attention from unwanted outsiders such as traffickers and prevent stigmatisation as not all visitors and survivors want the neighbouring community to know the purpose of the centre.

The design of the building can help it fit in by mimicking the neighbouring buildings. The building can be integrated by adopting characteristics such as the size, position of the building on the plot, the materials that are used and the shapes used in the centre's surroundings.

Figure 14. Community participation in the design process in Nairobi, Kenya by Kounkuey Design Initiative.

7.1.2. Social interaction

The organisation of functions should create spaces that encourage human interaction and social connection. These spaces should provide a variety of conditions that make the area conducive for interaction such as seating, aesthetic qualities and proximity to recreational spaces. The design of the centre should also include areas where survivors can interact with their family members in privacy during visits.

7.1.3. Public/private differentiation

The research showed that privacy and the need for social interaction are often in conflict with each other, leading to discomfort for the users. Clear distinctions of the spaces into private and public functions can help to prevent this conflict.

7.1.4. Supervision

The survivors' safety is a crucial consideration when designing the site and the buildings. The organisation of functions should allow for continuous lines of sight throughout the plot to allow for efficient supervision by the caregivers. This should complement adequate night lighting in the outdoor spaces.

7.1.5. Service planning

Service planning must provide access to vehicles where they may be necessary, to include access to ambulances, food deliveries or waste collection and disposal. The routes are to be separated from the residents' areas to allow for servicing without disrupting the day-to-day lives of the residents and provide safety.

7.1.6. Gender-sensitive design

The population at a centre requires gender separation for dormitories and sanitary facilities. In some contexts, survivors may even wish to interact with caregivers of the same gender. Therefore, organisational design and routes need to be inspected through a gender-sensitive lens to accommodate such needs.

7.1.7. Familiarity as a design tool

Day C. (2002) discusses familiarity as a quality that grounds humans. Memories contribute towards creating the essence of a place as sensitivity grows from what we know and remember both positively and negatively. In determining the architectural character of the centres, designers should draw from familiarity and memory of positive moments that survivors had when they were home. Familiar building heights and shapes, materials and colours or elements such as windows and doors will enhance a sense of belonging through creating place attachment, in return enhancing the healing quality of a space.

Figure 15. Urko Sanchez draws on a vernacular to create a familiar environment for 15 struggling families at the SOS Children's Village in Tadjoura, Djibouti.

"Smooth surfaces for easy cleaning
paint should be washable to ensure cleanliness
floor should be tiled too for easy cleaning"

File No: FGD_00

8. BUILDING EXTERIOR

8.1 Limitations

The questions directed to survivors and caregivers focused mainly on 'spaces', a word which may have unintentionally directed the focus towards the interior of rooms. Based on the findings, it is a possibility that the quality of living environments is associated more with the interior of the building rather than the exterior.

Notwithstanding this limitation, three main recommendations were extracted from the research for exterior materials & finishes.

8.1.1. Familiarity

The content in chapter 5.1, which discusses 'familiarity as a design tool,' is relevant and applicable to exterior materials and finishes as well. In addition to this, an analysis of façades and exterior finish familiar to the centre's context and the inhabiting survivors can help influence the design.

8.1.2. Cleanliness

From the research, all of the survivors outlined how clean surfaces and finishes had a positive influence on their well-being. Flat and smooth surfaces that are easy to clean are therefore highly recommended as compared to materials with rougher textures like stone, where dust and dirt accumulate quickly.

File No: KE_IN01

Activities I love at centre
Sweeping, washing utensils, cleaning
studying, playing with my friends

Despite dust accumulation and processes like erosion and weathering being difficult to mitigate completely, some measures can be taken to counteract their adverse effects. To help buildings look cleaner, non-porous and adjusted colours for the bottom third of the surface of the exterior walls can help conceal dust/dirt in an area more prone to mud, mould and general erosion.

Growing creepers or vines on the exterior is also another way to visually cover unpleasant surfaces and create greenery that helps in rehabilitation. The use of paved areas, for instance, can prevent mud and dirt from making its way inside the rooms which has been shown to be a trigger for survivors of human trafficking.

Figure 16. The bottom third of the walls of this hospital are given an extra layer of easy to clean and protective glossy paint. Sachibondu hospital, Zambia, BuildX Studio.

8.1.3. Confinement & Concealment

Security in rehabilitation centres must be considered both internally and externally. Perimeter walls, security details and the use of temporary and permanent materials can either foster feelings of imprisonment or feelings of safety, therefore, their implementation must be considered carefully.

Figure 17. Outdoor spaces facing a wall vs a green wall.
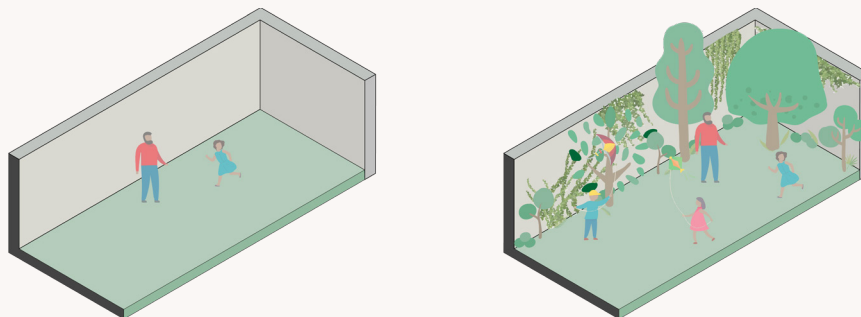
Figure 18. Bugler proofing on windows to be redesigned
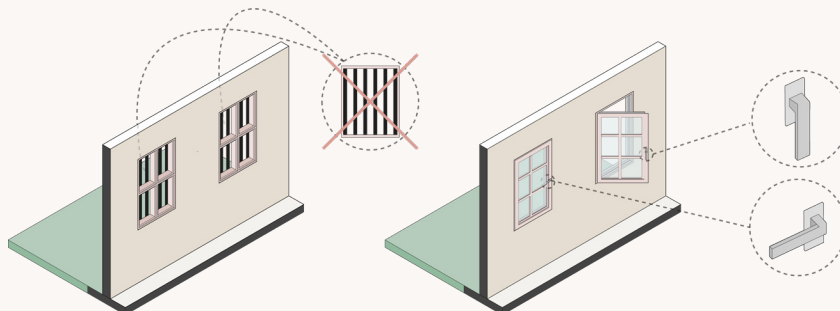
Codes from File
No: SD_001
Stakeholder
dialogue that took
place at UYDEL,
2019

"Burglar-proof bars on the windows
Trigger feelings of being constricted
happens during trafficking"

Survivors of domestic servitude often work in middle class or wealthy homes and are usually confined to lobbies, wash areas and storage spaces when they are not working. With the trafficking experience often characterized by physical confinement, more so for victims domestically or sexually exploited, security details such as burglar proofing bars could be a potential trigger. Strategies to conceal security elements in spaces should, therefore, be implemented to avoid triggering trauma.

"I plan to create awareness on human trafficking. I see myself build a shelter that will take care of helpless children"

File No: NE_01/09

9. CASE STUDIES

9.1 Centres for Children

Figure 19. Aerial picture of Noomdo Orphanage showing the placement of the buildings.

Figure 20. Differentiation of outdoor space into semi-public and semi-private spaces.

9.1.1. Noomdo Orphanage

Burkina Faso, 2016, Kere Architecture
Located within the rural countryside of Boulkiemde province, the orphanage is clustered around a communal outdoor space in a similar way to a traditional small village. Five modular courtyard buildings help create varying levels of privacy and security that are aligned with the different spaces that make up the orphanage.

Male and female living quarters are split on either side of the plan, thus, maintaining a sense of security and privacy. These quarters are divided by different age groups; with 6-11 year olds and 12-17 year olds in separate modules. The central area that connects them serves as a social space that can easily be monitored by staff.

i. Familiarity
The design takes precedent from a traditional village structure to create a sense of familiarity for children who lost their homes. Locally-sourced materials are used throughout the site.

ii. Public vs. private
Outdoor areas are differentiated in levels of privacy and use. The open central area is lined by the main buildings, perfect for physical and civic activities. The spaces in between the buildings are shielded from the main space and offer an intimate environment for group meals, gatherings of smaller groups and individuals.

9.1.2. Econef's Children Centre

Tanzania, 2019, Asante Architecture with Lönnqvist & Vanamo Architects
The childrens' centre is located within the small settlement town of King'ori, in close proximity to vocational training centres as well as religious centres. The centre has been ecologically and sustainably designed to be relatively maintenance-free and reduce reliance on private donations to function. It includes classrooms and sleeping quarters for 25 children.

Figure 21.
Study rooms of the children's centre separated by a waist-high wall from the common courtyard.

Figure 22.
Open brickwork as perimeter walls maintain the contact with the surroundings.

i. Security
A garden wall creates a clear but friendly security perimeter between the public space of the common outdoor spaces of the centre. The open brickwork allows for supervision of the public space directly around the centre and the air to flow through the walls.

ii. Public vs. Private
The transition between the privacy of the dormitories and the semi-public courtyards is formalised by open study areas on the corners of the dormitory volumes. The outdoor space through the whole project is subtly differentiated by small height differences in the floor, knee-high planters and waist-high walls.

iii. Supervision
The staff offices are located in the centre of the building creating short lines of travel for the staff but also an overview of both dormitories and the dining area.

iv. Clustering
The dormitories are split into two clusters. This creates more manageable sizes of groups and the possibility of housing boys and girls separately.

Noomdo Orphanage

Program Distribution, Male and Female Separation
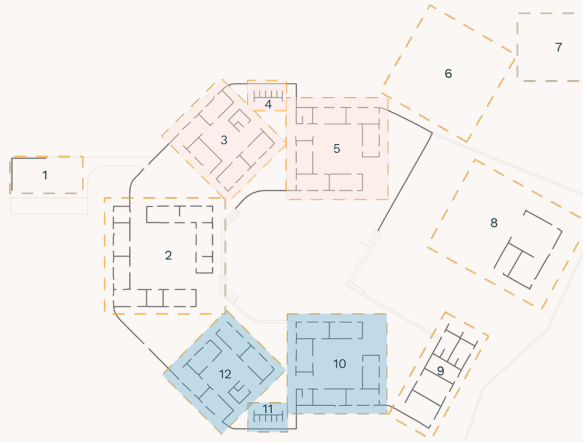
Econef Childrens Centre

Program Distribution, Living Area Separation

Figure 23.
Noomdo program
distribution

Figure 26.
Econef program
distribution

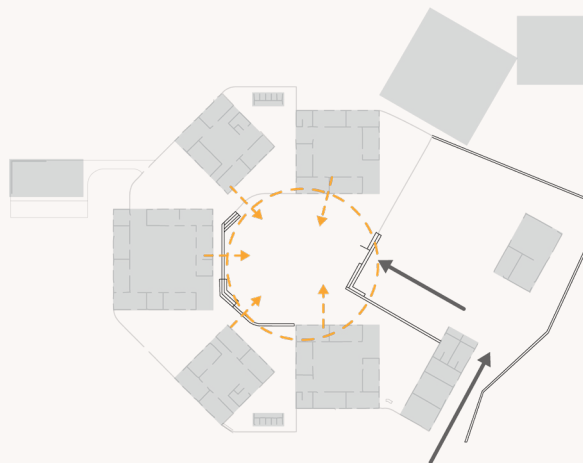Figure 24.
Noomdo access
and central public
courtyard.

Figure 27.
Econef program
distribution and
access

Access and Central Public Courtyard

Program Distribution and Access

Private Access

Public Access

Bedrooms, Living Area's

Admin, Healthcare Area

Eating, Kitchen Area
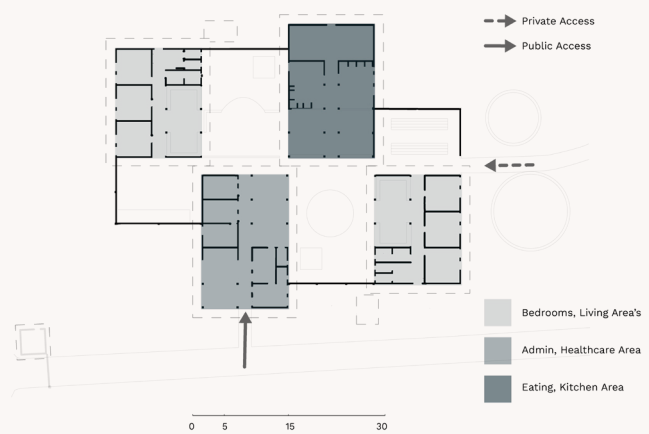
Figure 25.
Noomdo
defensible space
and private
courtyards.

Figure 28.
Econef courtyards
and greenspace.

Defensible spaces and Private Courtyards

Courtyard and Green Spaces
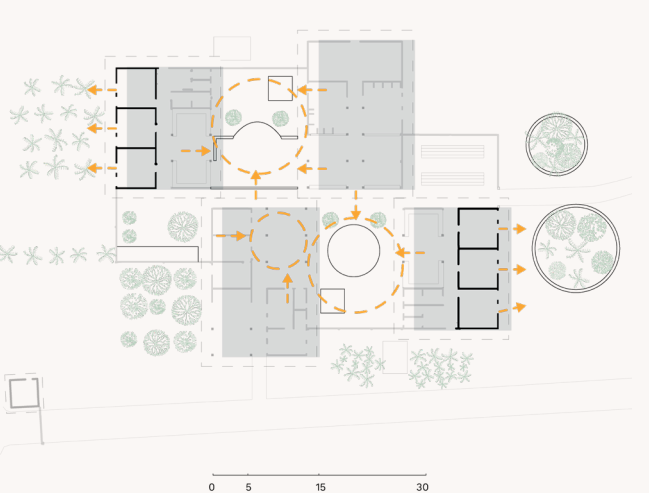
Figure 29.
Experience during
trafficking

"poor conditions of living
numerous challenges faced
rooms lacked adequate air circulation
generally hot given the climatic factors in UAE
room lived in was very hot all the time
wasn't allowed to use air conditioning.
room was congested
due to captivity
underwent enormous trauma
windows were so high
could not easily be reached

Felt like a prison
would faint in room
no one would come to rescue
for that reason
prefer places that are not isolated
fence was too long
could hardly look beyond the fence
made me feel
imprisoned."

File No: IN_002

Design Framework

✗   SPATIAL DESIGN

"distance between the kitchen and the dining area preferred a connection especially due to rain complained about too much smoke in the kitchen without any chimneys to let out smoke"

File No: FGD_001

10. FUNCTIONS

10.1 General Program

From our findings, most centres have the following programs:
i.   Primary physical healthcare
ii.   Mental/psychological healthcare
iii.   Residency
iv.   Formal education and vocational training

Residential centre programs should, at a minimum, include all the programs listed above along with a kitchen and sanitary facilities. Drop-in centres should focus on providing only physical and psychological healthcare, basic vocational training and sanitary facilities.

10.1.1. Centre Capacity and Spatial Needs

Legal guidelines stipulate that approved homes within Uganda may accommodate a maximum of 50 children. However, there is no specified population guideline for drop-in centres.

The spatial needs at the centre may vary depending on the facility type, i.e. whether it is a drop-in centre, residential rehabilitation centre or a combination of both types.

Spatial needs based on findings:

X - Allowance for space

Table 1. Centre Capacity and Spatial Needs

Spaces	Drop-in	Residential
Administration office	X	X
Primary physical health	X	X
Psychological health	X	X
Residences		X
Kitchen and dining		X
Sanitation	X	X
Formal education		X
Vocational training	X	X
Prayer space		X
Recreation and leisure		X

10.1.2. Outdoor Spaces

Extensive research, both by others and BuildX Studio, shows that the natural environment is of great importance to the well-being of humankind. Although indoor programmes are the core of a care centre, the outdoor facilities and natural environment are also an integral part of the design and aid in the rehabilitation process.

Codes from File No: NB_01/02 Weekly reflection survey entry by a participant at UYDEL,2019

"The field made me feel most relaxed noise free environment and scenery"

There are two types of outdoor space:
i. Passive spaces - offer a quiet respite
ii. Active spaces - offer a variety of activities for learning, play and therapy

The two types of spaces above should be incorporated into the design of the centres and should be functional to aid in the psychological well-being of the survivors.

In Great Lake climates such as Kampala, several functions of a care centre can be facilitated outdoors comfortably, such as social and recreational activities, (explained further in section 9.10). This, however, demands a highly functional and flexible design for all outdoor spaces. Outdoor spaces have numerous psychological benefits to the survivors and assist in enhancing their healing.

10.2 Program Configuration

A variety of spaces are critical to the successful treatment of survivors and the efficient running of centres. These spaces are listed below with individual spatial and functional requirements.

Table 2. Program Configuration

Program	Key Activities	Minimum Spatial Requirements	Main Users: Caregivers, Survivors, Visitors	Separation by:
Administrative	-Administration -First check-in survivors -Welcoming visitors and survivors	i. Reception space	C S V	
		ii. Waiting area	C S V	S V
		iii. Staff offices	C (S)	
		iv. Meeting rooms	C V	
		v. Storage	C	
Primary Physical Healthcare	-Consultation, examination, and treatment -Minor testing -Quarantine and isolation	i. Consultation room	C S	
		ii. Sickbay	C S	Gender
		iii. Storage	C	
Psychological Healthcare	-Individual counseling -Group Counseling	i. individual counseling room	C S	
		ii. large space for group counseling	C S	Age
Caregivers' Residence	-Making 24/7 presence of caregivers possible - Sleeping - Socialising	i. Individual rooms for privacy	C	Gender
		ii. Private Storage	C	Gender
		iii. Respite space	C	
Survivors' Residence	- Sleeping - Socialising	i. Dormitories	S (C)	Gender/Age
		ii. Storage/lockers	S	Gender/Age
Kitchen & Dining space	-Facility to prepare food for all residents, caregivers & visitors -Indoor or outdoor	i. Prep space for cook	C (S)	
		ii. Storage	C	
		iii. Learning, demonstration space	C S	
		iv. Dining space	C S V	
Sanitation	-Bathrooms -Washbasins -Clothes washing and drying area -Separate sanitation block for offices	i. Bathrooms w/ washbasins	C S V	Gender/Age
		ii. Bathing spaces	C S	Gender/Age
		iii. Clothes washing space	C S	Gender
		iv. Drying line space	C S	Gender
Classrooms	-Learning spaces -Vocational training -Formal/informal education	i. Classrooms	C S V	Age
		ii. Storage	C S	
		iii. Outdoor classrooms	C S V	

Prayer space	-Voluntary spiritual classes -Space to pray	i. Indoor prayer space	C S V	
		ii. outdoor prayer space	C S V	
Leisure	-Space to relax -Entertainment -Quiet time	i. Entertainment room	C S	Age
		ii. Storage	C S	
		iii. Quiet pods	C S	Age
Recreation	-Indoor and outdoor play areas -Art and Theatre -Learning space -Field for sports	i. Learning spaces	C S V	
		ii. Field	C S V	
		iii. Playground	C S	
		iv. Garden	C S V	

10.3 Program Adjacencies

The arrangement of programs within care centres must be based on privacy of both survivors and caregivers, supervision, the ease of moving around, health and safety provisions.

Table 3. Program Adjacencies

Program	Next to	Close to
Administrative	Entrance Sanitation	Recreation & Leisure Outdoor space
Primary Physical Healthcare	Administrative offices Caregivers' residence	Outdoor space
Psychological Healthcare	Outdoor space	Primary physical healthcare
Caregivers' Residence	Sanitation Outdoor space	Survivors' residence Clinic
Survivors' Residence	Sanitation Outdoor space	Caregivers' residence Clinic
Kitchen & Dining Space	Sanitation Storage	Vegetable garden
Sanitation	Survivors' residence Caregivers' residence Administrative offices Kitchen	
Learning	Outdoor space Storage	
Prayer	Outdoor space	
Recreation & Leisure	Outdoor space Survivors' residence	Learning

The diagrams below are examples of arrangements that take into consideration the different requirements of spaces regarding privacy, access and separation.

Figure 30.
Central courtyard
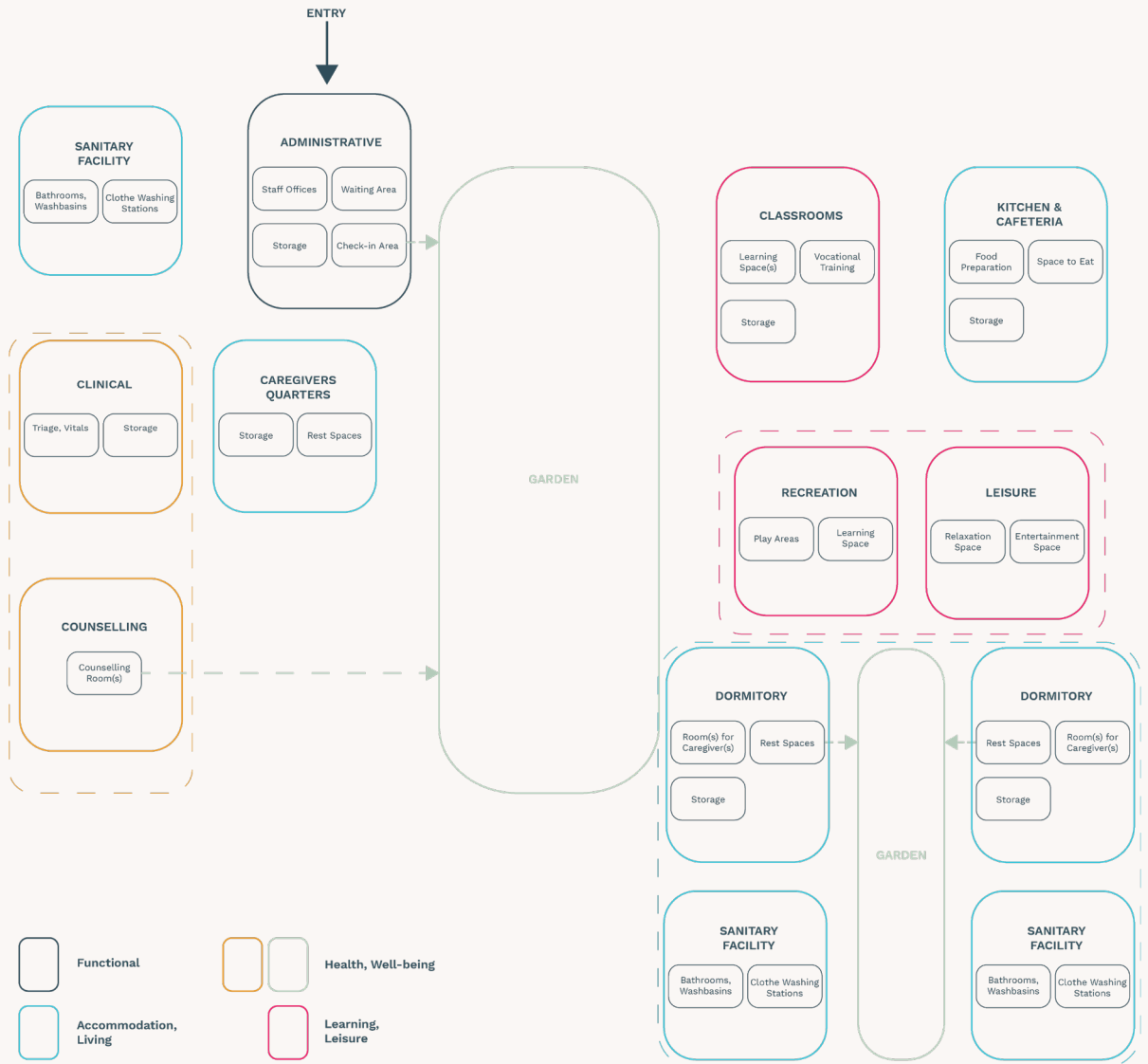arrangement
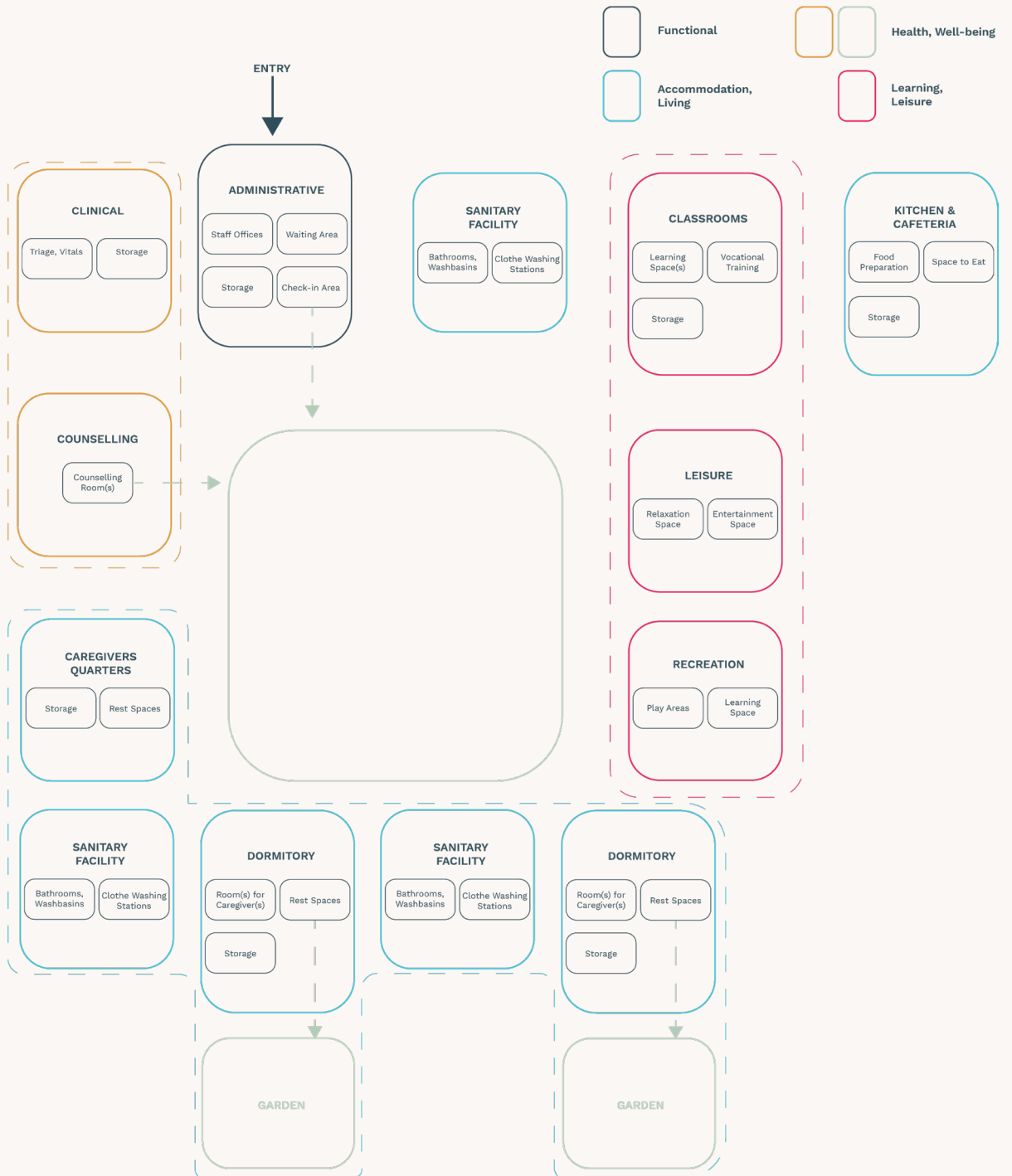
Figure 31.
Program
configuration
options

ENTRY

SANITARY FACILITY

Bathrooms, Washbasins | Clothe Washing Stations

ADMINISTRATIVE

Staff Offices | Waiting Area

Storage | Check-in Area

CLASSROOMS

Learning Space(s) | Vocational Training

Storage

KITCHEN & CAFETERIA

Food Preparation | Space to Eat

Storage

CLINICAL

Triage, Vitals | Storage

CAREGIVERS QUARTERS

Storage | Rest Spaces

RECREATION

Play Areas | Learning Space

LEISURE

Relaxation Space | Entertainment Space

GARDEN

COUNSELLING

Counselling Room(s)

DORMITORY

Room(s) for Caregiver(s) | Rest Spaces

Storage

DORMITORY

Rest Spaces | Room(s) for Caregiver(s)

Storage

GARDEN

SANITARY FACILITY

Bathrooms, Washbasins | Clothe Washing Stations

SANITARY FACILITY

Bathrooms, Washbasins | Clothe Washing Stations

Functional

Accommodation, Living

Health, Well-being

Learning, Leisure

70

Figure 32. Taken to
the police station

"at the police station
used to sleep on the floor(cement) made me feel terrible
used to share a room with one old man another child about my age
old man scared me never slept at night"

Codes from File No: NS_IN01
Interview with participant at Retrak, 2019.

✕ DESIGN CRITERIA

"one large door
no windows
natural lighting is poor
electricity bulb on the whole day
increasing costs
more heat in the classroom
Survivors refuse to come for lessons in the afternoon
if they come at all
majority doze off due to excessive heat in the classroom.
children sit on ordinary benches
express fatigue throughout the day
affects their interest and attention span
preference for single seats with backrests
single or shared desks are better"

File No: FGD_01

11. CORE PRINCIPLES

11.1 Healthy Spaces

11.1.1. Design for adequate and efficient ventilation

During trafficking and transition, survivors are often confronted with spaces that lack adequate natural light and ventilation, which severely affects their physical and psychological health. Given the climatic context, efficient ventilation was found to be a concern at the centres. Common areas such as classrooms and dormitories lacked adequate ventilation resulting in health issues such as headaches and fatigue arising from the lack of sufficient oxygen.

Natural ventilation can be maximised through the use of effective design strategies that facilitate natural airflow through convection, such as appropriate placement of openings and having a narrow building plan. Room spans, configurations and opening placement and size affect the quality of natural ventilation.

Figure 33. Well ventilated and lit space.
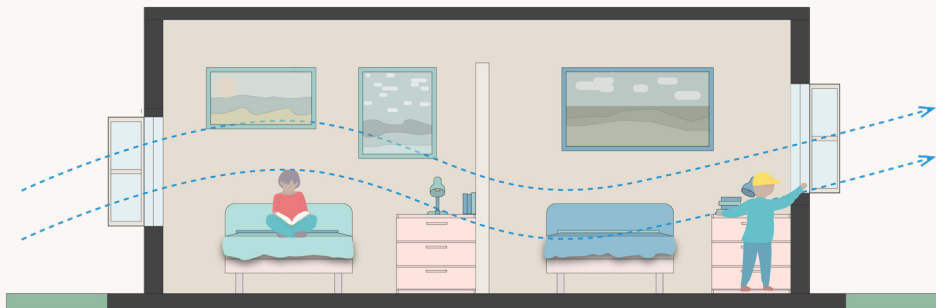
11.1.2. Design for adequate & efficient lighting

Lighting exerts a major therapeutic impact on psychological health. Most research on lighting concludes that adequate amounts of light, both natural and artificial, has a positive effect on a person's physiological health. Through this research we have found that for survivors of human trafficking this might not always be the case. For survivors of human trafficking, day lighting is the most preferred source of light as it is a natural source that is not overwhelming. There may be some survivors for whom bright lighting throughout the spaces helps in their rehabilitation, whereas there may be others for whom this same lighting is a trigger of past trauma.

Natural light is essential for physical and visual warmth. Exposure to daylight has a positive physical and psychological effect on the body and should be utilised within interior spaces. The window openings should maximise on natural daylight.

The appropriate window height to floor area ratios should be used in designing the open/ glazed openings for optimum daylight.

Natural light is essential for physical and visual warmth. Exposure to daylight has a positive physical and psychological effect on the body and should be utilised within interior spaces. The window openings should maximise on natural daylight.

The appropriate window height to floor area ratios should be used in designing the open/ glazed openings for optimum daylight.

11.2 Sensory Elements

Excerpt from: Neuroarchitecture Applied in Children's Design by Audrey Miglian

It is unquestionable that environments directly influence the behavior and emotions of their users. Human beings spend approximately 90% of their lives indoors, making it imperative that the spaces we inhabit stimulate positive behavior and emotions, or at least don't influence us negatively.

Sensory phenomena that soothe the senses can be used to relieve stress and promote well-being. Pleasant visual elements, sounds, textures and smells can be used to inspire, motivate, give meaning and fulfilment and nurture. These aspects for the survivors of human trafficking can be considered in the following ways:

11.2.1 Sight

Aesthetics:
Aesthetically pleasing spaces have a positive effect on the occupants of the space. In addition, this contributes towards fulfilling the esteem needs of the survivors. Several factors including material selection, finishes and lighting contribute to the aesthetics of a space. Aesthetics qualities are equally influential in outdoor spaces.

Codes from File No: NG_01-21 Journal entry from participant at Retrak, 2019.

"Sitting room made me happy
it is well decorated
has a nice color"

Lighting and colors of the surroundings play a crucial role in the survivors rehabilitation. Light tones create a calmer and peaceful atmosphere, whereas brighter tones can promote uneasiness and overwhelming energy.

Artistic Expression:
Artistic elements have a positive effect on the overall mood of the occupants of the space. Emotionally uplifting expressions and imagery were a preference by the participants of our study.

11.2.2 Noise

Quiet and noise-free spaces are preferred and sought by the survivors for moments of solitude and self-reflection. Acoustic factors are also a consideration for outdoor spaces, where meditation is likely to take place. Various screening strategies may be used to minimise noise disturbances from adjacent functions where necessary. Appropriate plant selections can be made to carry out this screening function.

11.2.3 Touch

Floor finishes:
Smooth, durable and easy to clean finishes should be the priority considerations. Locally available material choices include ceramic tiles, quarry tiles, terrazzo and cement screed. Survivors have pointed out that smooth floors that are comfortable in temperature are most preferred.

Wall finishes:
Water-based paints may be used on walls, especially within the residents' personal spaces. Smooth, clean wall surfaces help promote a peaceful experience for the survivors.

11.2.4 Smell

It is said that olfactory memory is the strongest type of memory in human brains. For survivors of trafficking, it is important that smells do not trigger past traumatic memories. Many of these olfactory memories include those of smoke, sleeping near sewers, animal waste, and hot suffocating rooms. Therefore, it is important to consider the smells of the environments they inhabit at the centres which do not mimic those of their past.

Having indoor plants, natural ventilation, and pleasant smelling vegetation can be used as a strategy for this while ensuring that the centers upkeep is maintained.

"...space for expansion and modification
adequate entertainment spaces
ensure survivors can keep busy
choose what they feel like doing
where they would like to be
depending on their feelings
large open space provides better and faster healing
motivate and accelerate learning achievements
expand engagement opportunities
accelerate and are pertinent for recovery of survivors"

FGD_01

12. SPACES

The spaces mentioned in chapter 8 of this framework are further broken down below to provide design criteria for each individual space that directly influences the rehabilitation of survivors of human trafficking.

12.1 Administrative

12.1.1. Objectives

Besides the day-to-day management of the centre, the administrative spaces are the first point of entry for survivors and visitors when they come into the centre. When survivors get checked-in, their information is registered by a caregiver. Access to the offices should be open 24 hours per day as there are caregivers that live on-site and may need to access the office after regular work hours. The staff that live on-site are the primary caregivers to the centres' residents; thus, their presence in the administrative space is required at most times.

Services provided:
- Administration
- First check-in survivors
- Welcoming visitors and survivors

12.1.2. Research Findings

Efficiency:
The findings indicate the need for spaces that can make the work area more efficient and accessible. Currently there is little provision for workspaces, meeting and storage areas.

Spaces for respite:
Caregivers spend long hours attending to survivors and doing administrative work which requires time and space for respite to be refreshed. Break rooms are currently not provided.

Excerpt from File No: IM_IN01 Interview with caregiver from Retrak, 2019.

"What we call the Child Care Review Meeting, we sit down the whole team that works together with this child - the centre manager, the residential social workers, the field social workers, the nurse, the teacher - everybody who participates in this child's life. We sit together and discuss the child and go child by child"

Visiting professionals:
The centres have visiting professionals that come in for a talk or to assist in the

rehabilitation of survivors, and in most cases there is no space provision made for them to work or to stay.

Privacy:
It is important to keep access limited to only caregivers when it comes to sensitive information and records. The role of the caregivers includes a significant level of record-keeping of the residents' information. Many survivors do not share their experiences with other survivors to avoid stigma and for this reason security of data is of utmost importance at the offices.

"The other activity I do is documentation and reporting - which is opening files for the young people that we get here"

12.1.3. Minimum Spatial Recommendations

The administrative facilities should include:
- Reception space
- Small waiting area
- Staff offices
- Meeting rooms for staff
- Storage:
  a. Record keeping
  b. Administrative supplies
- Access to the garden for outdoor breakout spaces

Secondary priorities include:
Interior breakout spaces

12.1.4. Design Recommendations

Spatial provisions for administrative staff, such as centre managers and caregivers, should be provided along with a space for where survivors can sit with caregivers to interact. In addition, the caregivers may require a private meeting space in which they can discuss administrative affairs concerning the survivors. These can be demonstrated in the following ways:

Supervision:
During the day, the administrative offices are highly occupied. We recommend having the offices face the outdoor recreational facilities and respite functions to be able to supervise effectively.

A sense of supervision is also crucial for new survivors coming into the centre as they do not trust easily because of their trafficking experience. This can be created by ensuring that registration offices have windows that provide views in and out.

Storage space:
Provisions should be made for a central record-keeping room for physical records, or a central server room where possible. Storage space for common administrative supplies

should also be considered.

Familiarity:
The waiting area and reception should embrace the idea of welcoming survivors and creating a familiar and comfortable atmosphere by using warm colour schemes and simple design.

Respite:
Access from the administrative block to the garden should be incorporated. Outdoor spaces should be taken into consideration when designing these spaces as it is important for the caregivers to have breakout spaces for respite.

12.2 Primary Physical Healthcare

12.2.1. Objectives

As the survivors first come into the centres, they are checked in by a social worker and then taken to the clinic for a physical check-up. This is performed to treat any physical wounds and illnesses that the survivor may have incurred. Due to the limitations of small clinical facilities within these centres, major illnesses and pre-existing conditions need to be referred to a local hospital under the supervision of a caregiver. The primary physical healthcare facility needs to remain open 24/7 on the premises as survivors can fall ill or have other conditions to treat at any time.

Services provided:
- Consultation, examination, and treatment
- Minor testing
- Quarantine and isolation

12.2.2. Research Findings

Privacy protection:
The survivors may be receiving treatment for illnesses such as HIV/AIDS and other sexually transmitted infections (STIs), which are often associated with stigma from the community.

Prevention of infection:
There can be a high prevalence of infectious air-borne diseases among the residents at the centres. These can sometimes lead to a crisis where large numbers of residents are ill at the same time, straining the available healthcare facilities.

Storage:
Adequate storage for medical supplies currently is lacking within centres which causes there to be a shortage in necessary supplies.

Patient beds:
Currently provisions only exist for one small clinical room with one treatment bed.
From the research, caregivers expressed the need for sickbay's, and adequate space for treatment.

12.2.3. Minimum Spatial Recommendations

The minimum requirements of the physical healthcare facility within a centre are:

    i. Consultation room - includes examination and treatment
    ii. Storage room - adequate storage for medical supplies
    iii. Sickbay - A sickbay should be included within the healthcare facility to allow for illness management and isolation if required. This space should also be available for survivors who need rest and observation during illness.

Figure 34. : Separating examination areas from waiting areas
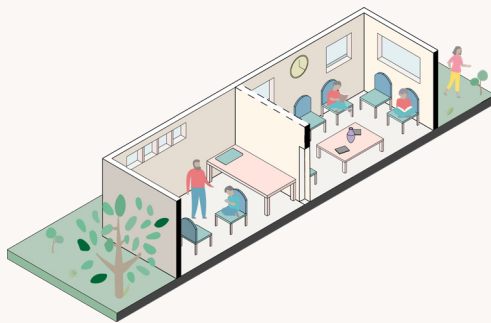
Gender separation should be taken into consideration for the sickbay.

Secondary priorities:
Waiting room/space

Figure 35. : Well lit and ventilated ward of the Butaro Cancer Center of Excellence, Rwanda, Mass Design Group (Baan, 2015)

12.2.4. Design Recommendations

Privacy protection:
Privacy can be enhanced through the strategic location of the health facility or having its access points away from main circulation paths and sight-lines.
The examination area should be visually and acoustically screened from waiting areas.

12.2.5. Lighting

Sick bays should have adjustable lighting, possibly with individual light points and dimmers to meet individual comfort needs, however, spaces will also require task lighting set-ups due to the concentration needed to perform various tasks.
The primary physical healthcare facilities should be accessible 24 hours a day for the resident staff. This should be incorporated in the lighting plan.

12.3 Psychological Healthcare

12.3.1. Objectives

It is common for survivors who come into the centres to have suffered various psychological ordeals. It is fundamental for the centres to adequately cater to individuals who are suffering from such situations, to prevent further psychological suffering.

Services provided:
- Individual counselling
- Group counselling

12.3.2. Research Findings

Counselling sessions:
A majority of survivors suffer from psychological traumas, making counselling a necessary and crucial aspect that encourages specialist care and treatment as well as medical treatment for comorbid physical illnesses.

Spatial Provisions:
Centres currently lack more than one spatial provision for counselling, limiting the amount of one-one sessions possible in a safe, private space. Group therapy spaces are also integral in identifying specific mental issues affecting younger survivors. Older participants can help in pointing out personal struggles caused by younger participants exhibiting behavioural changes

12.3.3. Minimum Spatial Recommendations

The healthcare facility should provide:

i. Individual counselling rooms
To allow for privacy when receiving care from a professional.
ii. Outdoor counselling areas as effective healing environments, both for one-on-one and group sessions.

Secondary priorities include:

i. Waiting room (can be shared with primary physical healthcare)
ii. Large indoor spaces
For carrying out group therapy sessions

12.3.4. Design Recommendations

Privacy protection:
Privacy can be enhanced through the strategic location of the space or placing its access points away from main circulation paths and sight-lines. The room should be both visually and acoustically screened from any outside noise as to not provide distractions during the session.
Privacy can also be maintained by having signs that allow others to know that the space is currently in use and should not be disturbed.

Figure 36. Image: Diagram illustrating the counselling room.

Outdoor sessions:

The need for more counselling space has been highlighted within the research. When taking counselling outdoors it is possible for survivors to experience sensory overload of all the moving space around them. For this reason it is important to conduct outdoor therapy in somewhat secluded spaces or spaces that give a sense of privacy. Adding outdoor areas within the landscape where a caregiver and survivor, or groups, can sit in private without many visual and acoustic distractions can be an effective way of utilizing outdoor space. It has also been mentioned that fresh air and outdoor activities are preferred by survivors and caregivers throughout the research.

Cost effective design interventions that can meet the functional requirements illustrated above are:

Short wall ledges:

Figure 37. Image: Outdoor counselling on wall ledges
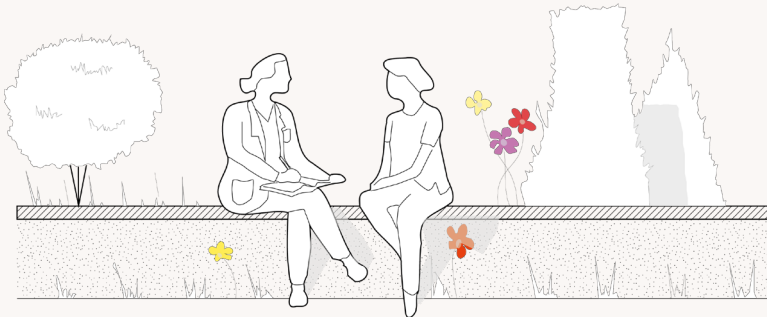
Benches under large trees, for shade and privacy:

Figure 38. Image: Outdoor counselling on benches that are screened by natural elements
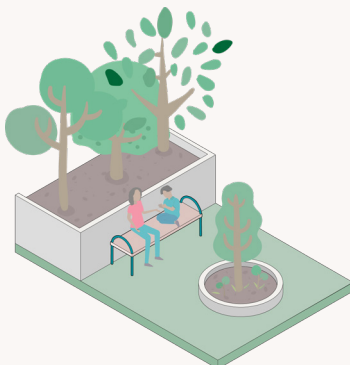
iii. Nature enclosed private spaces, designing with nature

12.4 Caregivers' Residences

12.4.1. Objectives

Caregivers' residences are required on-site as care and supervision is required 24 hours a day. Spatial provisions for residential facilities should be provided according to the number of residential social workers on site. Given the maximum recommended ratio of 1:8 for caregivers to centre residents, and the maximum number of residents (50 residents), provisions for at least 6 residential caregivers should be provided.

12.4.2. Research Finding

Privacy and Respite:
Residential caregivers require privacy and respite after a full day of providing care for the survivors. Centres often lack private respite areas within residential facilities. They prefer their housing to be in close proximity to survivor residences in case problems arise, but also distant enough to where it allows for privacy. Separate sanitary facilities are a preference for caregivers for privacy and comfort.

Spatial provisions:
Storage for personal belongings is important within the caregivers housing. As adult caregivers, separate rooms are a preference for individuals to fulfil privacy needs. Accommodation for visiting staff and volunteers should also be considered.

12.4.3. Minimum Spatial Recommendations

The caregivers housing should provide:
i. Individual rooms for privacy
ii. Secure storage for personal belongings

iii. Space for respite
iv. Attached individual sanitary facilities

12.4.4. Design recommendations

Supervision:
The caregivers' leading role, amongst others, is the maintenance of security for the survivors. Caregiver residences should be located near the survivors' residences to facilitate efficient supervision and delivery of service as needed. This is crucial in cases of health emergencies and occasional conflict between survivors.

Privacy:
Privacy may be achieved through spatial and visual separation from other semi-private and public spaces at the centre. Provision should be made for private spaces where the caregivers may seek respite within the residential facilities. This may be in the form of a common leisure room or a space accessible only by residential caregivers.

The survivors' safety takes precedence over the caregivers' need for privacy. Control and supervision should take precedence over their privacy in instances where both cannot be achieved.

12.5 Survivors' Residences

12.5.1. Objectives

A majority of the survivors remain vulnerable if they are not removed from their social and environmental context. In some situations, they are too far away from their homes to return. Care centres offer residential accommodations to these survivors during their rehabilitation.

12.5.2. Research Findings

Privacy:
The survivors' experiences over time influence their needs for social connection. When they first come in, they may be socially withdrawn and will tend to require more privacy. Accommodation for new residents that emphasize individual privacy is a preference amongst survivors.

Excerpt from File No: NMT_01-15 Journal entry from participant at Retrak,

"Getting sleep was a problem ended up crying and frustrated, thus abusing (insulting) other kids I was stressed"

Safety:
The centres also receive residents who may require closer supervision than their counterparts at the centres. These may include residents with severe physical and mental illnesses whose physical separation is necessary to preserve the safety of the centre residents.

Adaptability:
The survivors have varied desired qualities of space based on their own individual experiences during trafficking and interpretations of space. Qualities such as colour, texture and light levels should, to some extent, be controlled by the occupant of the space.

Respite:
The survivors may be overcome with negative thoughts during moments of solitude, which often occur within the sleeping space. For example, they may have nightmares and traumatic memories during the night. During these moments of intense psychological distress, the survivor may seek respite in recreational areas. Sleeping areas are also used for socialisation among peers without the presence of caregivers, which sometimes interferes with the privacy needs of other survivors.

"As I was sleeping other children played very loud music this hurt me'

12.5.3. Minimum Spatial Recommendations

The survivor residences should provide:

Dormitory rooms:
For at least 4-6 persons, to avoid cases of social isolation and noise disruptions as a result of large groups within a single space.

Gender separation:
Locating the dormitories preferably at two distinct buildings on the site.

Figure 40. Image: Cubby spaces for children to rest and relax (Gowrie Victoria, 2020)

12.5.4. Design Recommendations

Safety:
The creation of social safety, personal space and privacy are key factors in the design of these spaces. Social safety may be reinforced by grouping residents with similar peer group characteristics, such as age. The accommodation spaces for these groups can be separated within these facilities, providing the survivors with a peer group they can relate with most.

Clustering the residents into smaller groups helps to define a sense of control over one's environment. Day C. (2002) discusses the creation of violent disputes through spatial dimensions.

Creating comfort and having clearly defined boundaries reduces hostility towards others within a communal space, as each person has a sense of their own 'place'. Also, the use of single beds and personal storage further reinforces the sense of personal space and safety.

Adaptability:
As these residential spaces are mainly occupied in the evenings, it is essential to consider the change of use within the rooms provided. This can be achieved by having moveable furniture that can be easily stored away within designated spaces. For instance, the sleeping spaces can also be used as individual study spaces or places of rest and relaxation.

Figure 41. Image left and right: Big Smile children rehabilitation centre by Schema architecture and planning, Athens, Greece

Privacy:
Privacy for survivors should be emphasised over control. While supervision and control are necessary, they should not be physically emphasised to display a sense of privacy. Similarly, the survivors' freedom should be asserted over protection. Protective elements, such as burglar proofing, should be concealed to avoid creating a sense of confinement.

Artwork:
Artwork can contribute to general well-being within healthcare centres (Daykin et al. 2008), which was also found to be the case when interviewing the survivors. The appreciation of art and pictures is evidently part of the centres and would be encouraged to have dedicated spaces for more curation.

Figure 42. Illustration of Survivors' Residences

12.5.5. Lighting

Residential spaces can employ accessible dimmer switches to allow survivors to adjust lighting conditions based on their respective levels of comfort.

Indoor and outdoor lighting, through factors like intensity, positioning, and the fixtures themselves should be considered carefully so as not to cause any nuisance or disturbances to residents within residential areas. It is also recommended that lighting fixtures should be distributed in line with the placement of windows. Finally, despite the security and energy-saving benefits that motion sensor lighting offer, their abrupt nature is stressful for survivors.

Window Placement:
Given that survivors spend substantial amounts of time in dormitories both during the day and at night, windows with an outward view to nature will promote physical and emotional well-being, thus, making them ideal for such spaces.

12.6 Kitchen & Dining space

12.6.1. Objectives

Both the kitchen and dining space serve a double function as they can also be used as learning areas and social connection. The core functions of food storage, preparation, and serving are provided for within the spaces.

12.6.2. Research Findings

Kitchen as learning space:
In addition to its core function, cooking as a skill is advantageous to the survivors once they leave the centres, making this an important space for extra-curricular learning as well.

The Uganda Children Approved Homes Regulation Toolkit (2013) recommends that the residents are involved in the planning, shopping for and cultivation of food, preparation of meals, serving and cleaning up.
The findings revealed that the resident caregivers of the centres are involved in a number of these activities.

Excerpt from File No: IM_IN01 Interview with caregiver at Retra

"We also have a kitchen where we have a cook. ...We assign two children every day to give support to the cook through cooking, washing utensils and they learn those skills"

Firewood:
Firewood was widely used for cooking at the centres that took part in the study. This, however, has implications on the air quality and ventilation in the kitchen space.

Storage:
The findings revealed that there was never enough storage space for the kitchen, and was often located much further away from it. This would be a concern during rainy seasons as people would have to walk further in bad weather conditions.

Well-being survivors:
Food was a popular topic that was frequently alluded to within the digital journals, as the best part of the participant's day. Food was often limited or not available during their trafficking experience, so receiving full portions throughout three times a day at the centre really made them happy and created a want to be involved in the cooking process.

Proximity:
Participants did not like that the kitchen serving and dining area were not close by, during the rainy season the participants would end up getting wet as there are not many covered walkways.

12.6.3. Minimum Spatial Recommendations

The kitchen and dining area should include:

Educational and Demonstration spaces:
An indoor kitchen should be provided where energy sources such as cooking gas or electricity may be used for educational purposes.

Outdoor kitchen for center use:
This may be provided where energy sources such as firewood and charcoal are mainly used in the preparation of food.

Wood storage:
Storage spaces for firewood or charcoal should be raised from the ground and protected from rain and moisture.

Storage space:
Storage spaces for food and equipment

Dining space:
An additional space next to the kitchen will be needed for eating and sharing stories.

12.6.4. Design Recommendations

Educational and Demonstration spaces:
Designated spaces within the indoor kitchen spaces should be provided for classes for the survivors. It is important to ensure that all sharp kitchen tools are kept away safely and only used under the supervision of the instructor.

Figure 43. Image: Illustration of the indoor kitchen area with educational elements
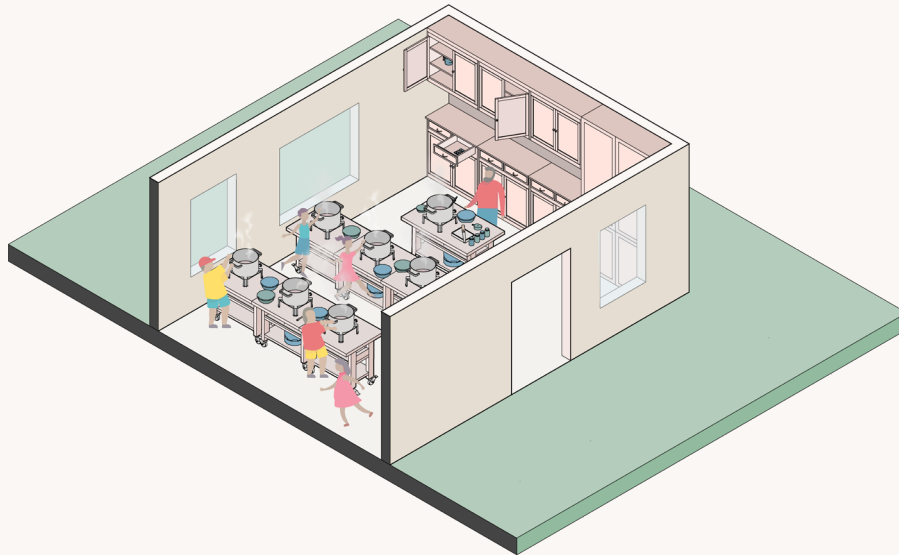
Figure 44. Image: Illustration of the outdoor kitchen with designated wood storage facilities
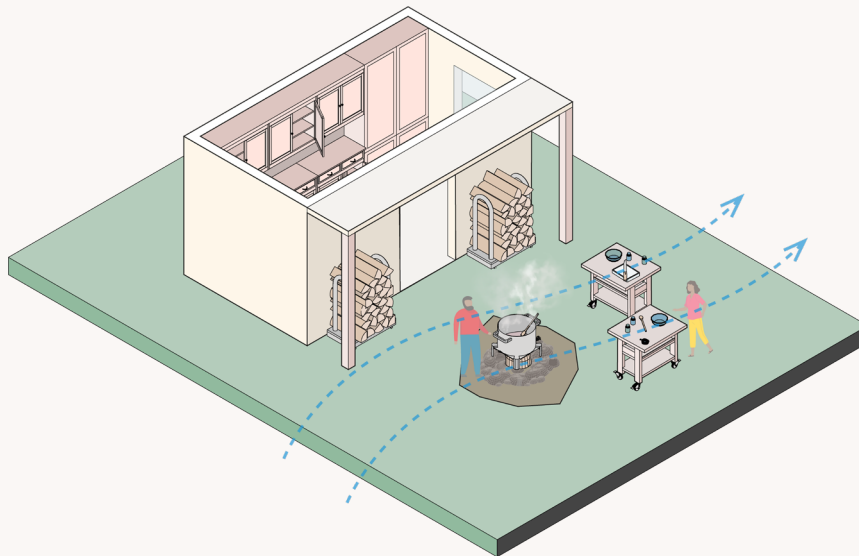
12.7 Sanitation

12.7.1. Objectives

Cleanliness and hygiene are some of the basic necessities required for human comfort and satisfaction. The aim is to protect human health by providing clean and sanitary environments.

12.7.2. Research Findings

Privacy:
Most of the female survivors highlighted that gender separation is key to maintaining privacy within sanitary facilities.

Hygiene:
Hygiene has been a key concern within the sanitation areas, especially when it comes to the females' menstrual cycles and waste disposal. Having adequate waste provisions, easy to clean surfaces and well-ventilated washrooms may facilitate hygiene maintenance based on the findings. It also revealed a preference for squatting toilets by centre managers for their ease of use, cleaning and maintenance.

12.7.3. Minimum Spatial Recommendations

The sanitation areas should provide:
      i. Gender-sensitive washrooms with wash basins
      ii. Bathing spaces
      ii. Laundry facilities
      iv. Drying yard with a hanging line for clothes
      v. Grooming spaces

12.7.4. Design Recommendations

Privacy:
Sanitary facilities should be adequate and separated for age and gender separation, for privacy.

Drying yards should also be kept separate if possible as sometimes survivors feel embarrassed to put their basic garments on a hanging line.

Toilet facilities:
Latrines are preferred by most centres. Design should be informed by limiting the spread of infectious diseases and minimise the consumption of energy and water which may be in short supply. Operable windows or openings should not face any public corridor or access spaces, to ensure privacy for the users. The location should be away from food preparation or consumption, however, should be in close proximity to dormitories.

12.8 Learning

12.8.1. Objectives

The centres aim to provide different types of classes to meet the interests of survivors while also providing practical skills needed for them to be self-sustainable.

12.8.2. Research Findings

Learning:
Learning at the centres mainly entails elementary education and vocational skills training. Within the vocational skills training classes, students are allowed to select a course of their choice. Due to this, some classes may have more attendees than others.

Education is vital to fulfilling the survivors respect and pride needs and mastery, which promotes their healing through positive self-perception. Learning new skills gives the survivors hope for their future after leaving the centre. The student population may vary at the centres as new residents are introduced and others are re-integrated back into their communities. The learning curriculum and variety of skills taught are dependent on the survivors' needs at the time they arrive at the centre. Other factors that influence this selection is the availability of teaching staff, materials and the relevance of the subject matter in its intended context.

The types of classes usually offered are:
- Tailoring
- Hairdressing
- Mechanical workshops
- Electrical workshops
- Plumbing
- Construction
- Voluntary Spiritual classes
- Theatre
- Arts/dance

Excerpt from File No: MK_IN01 Interview with social worker at UYDEL, 2019.

"When they are identified and come to the centre, they [go through] what is called the pre-training. When the young person is here, they can even go through all the 8 classes - hairdressing, catering, tailoring, motorbike, electronics, plumbing, building and construction - to make their choices"

"In terms of the number of people, if for example the hairdressing class has more people, it means that its choice is high"

Occupant health:
Due to poor lighting and ventilation, frequently survivors that participate in the learning spaces do not feel healthy enough to be able to concentrate. There can be instances of extreme temperatures or poor lighting that can cause them to lose interest in the topic or not show up to class altogether.

Organisation:
Centres may not have the right facilities to ensure proper learning can take place. For tailoring classes, it was observed that there was inadequate space for the cutting and measuring of large fabrics commonly used for classes. Many participants ended up sitting on the floor to do this. Hairdressing classroom also did not have enough seating so participants resorted to sitting on the floor and on boxes.

"We have motorbike mechanics - the boda bodas. We have so many in Uganda and they need repair. We consider that to be a marketable skill. The people that leave here with that skill immediately find employment"

Classrooms usually have things all over the place due to not having adequate storage or shelving to organize things. Like in the mechanical rooms, tools are scattered all over due to lack of shelving.

"In a year, I hope to have started a bridal shop of my own"

12.8.3. Minimum Spatial Recommendations

At a minimum, the facility should provide:

Classroom and workshop spaces:

Storage space: the nature of coursework in the vocational skills training are usually taught through demonstration, thus requiring significant storage for the teaching and student's learning material.

Secondary priorities are:
Library spaces
Study spaces

12.8.4. Design Recommendations

Considering the large diversity of activities in the classrooms/workshop areas adopting strategies for flexible use of these spaces is paramount to making them possible. Some suggested strategies are:

Flexibility:
Acoustic partition panels or walls can be used to separate the different functions within learning spaces in a large space, as well as create a barrier for sound. Movable furniture is also recommended to be able to change the layout of the learning spaces as needed. The learning space must also be adaptable to the varying resident population, with the consideration of age-specific rooms.

Occupant health:
Adequate provisions for lighting and ventilation (presented below) need to be considered as well. The choice of colour and materials within this space should be visually stimulating to enhance concentration.

Figure 45. Image: Illustration of well-lit and ventilated learning spaces.
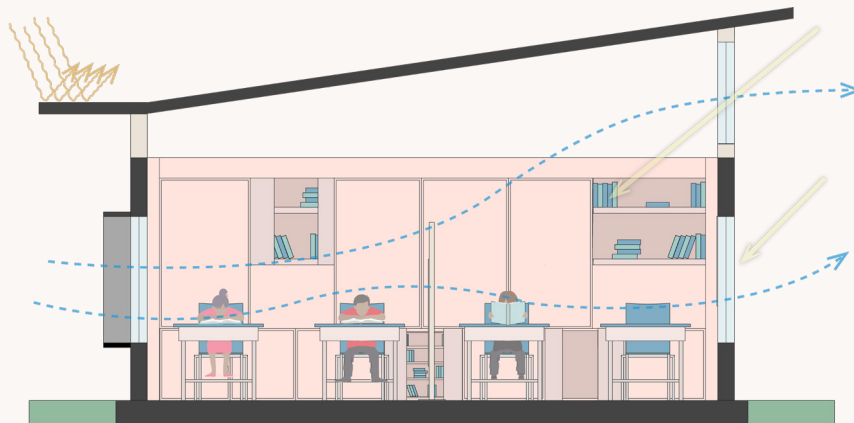
Study areas:
Spaces for personal study should be provided in proximity to the residential facilities. A dedicated study room or library may be provided.

Image: Study spaces in a children's home by BuildX Studio, Nakuru, Kenya

Outdoor learning:
There are many lessons that can be taught outdoors to foster learning:

Gardening - used as a learning tool within the centres and helps survivors gain hands-on knowledge of the process of growing their own food and being self-sustainable. The gardening area provides a dynamic environment for the survivors to experiment, observe, discover, nurture and learn.

Mechanics - this type of training can easily be done outdoors where there is an ample amount of space to have survivors learn how to fix motorbikes and bicycles. Construction techniques - also used as a type of training within centres which can be learnt outdoors. It avoids the need for excess storage space within classrooms and allows for fresh air for the survivors.

Arts and theatre - as one of the learning activities most enjoyed by survivors, it can take place outdoors where survivors can be part of nature both to be at ease and to gain inspiration.
Recommendations for outdoor spaces:

Privacy:
Spaces for respite where survivors and caregivers can sit to reflect, read, observe and rest should be provided within the outdoor space. This can be done by providing seating within the landscape that is comfortable and shaded. Perimeter fencing and walls next to outdoor spaces can incorporate greenery to avoid the feeling of confinement.

Flexibility:
Outdoor furniture such as chairs and tables that can be moved around easily should be considered to allow survivors more flexibility in terms of preferred locations for respite and play and learning.

Multi-sensory:
Multi-sensory approaches should be incorporated when designing an outdoor space such as:
      i. Visual - with plants and pleasant sights
      ii. Sound - soft sounds away from noisy areas of the centre
      iii. Smell - pleasant smells from flowers and plants
      iv. Touch - different textures and plants that can be interacted with

Codes from file no: WR_01/09 Weekly reflection survey entry by participant at Retrak,2019.

"Positive moment
In the compound
Flowers made me happy
Smell good and look beautiful"

Accessible:
Outdoor spaces should be accessible by everyone within the center. This can be achieved by having multiple outdoor spaces that are linked with indoor spaces. Creating strong spatial and visual links between indoor and outdoor spaces will maximise on the benefits of the natural outdoor environment for the survivors.

Image: Sachibondu Hospital maintains direct contact with the outdoor environment. BuildX Studio, 2019

Image:
Women
congregate
under the shade
of functional
landscapes

Image:
Outdoor learning
environments with
dedicated storage
areas (Unicef,
2020)

12.9 Prayer

12.9.1. Objectives

As part of psycho-social support programmes, prayer spaces are fundamental within the centres. These spaces provide the survivors with the opportunity to develop skills of personal reflection and to explore prayer in an open, inclusive and safe environment. By allowing the survivors to explore such ideas and experiences, it helps them develop their own sense of identity, self-worth, personal insight, meaning and purpose.

12.9.2. Research Findings

Law:
Part III of the Uganda Children Approved Homes Rules (2013) stipulates that where a child's religion and the name is known, the home shall respect that religion and name as far as is practicable, and the child shall be brought up in the knowledge and practise of that religion and name.

Excerpt from File No: MK_IN01 Interview with caregiver at UYDEL, 2019.

"We have found out that prayer as a support dimension is doing great to promote resilience among our survivors. Our health worker supports us in prayers. Every evening after sports, they gather, sing and pray. We know that when they are praying, they are steaming off. When they sing these gospel songs, they feel like God is not leaving them alone. For the Muslims, when it's fasting season or when it's Friday, they are also left to take themselves through the prayers. We also think that prayer is good for bringing about change among the lives of these young people"

Psychological impact:
The participants' responses revealed the positive psychological impact of religious activities. Group spiritual classes are voluntary and enjoyed by most of the participants. Caregivers also mentioned that prayer is the first group activity after being rescued for many survivors. The findings also showed that the survivors really enjoy being part of gospel singing and dancing as an activity.

Excerpt from File No: LR_01-32 Journal entry from a participant at UYDEL, 2019.

"Today I was happy I woke up healthy, praised and worshipped God in church. This made me so happy"

12.9.3. Minimum Spatial Recommendations

The healthcare facility should provide a multifunctional indoor or outdoor space for meditation and prayer.

12.9.4. Design Recommendations

Spatial needs:
Outdoor and indoor spaces can be used as a place for prayer with the proper facilities without needing a dedicated space. These facilities should take into consideration the

Image: Illustration of a dedicated prayer space with the required functional requirements

different religions and their specific needs.

Indoor spaces:
In the case of an indoor facility, the acoustic properties of these spaces should be such that there should be little to no distractions from external activities.

Outdoor Spaces:
Where religious denomination allows, small prayer groups can be formed in order to have prayer sessions in designated outdoor spaces. This would also create a sense of connection with the natural environment.

Image: perforated brick walling at the Sachibondu Hospital in Zambia by BuildX Studio

12.10 Recreation & Leisure

12.10.1. Objectives

Recreation and leisure are needed for a well-balanced life within the centre as well as supporting the rehabilitation in many different ways. The activities to take into considerations cover a wide range such as: watching television, playing board games, jewellery and handicrafts, sports, listening to and performing music, dance performances, theatre and drama, cooking, prayer activities, gardening, art and playing.

Image: Illustration showing the different roles that the garden takes on like leisure, education and food provision.

12.10.2. Research Findings

Recreational activities:
These enable the survivors to socialise and form peer groups, which are essential to fulfill their social support and safety needs.

Codes from File No: MK_IN01 Interview with a social worker from UYDEL, 2019.

"Sports is an educational form of social work
social workers and sports instructors
trained to use sports to teach life skills to the young people
residents like it because it's fun, and they are learning
teach them life skills like refusal skills, decision-making, emotional control
resettle them in their communities
don't fall prey again to being trafficked"

Respite:
Providing respite to the survivors and caregivers is important especially when they are experiencing moments of emotional distress.

Educational:
They enable the survivors to build their creative expression and grow their skills in this area. These activities thus play the role of being educative, equipping the survivors with skills including sports, music and theatre performance that they may be able to utilize once they leave the centres. Mastery in these aspects helps to give them a positive self perception.

Codes from File No: LR_01-32 Journal entry from survivor at UYDEL

"was happy because Madam Deborah handed me a certificate for being the best actor"

Culture:
Expression through the performance of music, dance and drama is crucial to fulfilling the mastery needs of the survivors. In the selected context, each of the survivors are members of different communities, and represent a variety of cultures. Expression through music and dance gives them the opportunity to stay connected to their cultural heritage, and share it with their peers at the centre.

Codes from File No: IM_IN01 Interview with caregiver at Retrak

"it was important for each of the girls to express the culture of each community that they came from, and each community represented was given a turn to showcase their dance in the presentation. This helped the girls feel included and accepted"

Healing:
Performances of music, dance and drama are used by the survivors to express their own experiences, which can contribute to their healing. In addition, the sharing of these performances with the community aids in raising awareness about human trafficking.

Codes from File No: NE_01/09 Journal entry from a survivor at UYDEL

"Activity that made me most happy I created awareness about human trafficking in the community this week this made happy"

Codes from File No: ZN_01-21 Journal entry from participant at Retrak, 2019.

"Also received a new television set today we shall be watching our t.v shows am so excited"

12.10.3. Minimum Spatial Recommendations

The centre should provide:
Play spaces: indoor and outdoor
Living room: indoor space for leisure
Multifunctional space that can serve either performing arts and or sports, indoor and outdoor

Secondary priorities are:
Dedicated outdoor playgrounds
Dedicated outdoor sports areas
Dedicated performance space: outdoor and/ or indoor
Outdoor leisure

12.10.4. Design Recommendations

Multifunctional:
Most recreational activities require a large amount of space. Many of them are able to use the same space, mostly in different times of the day or sometimes simultaneously. The

Image:
Outdoor performance spaces that are shielded from the elements
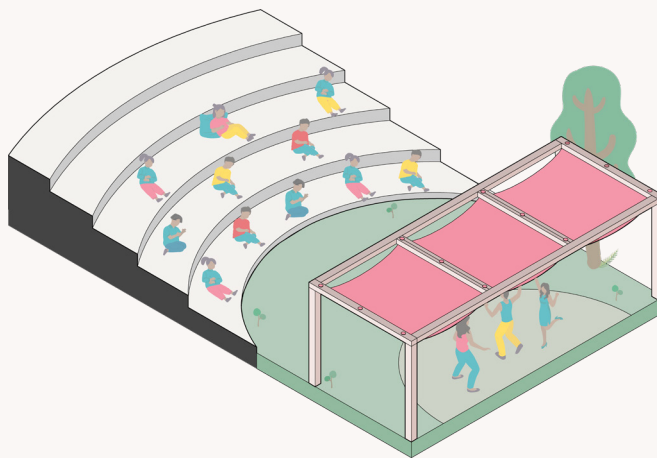
design should provide a space that can facilitate multiple functions in the same space, with or without temporary changes to the spatial layout.

Image:
A group of students played outside the new school classrooms that were built with plastic bricks in Abidjan, Ivory Coast. (The New York Times, 2019)

Performance and gathering areas:
The performance space can be part of a larger gathering area. It may also be provided as part of an outdoor (covered) space. Indoor performance spaces should be acoustically insulated from adjacent spaces to prevent unwanted noise from entering these spaces.

Age differentiation:
Consideration for separate play spaces for different age groups should be made.
Young children between the ages of 0 and 10 years should have their own separate space with age-appropriate activities and play equipment. This includes a variety of toys and games engaging their cognitive, mental, emotional and social development.

Older children above the age of 10 years have their own age-appropriate activities and games which engage their mental, social and emotional development. Creative expression is usually a key consideration for this age group as it allows for psychological relief. Indoor-outdoor spaces or transition spaces may be utilized for these activities where appropriate.

12.11 Materials & Finishes

Nikos A. Salingaros (2015) highlights that a healing environment acts as a source of emotional support to its occupants. The experience of a healing environment overall will register positive emotional responses in its occupants. He also mentions that our visceral interaction with elements of space is largely influenced by:

i. Structural components in the built environment.
ii. The interactions of materials and space.

Certain indoor and outdoor design elements such as sharp corners, narrow pathways, blind spots, etc. increase anxiety and leads to triggers while soothing features (e.g. open spaces, situational awareness providing features such as lack of clutter or open floor plans) can relax survivors. (Investigating Architectural and Space Design Considerations for Post-Traumatic Stress Disorder (PTSD) Patients)

It is important to differentiate between how the built environment and psychotherapy can cooperatively contribute to recovery. Reducing the cognitive load of an environment isn't intended to avoid confronting one's trigger, but to prevent the patient from becoming overwhelmed by an excessive quantity of stimuli or by being unnecessarily exposed, as exposure would ideally occur initially in a controlled, deliberate, and constructive manner, (Designing for Health: Post-traumatic Understanding- Matt Finn)

From our research findings, the main considerations for interior material selection are the following:

Cleanliness:
This emerged as a major concern at the centre for the survivors. Cleanliness is directly related to the survivors' experience during trafficking and transition where many survivors experienced spaces characterized by dirt and poor maintenance, making dirt a trigger of past trauma.

Codes from File No: LR_IN01 Interview with survivor at UYDEL, 2019.

"All the spaces I stayed at were not good at all
most of the times I slept on the streets
covered myself with a sack
used to have a bath once in a while
Water and place to bathe were inaccessible
places I worked at were not clean at all"

Durability:
The durability of materials can potentially contribute to the cleanliness or visual impression of a space. Non-durable finishes over time become degraded, which bring about dust particles on surfaces and leave an undesired appearance. This negatively impacts the health of the room's occupants, as well as takes away from the esteem brought about by having a desirable appearance.

Texture:
The data revealed an overall preference for smooth surfaces due to their appearance, ease of cleanliness and feel. Rough surfaces, and especially those that the occupants come into contact with, were mainly associated with discomfort.

Colour:
The findings revealed general favouritism for bright colours. However, colour choice may be dependent on the preference of each individual since negative memories may be associated with particular colours. However, because it is not possible to accommodate all the residents' colour choices, provisions should be made to allow the resident to customise their personal space with the colour that they are most comfortable with.

The colour choice should also be influenced by the function of a particular space. Spaces that have stimulating activities such as recreational rooms and learning spaces may use a vibrant colour palette. Private and respite functions require a more neutral or calming colour palette.

Codes from File No: FGD_01 Focus Group Discussion with caregivers at Retrak, 2019

The age of the occupants also influences the colour choice in a space. For younger children, vibrant colours and illustrations may be used in their dedicated spaces. Pastel or neutral colours may be selected for spaces for older children.
multi-coloured classroom interior enhance attention and interest in learning

Design Criteria

Figure 46. Rescued
by a social worker

"Anti–Human Trafficking Unit – rescues them
call us and refer them [the survivors] here
we give them shelter and food
work on their resettlement
also support us with the immigration
everything is set for us
we even have a police letter
probation officers also assist us
At times they receive cases of human trafficking"

File No: MK_IN01
Role: Centre Manager

CONCLUSION

Summary

The following recommendations and guidelines address the fundamental factors that directly influence the psychological well-being of human trafficking survivors:

Social Environment

I. Factors like caregivers, peers, friends and family should reinforce and foster positive relationships with survivors through physical and emotional availability, contact and care. Despite being providers, caregiver's relationships with survivors should also be based on trust, emotional safety and security.

II. Social spaces alongside activities like music, dance and theatre should promote positive peer relationships and foster emotional safety, love, belonging and self-esteem growth.

III. Private spaces at centres should be available for survivors to interact with visiting family members in a safe environment.

IV. Centres should maintain healthy relationships with nearby communities and foster mutual feelings of inclusion. Design interventions that, therefore, exclude or withdraw the centre's entirely from their contexts, should be carefully considered.

Space & The Physical Environment

I. Centres should be located in safe neighbourhoods and away from urban environments when possible.

II. Close proximities to law enforcement, health centres and other social services are paramount due to the critical roles they each play in the centre's operation.

III. To promote design adaptability and ensure the changing needs of the centre can be met, the site should, to some extent, not restrict any expansion, modification or renovation.

IV. Separate centres should be designed for male and female survivors for safety and privacy purposes. In instances where this is not possible, however, then accommodation areas should be separated by sex.

V. The main spaces for consideration are:

Classrooms: Learning spaces should be adaptable and visually stimulating through the selective use of colours and materials. Lighting and ventilation directly affect levels of concentration and, therefore, need to be carefully considered. Sufficient space for visual learning aids (a critical element of elementary learning) also requires addressing.

Sleeping Areas: Clustered in their respective age groups, residents should have single beds with private storage facilities and clearly defined personal space to foster privacy.

Separate sanitary facilities for young and older users that combat the spread of diseases while being energy and water efficient (often scarce resources) should be implemented.

Spaces should be visually calming and employ a range of materials, colours, textures and auditory elements as per the different age groups that use the spaces for respite and to psychologically de-stress.

The sleeping area's social nature will benefit from incorporating recreational spaces that can be used for respite; however, they shouldn't compromise the privacy of the sleeping areas.

Health Facilities: Should be welcoming and foster a sense of privacy and security, with care taken to contain the spread of infections. As a minimum requirement, an examination, storage, and test room should be provided alongside a sickbay/ward for more severe illnesses and a designated respite area psychological care services like counselling.

Green Spaces: Green landscapes are highly recommended due to the psychological benefits they provide and the crucial supporting role they play in many healing and therapeutic activities. .

Private reflection and meditation spaces should be incorporated within green spaces alongside selectively chosen elements with engaging visual and olfactory characteristics that can exemplify the already existing psychological benefits of green spaces.

Recreation and Leisure: Designs to accommodate both indoor and outdoor recreational activities like music, dance, play, theatre performances and sports should be made to supplement survivors healing and therapy.

Prayer Spaces: Prayer spaces that accommodate both individual and congregational prayer should be implemented and reflective of a centre's various religions.

Kitchen: Group learning spaces should be carved into kitchen environments with appropriate design decisions taken to address the different forms of fuel used like charcoal, firewood, gas and electric cooking.

Administrative Spaces: Sufficient storage alongside a dedicated staff area for respite should be incorporated.

VI. Durable and cleanable materials should be utilised where possible for their ability to reduce maintenance costs and promote cleanliness. Design qualities like engaging visual and textural effects can also be used.

VII. Spaces for respite should offer private tranquillity with minimal noise disturbances, achievable through careful spatial distribution alongside considered material and structural interrogations.

Further Investigation

With female participants and their perceptions constituting a significant portion of this research, further studies can be done with male participants to identify potential similarities or differences surrounding experiences and attitudes towards spaces.

Considering that the sample group chosen for this study were at early to intermediate stages of their healing process, survivors at more advanced stages can also be examined to identify potential similarities and differences.

The resulting designs produced as outcomes of this research can be analysed and interrogated on their ability to promote the healing and rehabilitation of human trafficking survivors. Learning lessons from such an exercise will only further the impacts that this research document seeks to achieve.

Further studies could also be conducted at centres that are located within other East African and African countries to establish similarities and differences surrounding perceptions of space and survivor needs.

"hope to start a tailoring business once I leave the centre "

"centre has improved my well being
helped me have hope for a brighter future"

"When I leave the centre
hope to go back to school
finish my primary leaving examinations (finals)
Thereafter, hope to join a hairdressing school"

"hope to build my father a beautiful house"

"in a year
hope to be in a much better place both mentally and physically"

Various excerpts from interviews

"Aunty Brenda loves me like her very own
loves everyone else equally
aunties give us enough food
leaves us satisfied
They counsel and guide us
help us forget about our problems
enables us to respect them"

File No: ZN_01-21
Survivor journal entries

ACKNOWLEDGEMENTS

Design Framework

✕ APPENDIX

A. LIST OF FIGURES

B. GLOSSARY

Adaptability: The capacity to be modified for a new use or purpose (Oxford dictionary.)

ADHD: Attention Deficit Hyperactivity Disorder.

Brief: A set of instructions or information that describes the requirements for which the design provides a solution. Can be specified as being either strategic or project based.

Bipolar Affective Disorder: Type of mood disorder, where an individual experiences episodes of mania (elation) and depression.

Cognitive Behavioural Therapy (CBT): This is a form of psychological treatment that considers emotions and behaviour as being influenced by the perception of events.

CD: Conduct disorder, usually as a result of behavioural and emotional disorders in children.

Context: Circumstances around the use, creation or design of an object or space.

DESNOS: Disorder of Extreme Stress Not Otherwise Specified; arising from severe, protracted abuse, most notably child abuse, victims of torture, and living in a war zone.

DRC: Dream Revival Centre.

Grounded Theory: Research methodology that sets out to discover/ construct theories from data, systematically obtained & analysed using comparative analysis.

Haptics: The science concerned with the sense of touch (Merriam-Webster dictionary.)

Human Trafficking: The action or practice of illegally transporting people from one country or area to another, typically for the purposes of forced labour or sexual exploitation (Oxford dictionary.)

Inductive Research Approach: Research approach that aims at developing a theory, due to little to no existing literature on a topic and no theory to test.

Influx: An arrival or entry of large numbers of people or things (Oxford dictionary.)

Modern Slavery: The recruitment, movement, harbouring or receiving of children, women or men through the use of force, coercion, abuse of vulnerability, deception or other means for the purpose of exploitation (NHS.uk)

Informal Education: Learning that results from work, family or leisure activities that aren't organised in terms of objectives or outputs.

Orphanage Trafficking: When children are deprived of their families and exploited for profit.

ODD: Childhood disorder that is defined by a pattern of hostile, disobedient and defiant behaviours directed at adults/ other authoritative figures.

Paranoia: Irrational and persistent feeling that people are 'out to get you'.

Prevalence: The fact or condition of a thing being common (Oxford dictionary.)

Program: In construction, this typically refers to the sequence in which a series of tasks must be carried out so that a project is completed.

PTSD: Post Traumatic Stress Disorder; which is a mental disorder that can develop as a response to people who have experienced traumatic events.

Rehabilitation: The action of restoring someone to health or normal life through training and therapy after imprisonment, addiction, or illness (Oxford dictionary.)

Respite: a short period of rest or relief from something difficult or unpleasant.

Self-Actualisation: The realization or fulfilment of one's talents and potentialities, especially considered as a drive or need present in everyone (Oxford dictionary.)

Sensitisation: The capacity to be modified for a new use or purpose (Oxford dictionary.)

Sex Trafficking: Crime that involves men, women and / children being forcefully involved in commercial sexual acts.

Space: Referred to as a specific area or volume within a building, such as, usable and unusable space.

Survivor: A person who continues to live, after suffering an extremely life threatening situation.

Value Engineering: Creative, team-based approach which allows the generation of alternatives to the existing solution, usually used as a method to reduce costs.

Ventilation: The provision of fresh air to a room.

Victim: Someone or something that has been hurt, damaged or killed or has suffered, either because of the actions of someone or something else, or because of illness or chance.

Virtual Trafficking: Technology facilitated trafficking by the use of social media and the internet. This practice, also known as 'cybersex trafficking'

Visceral: A feeling felt in or as if in the internal organs of the body. It could also be defined as dealing with crude or elemental emotions (Merriam-Webster dictionary.)

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D. LEGAL CONTEXT

Centres for the healing of human trafficking survivors encompass the following components:
    i. Mental/psychological health care;
    ii. Physical healthcare;
    iii. Formal and non-formal education;
    iv. Residency, and;
    v. Physical planning and design.

This broad scope of factors for consideration necessitates that this Design Framework is used in conjunction with the following Legal Statutes, Acts, Policies & Guidelines by the Ugandan Government.

i. The National Physical Planning Standards and Guidelines, 2011.

Refer to Chapter 2: Residential Standards for standards on:
Plot Size & Shape, Building Lines, Plot Coverage, Plot Access, Design/ Materials, Car Parking, Access to Utilities, Boundary Fencing, Landscaping and Ancillary Users.

Refer to Chapter 7 : Standards for Social Services, Utilities and Government Facilities.

ii. The National Building Code

Ministry of Works and Transport - Building Control Regulations (Amended 2012) Refer to Part 3: Design for requirements on:
General Requirements (for the approval of plans, etc.), Structural Design, Building Services, Fire Protection, Electrical Installation.

Refer to Part 4: Construction for requirements on:
Tests & Reports, Site Activities, Building Elements & Materials, Special Provisions.

Refer to Part 5: Occupancy for requirements on:
Notices & Inspection, Hygiene, Safety.

iii.   The Children (Approved Homes) Rules, 2013

iv.   Children (Approved Homes) Assessment Toolkit
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E. THE TEAM

Agnes Igoye

Acting as the Dream Revival Centre's representative, Agnes Igoye serves as Uganda's Deputy National Coordinator, Prevention of Trafficking in Persons, heads Uganda's Immigration Training Academy and is the founder of the Dream Revival Centre. She represents Uganda in several regional inter-governmental committees on migration, peace and security. Agnes has trained over 2,000 law enforcement officers to counter human trafficking. She was named one of the 100 most influential people in Africa by New African Magazine in 2015.

Antislavery Knowledge Network (AKN)

AKN (The Antislavery Knowledge Network,) is a community-Led Strategies for Creative and Heritage-Based Interventions in Sub- Saharan Africa. The project is one of a group of international academic networks funded by the Arts and Humanities Research Council and led by universities based in the UK. They have been set up to conduct collaborative arts and humanities-based research into some of the world's most pressing development challenges. Together, they aim to grow their network and explore how approaches from the arts and humanities can address contemporary forms of enslavement by adopting a community-engaged, human rights focus that delivers development impacts.

BuildX Studio

BuildX Studio, based in Nairobi, Kenya envisions a world made for people and planet by creating the buildings of a radically better tomorrow. Through research and innovation, we develop exceptional human-centred design solutions which prioritise environmental performance, functionality and local resources and we lead the way in trusted, transparent and efficient construction.

Team members:
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Editors: Jamil Dossa, Khilna Shah, Paul Schrijen, William Otuke, Angela Dominguez

Christopher Platt

Christopher Platt is co-Founder of Studio KAP architects and Chair of Architecture at the Mackintosh School of Architecture, where he was previously Head of School. His first 20 years of professional practice was spent in Glasgow, London, Oxford, Ethiopia and Berlin and was followed by 20 years combining academia with independent, reflective practice in Studio KAP and practice-based research. This work has focused on the creative reciprocity within three main areas: Concept/Detail; Old/New; Figure/Ground, both in Global North and Global South contexts.

Dream Revival Centre (DRC)

DRC (The Dream Revival Centre,) is a residential facility for survivors of human trafficking in Kampala, Uganda, an initiative under Papa Odet Foundation registered and incorporated as a NGO. It offers shelter to female survivors and access to support services, to rebuild their confidence and psychological well-being, and revive their dreams. It provides comprehensive care encompassing physical and psychological health and social services. The Dream Revival Centre provides rehabilitation services to female survivors of human trafficking. They provide a safe and hospitable space in which survivors can gain access to comprehensive care, social services, education and resources needed to rebuild their lives.

The centre coordinated outreach with the other partner centres including the ones listed above. They also coordinated the community theatre activities and a stakeholder dialogue that was held at the UYDEL Masooli centre in October 2019.

Dr Jill Morgan

Lecturer at The Royal Conservatoire of Scotland, Dr Jill Morgan, a performing arts psychologist, has provided professional guidance on research methods, ethics and psychological research factors. She has extensive research experience which focuses on the role of arts in well-being with particular emphasis on the use of qualitative methodologies.

Jonny Campbell

Jonny Campbell is an award-winning film maker, cameraman and editor specializing in factual and observational documentaries. He is assisting in editing and the post-production of data provided by Media 256.

MEDIA 256

Media company in Uganda that handled raw format research for the documentary.

UYDEL

The Uganda Youth Development Link (UYDEL) was started in 1993, for provision of rehabilitation services for street children within Kampala. UYDEL expanded its reach over time to children and young adults who experienced sexual exploitation, trafficking in persons, alcohol and substance abuse and gender-based violence, among other difficult and traumatic experiences that required rehabilitation and psycho-social support. The target group is urban Ugandan youth between the ages of 15-20, who are usually from vulnerable populations.

Retrak (Hope for Justice)

The Bulamu Light House (Retrak) is a rehabilitation centre for girls aged between the ages of 7 and 17. The organisation also has a separated rehabilitation centre for male residents. They offer residential services to their clients, who usually stay there for 3 months on average.

Set Her Free

Set Her Free is an organization based in Kampala, Uganda which was started by Robinah Muganzi and Robin Nestler. It was started to provide comprehensive rehabilitative, health, educational and vocational services to girls and young women. The co-founder, Robinah Muganzi experienced a vulnerable and difficult childhood and was able to get help from a non-profit organization in Kampala.

The centres provided participants for the documentary, as well as representatives that took part in the stakeholder dialogue.

Appendix

THANK YOU

Full Research Report, Analysis and Healing Spaces
Documentary Available online at buildxstudio.com

BUILDX STUDIO

Antislavery
Knowledge
Network

Dream
Revival
Centre