

# **Understanding the interior design of selected SAPS stations in Durban with specific reference to User Centred Design**

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Dissertation by

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## **Abstract**

This study investigated and sought to understand the extent and role of user-centred interior design of South African Police Service (SAPS) stations in Durban. The assumption of this study was that the design of a SAPS station that considers the most vulnerable would benefit the other users of the SAPS station. Therefore, the persona of User Centred Design would be the client who had reported a crime. This study aimed to understand the clients' perspective on the SAPS police station, as the proposed outcome would be to make User Centred Design decisions based on the clients' perspectives and experiences, because the client persona of the SAPS station would be traumatised. The objective of this study was to review literature on User Centred Design, Sensory Processing, Post Traumatic Stress, Acute Stress Disorder and literature on South African police stations. As well as conduct field work by interviewing clients that have reported crimes to the SAPS station and to also to conduct interviews with South African Police Service officers.

Hermeneutic phenomenology was utilised to understand the perspective and experience of the SAPS client. The notion of the double hermeneutic was the main tool and basis of understanding. The first half of the double hermeneutic was the context of the SAPS station. The context of the SAPS station was understood by the hermeneutic circle, in which the whole of the context was understood by its parts, which gave a greater understanding of the whole. The parts of the context were SAPS literature, six interviews of SAPS officers and observing three Durban SAPS stations. The second half of the double hermeneutic was understanding the client persona. This was done again with the use of the hermeneutic circle, where the parts of the client persona were the nine interviews of participants who had been to report crimes to the SAPS station, the literature on trauma and a brief background description of the participant. The two halves of the double hermeneutic were reflexively brought together using User Centred Design themes. These themes informed the User Centred Design needs of the SAPS client.

It was found that the current SAPS stations do not meet the User Centred Design needs of the client; that this resulted in the client projecting their trauma onto the station and allowed for the client to judge the SAPS officer negatively before the client engaged with the officer. The main needs of the client are to feel safe and secure, to have privacy, to have a welcoming and friendly SAPS station atmosphere and to have clear directions. A disconnect between SAPS officer and SAPS client, which reinforced the notion of unmet expectations, was the result of these unmet basic needs. Therefore, the recommendation of this study is that the interior of SAPS stations should be considered in terms of user centred design in order to fully grapple with the needs of the SAPS client.

## Declaration

I, **Shelly Anthea Kenny** declare that this dissertation, Understanding the interior design of selected SAPS stations in Durban with specific reference to User Centred Design, is my own original work. All sources used or quoted have been indicated and acknowledged by means of complete references. This dissertation has not been presented to any other university for examination or for any other reason.

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## **Dedication**

I would like to dedicate this dissertation to all the South Africans who have stood in the Community Service Centre and told the world their story.

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## **Abbreviations**

**ASD:** Acute Stress Disorder

**CBM:** Citizen Based Monitoring Programme

**CSC:** Community Service Centre

**FSD:** Frontline Service Delivery

**PTSD:** Post Traumatic Stress Disorder

**SAPS:** South African Police Service

**VF:** Victim Friendly Room

## Definitions

**Being:** within the hermeneutic phenomenology, being is translated from 'Dasein', which means 'the mode of being human' or 'the situated meaning of a human in the world', as the word *being* has come to encompass the philosophical endeavour to understand what it means to be conscious or human.

**Client:** a member of the public or a non SAPS official, who goes to the South African Police Service station to conduct a task that pertains to the service of the police.

**Community Service Centre:** a public room within a South African Police Service station, where the client reports a crime, certifies documents, gets an affidavit done, or other tasks that pertain to the services needed from the SAPS officers.

**Essence:** within hermeneutic phenomenology, it means the fundamental elements that make up an experience.

**Evidence based design:** any design that is based on research and peer reviewed findings.

**Lived experience:** within hermeneutic phenomenology, it is a moment in time that a person lives through and is able to reflect on, and often when this moment is reflected on it provides knowledge about a fundamental essence of living.

**Persona:** is a target user for a design. This target user is fictional and based on research of actual users of their goals, wants, needs, emotions, psychology, backgrounds, and the pattern of behaviour that the user may have towards the interior design.

**Principle user:** is the user that the design is mainly focused on or directed toward.

**Space:** is an abstract concept of a physical area within the building envelope.

**User Centred Design:** a problem solving approach to design that focuses on the experience of the user or persona.

**Victim Friendly Room:** is a room in a South African Police Service station designated for the use of clients that are traumatised often by witnessing or being victims of a crime.

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# **1. Introduction**

The interior design of a building can positively or negatively affect the user's experience of that space, regardless of whether or not the user has consciously thought about the interior design. User Centred Design could contribute to a more positive experience for users in general, and more specifically for those who may have been traumatised prior to using a particular space. For this reason, I have explored the use and application of User Centred Design within the police station interior, relative to how members of the public, the clients, experienced the police station interior. I have drawn on examples of police station environments as well as User Centred Design literature to determine whether certain design concepts would be considered user focused. In order to discover and understand the perspective of the user who has experienced trauma, these user focused design concepts were assessed against the experience of the clients who reported a crime to the police station. The clients' perspectives have provided insight that I believe would contribute effectively to the application of User Centred Design in the interior design of a police station within the particular local South African context I have explored.

## **1.1 Motivation and purpose for the study**

I was motivated to pursue this study on SAPS station interiors because I had observed a woman who had no alternative but to report a very personal matter in full view and within earshot of other individuals at a Community Service Centre (CSC). I left the CSC feeling that perhaps I could do something about the design of police stations, so that others in a similar position as that woman would be able to make confidential disclosures rather than endure the possibly retraumatising experience of having to disclose a very personal matter in public. For me, interior design is a tool that can be used to solve unique problems such as this. Consequently, the police station itself can be a means to "inspire confidence and trust" as it is the first non-verbal link between the community members and the SAPS (Gallagher *et al.*: 2001; South Africa: 2015a).

The SAPS mandate according to the South African Constitution Section 205 is to:

- Prevent, combat and investigate crime.
- Maintain public order
- Protect and secure the inhabitants of South Africa and their property
- Uphold and enforce the law.

In addition to the SAPS mandate, the institution should have the trust of the public to have the motivation and capacity to fulfil the goals and desires of the community within the police station environment (Robbins: 2014). A resolute commitment of the SAPS is to make sure “all people are and feel safe” and to “inspire confidence and trust (South Africa: 2015: 10).” In like manner, the desires of victims are to be treated with fairness, respect, dignity, and to see justice served (Department of Justice and Constitutional Development: 2020).

The South African Police Service hopes that the police station communicates a sense of safety to the community by its presence in society and by the public walking through the front door. In a speech at the opening of a Frontline Service Delivery (FSD) police station, the spokesperson for the minister of police, Musa Zondi (2015: para 4, line 3), stated that the “police station should be a symbol of safety, of community involvement and a point for the betterment of a community.” Zondi (ibid) went on to say that the mere presence of a police station should make a community safer, and that it is an important place of face to face contact between police officers, clients and suspects. It is one thing to make South Africans feel safe by protecting its citizens against crimes, but it is another to make South Africans feel safe in the environment where they are most vulnerable. This is where the impact of the design is most visible with maximum effect. Some psychologists have found that the first impression we have of a person may in fact be directly influenced by the physical environment which we occupy (Bargh: 2006; Williams and Bargh: 2008; Ackerman, Nocera and Bargh: 2010). The anecdotal view of the SAPS police station environment is that it is under-resourced, retraumatising and unsafe (SABC News

Live: 2016; SABC Digital News: 2019). Therefore, this study provides opportunities to understand how the South African police station may be functional and also symbolically perceived by the community.

## **1.2 The contribution of this study**

The academic literature on the interior design of police stations is limited (Millie: 2012). There are, however, architectural examples to draw from. The literature that I have found deals with the police station's functional aspects and the specifications of a design project. These guides prioritise the police officer as the principal user of the station. As a result, the guides do not include design aspects that focus on how the public experiences the space. These guides are also context specific to their countries (Home Office: 2005, 2007; International Association of Chiefs of Police: 2019). I have explored what the South African public perceive and how then this is designed for. By focusing on the clients' use and experience of the police station interior, I hope to expand the current narrative to include clients, together with police officers, as principal users. This broader understanding of principal users will contribute to and expand on the area of police station facility design internationally and in South Africa. Contextual and evidence-based design is important due to the particular history the South African Police Service has with the public, especially now that the police station is seen as an instrument to implement community policing, where community and police can have positive interactions (Buthelezi: 2010). I therefore intend for this study to contribute to the body of evidence necessary to address negative perceptions and experiences - historical and current - and inform a User Centred Design approach that will benefit SAPS station interior design and the principal users of those spaces.

## **1.2 Context of the study**

### **1.2.1 The general influence of interior design on society**

Interior design perhaps has been around since there has been the need for shelter and the use of buildings (Caan: 2011; Pile and Gura: 2014). The term interior design has traditionally been used for all types of interior projects in the built environment. Interior design is the manipulation of space within the existing building structure to create atmosphere and identity through the use of construction, the treatment of surfaces and placement of furniture. Interior projects range from residential to retail, office and other public buildings (Brooker and Stone: 2007). The functions and purpose of interior spaces influence the users, because interior spaces are reflective of social, economic and political influences of the period of their time throughout history; and those influences on the interiors of buildings would have offered a different experience to those that occupied them in the past, than to those who would occupy them in the present (Pile and Gura: 2014). The local and cultural context is therefore a prime aspect of the users' experience of buildings.

Interior design has a reputation as a superficial industry, where trends are followed, and the decoration of a home is based on fads and popular culture (Dadich: 2017). However, there is now a greater understanding and insight into the impact that a well-designed space can have on its occupants. Understanding this impact is a movement towards spaces that enhance life (ArchDaily: 2013). It is also well documented that poor design, and a lack of understanding of how buildings influence their users, can contribute to making users physically sick (Behling: 2016). "Sick building syndrome" as defined by Clements-Croome (2011: 71) is "categorised as a situation when 20% of a building's occupants experience a similar medical condition due to an unknown cause over a period of at least 2 weeks, while in the building." Clements-Croome (2011) also goes on to explain that building sickness can be combated by intelligent building design, such as allowing for natural ventilation and daylight.

There is a vast body of research into hospital design (Salonen *et al.*: 2013; Slavens: 2017), due to understanding that these buildings will serve their users for decades (Salonen *et al.*: 2013). There is also clear evidence that the physical environment impacts directly on the health care outcomes of patients and the efficiency of staff (Salonen *et al.*: 2013). Ulrich (2001:97) found that poorly designed hospital spaces, in particular those spaces that do not meet the psychological needs of the patient, contributed to “anxiety, delirium, elevated blood pressure and increased drug taking.” The hospital experience is one that is fraught with anxiety regardless of the design of the environment. Ulrich (2001) argues that patients can be set up to succeed in healing faster and better through the supportive design of hospitals, together with the medication they are given. Ulrich (*ibid*) complains that the typical approach to hospital design is about function, and the focus on function creates spaces that are physically and psychologically hard, therefore unsupportive of the well-being of patients and staff that use the space.

To illustrate the concept that space can bring about wellness to the user, hospital research started with designing for tuberculous wards (Ulrich: 2001; Day: 2014; Peters: 2017). It was found that, with the careful consideration of nature into the design of wards, some patients were assisted in their healing process. In 1910, for example, the recommended “cure” for tuberculous was sunlight and fresh air, which resulted in larger windows and “cure porches” (Day: 2014; Peters: 2017).

Research into the interior design of hospitals indicates the importance of considering the users of hospitals, in particular the patients and nurses. Interior design research informs choices that impact these users which then highlights the importance of a well-designed environment (Connellan *et al.*: 2013). A well-designed environment then impacts positively on all that use the place. Literature on hospital design



(Connellan *et al.*: 2013; Salonen *et al.*: 2013) indicates the significance of specific design points that are used to reduce stress, improve staff performance, and thus positively impact patients and hospital staff; resulting in their improved health and overall well-being (Connellan *et al.*: 2013). In reports by both Connellan *et al.* (2013) and Salonen *et al.* (2013) on the merits of spatial layout, floor coverings, ventilation and air-conditioning, thermal environment and visual environment in hospitals, it is clear to see that considered interior design has merit. Not only does research into the interior design of a stressful environment such as the hospital ensure the patients' well-being, and it also enables good decision-making with regard to material choices and best layout practices. It also exhibits the priority of the designer to be involved from the beginning of the design phase. According to Ulrich (2001) this type of research gives the designer credibility with stakeholders and investors as design decisions are not based on gut instinct but on hard evidence. It stands to reason then, that the design of the police station should also be based on research and hard evidence as the police station is as equally significant as the hospital in society.

### **1.2.2 The context of the South African Police Service**

In order to illustrate the influence of interior design on the environment of the police station, the context of the South African Police Service (SAPS) must first be established. This context will explore the idea that the past and current perspective of the SAPS is important within the police station environment. It is important to understand this context as it will have a bearing on the clients' perspective when experiencing the police station interior.

The SAPS as we currently know it was formed with the amalgamation of 11 distinct and separate police forces. These previous police forces consisted of the South African Police (SAP) and the other ten were the homeland police forces (Rauch: 2000; Newham, Masuku and Dlamini: 2006). Many of the symbols of Apartheid

were removed and replaced by symbols of democracy. It was hoped that these new symbols would encompass the new vision (Raunch: 2000). These symbolic changes were as Raunch (2000) explains:

- The name of the police changed from the South African Police to the South African Police Service.
- A new police leadership was appointed, which now is appointed directly by the president.
- The ranking system was changed from a military ranking system to a model based on British ranking. This may appear to sound less intimidating.
- One uniform was designed to represent the entire SAPS, which looks less militant than the many different previously used uniforms which represented each of the 11 different forces.
- The SAPS now had a new insignia uniting them instead of the previous 11 separate insignias. This new insignia is an aloe with nine branches to represent the nine provinces.
- The colour of police vehicles changed from bright yellow to blue and white.
- In some cases, the names of certain police stations, named after Apartheid politicians or police, were changed. One example was the John Vorster Square police station that was changed to the Johannesburg Central Police Station.

The ruling political party, African National Congress (ANC), hoped that changing these symbols would alter the perception of the police within communities; and that by adding 'service' to the name, the focus would be more people orientated. And for the most part, it had worked (Raunch: 2000). Furthermore, it was hoped that this forced change would bring about a new type of police officer, one that encompassed an entrepreneurial spirit (Mofomme: 2001). The entrepreneurial spirit was intended to encourage police officers to demonstrate constraint and self-control; creativity with problem-solving; development and flexibility; with officers thinking for themselves and viewing themselves as community problem solvers (Mofomme: 2001). It was

also meant to encompass the old practices that were relevant while implementing and maintaining new ones (Mofomme: 2001).

In contrast to this, in the early days after Apartheid, Raunch (2000:1) explains that these forces were "militant, hierarchical and ill-equipped" to deal with everyday crime. As a result, the police force had a racist and sexist ideology, and it was known for its brutality, corruption and lack of due process, reminiscent of the pre-democracy organisations (Raunch: 2000; Mofomme: 2001; Newham, Masuku and Dlamini: 2006). With this reputation, the police still had not completely won over the hearts and minds of the people of South Africa.

Newham, Masuku and Dlamini (2006:30) outline that progress with attitudes towards race and gender had shown some change, albeit slow during the time of the study, as the majority of "police officers feel that they experienced no difficulties working with colleagues of different races, and three-quarters of police officers are not particularly concerned about the race of their commander". Secondly, Newham, Masuku and Dlamini (2006) concluded that there had been mixed success with newly implemented community policing strategies, but the most concerning issue at that time was blatant xenophobia. Another study which further highlights the professionalism of the police was conducted by Snyman (2010), who aptly compares the SAPS professionalism to the Roman god Janus with two faces; where one side represents the professionalism and the other side, unprofessionalism. Snyman (ibid) concludes that the quality of professionalism was "neither here nor there", and definite decisions needed to be made to let the professional face be visible and central.

These findings suggest the behavioural history of the SAPS has influenced distrust in communities, and that the past attempts at gaining trust have been poorly

executed. As a result, the relationship of trust between the SAPS and the public is a fragile one. The South African Constitution outlines that it is the political responsibility of the current party in power to ensure a good relationship between the community and the SAPS (South Africa: 1996). As Buchanan (2001: 36) explains: "The South African Constitution begins with a statement of cultural rights, suited to the current historical period in the development of human rights. It seeks to integrate civil and political rights, as well as economic and social rights, in a new framework of cultural values and cultural rights, placing central emphasis on human dignity". Therefore, as custodians of our constitution, the SAPS should prioritise the rights and dignity of South Africans.

In this case, the National Planning Commission understands the importance of a good relationship between the public and the SAPS therefore it set about a programme in August of 2013 that sought to hold the authorities accountable by citizens of South Africa (Department of Monitoring and Evaluation: 2017). The National Planning Commission did this by creating a Citizen Based Monitoring (CBM) Programme. This programme uses the comments and feedback of citizens to provide better government services to the public (Department of Monitoring and Evaluation: 2017). The Frontline Service Delivery (FSD) programme has brought to life citizens' feedback. The newly implemented FSD programme has set about to make changes within the departments relating to government, and one such department is the SAPS (Department of Performance Monitoring and Evaluation: 2013).

Consequently, the FSD has undertaken to "professionalise" the police station. As previous Deputy Minister of Police Fikile Mbalula (2015: para. 5 line. 1), declared in the opening of the first FSD police station in Amagwe, "The Front-Line Service Delivery Project is thus levelling the field, by closing the gap between the poorly developed police station infrastructural capacities (scarce resources, skills, and

isolated support), and those that are already developed, as found in affluent areas". The 2015 'Police' magazine maintains that the FSD "project is aimed at improving and changing the negative perception the communities across South Africa have of the SAPS". The project also aims, among other things, to address the professional conduct of police officials, how they serve the public, ensuring that police stations are accessible to the public and that the first point of interaction between the police and the public yields positive results (Warrant Officer Maluleka: 2015)". The professionalised police force has also adopted new terminology, "clients", to refer to those that they serve. This research has adopted this same terminology and refers to the members of the public who use the police station as clients (Warrant Officer Maluleka: 2015). There also needs to be a distinction between the physical police station building and the organisation, the South African Police Service, as this study is limited to the built environment and does not address organisational structure or police conduct. Therefore, I refer to the physical built environment as the SAPS station (South African Police Service station). There are, however, instances where the building and the South African Police Service organisation are not mutually exclusive, as the physical building has direct bearing on the service delivery and vice versa. Therefore, the service delivery of the SAPS officers would be commented on in relation to User Centred Design and not critiqued in relation to professional standards.

## **1.3 Research Aims and Objectives**

### **1.3.1 The Research Focus**

There is a premise that designing for a wide range of people for all situations is possible when focusing on a certain demographic, such as the disabled and the elderly, as seen in Universal Design (Giuliani and Paradiso: 2001; Steinfeld, Maisel and Levine: 2012). User Centred Design takes this premise one step further by creating a persona, where the focus of designing for one person will benefit all (Cooper: 2004; Siddall *et al.*: 2011). Therefore, the assumption of this study is that

the design of a station that considers the most vulnerable would benefit the other users of the police station. Thus, the research aim is to understand the perception of the client reporting a crime to the police station. The proposed outcome would be to understand the essence of a police station in order to make User Centred Design proposed application for the SAPS station. Objectives of this study would be to review literature on User Centred Design, Sensory Processing, Post Traumatic Stress, Acute Stress Disorder and literature on South African police stations. The questions that grounded this study were:

- What are the clients' perceptions of a SAPS station environment?
- In what ways are SAPS stations user-centred or not user-centred?
- How can the design of police station be improved upon to become user-centred?

### **1.3.2 Theoretical and Methodological Approach**

I used hermeneutical phenomenology as a methodological approach in order to understand the perspective, and therefore the experience, of the client who reported a crime to the police station. This philosophical underpinning is to understand what *Being* is, in the same way that User Centred Design asks, "Who is the user, and what is their perspective and experience of space?" When using hermeneutic phenomenology to underpin a study framework, it is important to understand the context of the phenomena that is to be studied. The context of the police station in South Africa was based upon i) documented descriptions of SAPS police stations in the literature review (section 2.3); ii) own observations of SAPS station premises and iii) interviews with SAPS officers regarding the environment of police stations. I used the method of the hermeneutic circle to interpret the context and thereby create meaning-making. I compared literature on trauma and the participants' interviews to further understand the participant (section 2.4 and 2.5 and TIP table). In addition to literature on trauma, I used a brief background description of the participant to further understand the participant. These background information descriptions were based on the following information: i) the crime that the participant was reporting to

the police station; ii) how many times they had been to a police station previously; iii) the socio-economic status of the police station that the participant visited based on the area. Again, the hermeneutic circle was used to understand these parts as part of the whole.

Then the context analysis and the participant analysis were both used as a basis of knowledge in the method of the double hermeneutic. I used the double hermeneutic as a method of meaning-making, to infer on interpretation of the SAPS station environment through User Centred Design. Once the interpretation of the participants' perspective was made clear to me, the interpretation was then used together with the knowledge of User Centred Design by using themes, to answer the questions that grounded this study.

### **1.3.3 Ethical considerations and limitations**

The ethical rights of the participants and the SAPS officers who took part in this study are important and I ensured that they were all treated with dignity and respect. It was important to guarantee that the autonomy of the participants and SAPS officers were respected and that risks were minimised, and benefits were maximised. Within section 3.2.8, these considerations are explained in detail.

Due to the sensitive security aspects of the SAPS station, I was not granted permission to observe the SAPS station or to use architectural plans. The concern from the SAPS was that the exposure of the layout and security measures of the police station would compromise the safety of SAPS officials and clients, if, for example, someone with ill intent would read this study. The use of plans would have allowed me to see the overall allocation of the rooms and how these spaces would interact with each other, including the distances a client would walk to receive help from various departments. Understanding this would have provided a better sense of the allocation of space and the whole context from my perspective as an interior designer, not just as a researcher. The decision to not allow me to use plans then

led me to interview SAPS officers. The interviews were in depth and allowed me to gather in detail the information that was needed. In addition to this I had to follow strict guidelines from the Head of Strategic Management of the SAPS (Appendix C). Further limitations are explained and dealt with in detail in sections 3.2.9.

## **1.4 Dissertation Outline**

### **Chapter Two: Literature Review**

The review of the literature is set in three parts. The first part is the review of literature on User Centred Design and the concepts that surround creating an experience in interior space. The second part is a review on the context of the SAPS station in South Africa and literature on international examples of police stations. The third section explores the client who utilises the SAPS station, the persona of the client that has been traumatised and the role of sensory processing.

### **Chapter Three: Research Design**

Chapter three is where I introduce the interpretive paradigm and the underpinning philosophy of Hermeneutic phenomenology as a tool to elicit the perspective of the client of the police station. I also outline the tools that were used to collect and analyse data. Furthermore, I explain the limitations and the ethical considerations that this study encountered.

### **Chapter Four: Data Analysis**

Chapter four is an audit trail of dealing with the analysis of the data that was collected from literature and interviews. This chapter is divided into three main sections that relate to the concept of the double hermeneutic. The first layer is the analysis of the context, the second is the analysis of the participant and the third is bringing these two layers together reflectively, thereby completing the double hermeneutic and the analysis. The end results in themes that are based on the principles of User Centred Design.



## **Chapter Five: Findings and Discussion**

Chapter five is a discussion of the analysis and findings of chapter four, which is the application of User Centred Design in the SAPS station built environment. I offer my interpretation of User Centred Design within the police station and make recommendations on how the application of User Centred Design can be improved upon.

## **Chapter Six: Conclusion and Recommendations**

Chapter six is the general impression of the study, where I offer my reflections and outline the answered objectives of the study. I make future recommendations and state the knowledge that has contributed to the field of interior design.

## **2. Literature Review**

### **2.1 Introduction**

The South African Police Service station (SAPS station) is a specific environment with particular design challenges. The literature in this chapter will first briefly discuss interior design and then progress to User Centred Design. This chapter will explore the context into which User Centred Design is placed, namely, the SAPS station. The context of the SAPS station is explored to establish the present-day image the SAPS portrays to the community at large. The importance of the SAPS image is addressed, together with understanding the persona of the client, as the persona of a client is central to the concept of User Centred Design.

### **2.2 Interior Design**

A quick google search will show that the most common quoted definition of interior design is: “the art and science of understanding people's behaviour to create functional spaces within a building”. Furthermore, it is not attributed to a particular author, and it is a definition that is lacking in further elaboration. As Moorman (2008) points out, the public's perception of interior design is limited and often wrong. Therefore, I would like to use the definition that the only interior design governing body of South Africa, the African Institute of the Interior Design Professions (IID Professions), definition of the interior designer and the profession is;

“The professional interior designer is a person qualified by education, experience and recognised skills, who identifies, researches and creatively solves problems pertaining to the function and quality of the interior environment; and performs services relative to interior spaces including programming, design analysis, space planning, aesthetics and inspection of work on site using specialised knowledge of interior construction, building systems and components, building regulations,

equipment, materials and furnishings; and prepares technical drawings and documents relative to the design of interior spaces, in order to enhance the quality of life and protect the health, safety and welfare of the public (IID Professions: 2020)."

Furthermore, by using specialised knowledge of interior construction, a designer can focus on the experience and occupation of space by understanding the user, as this is the first step to solving any interior design problem (Malnar and Vodvarka: 2004; Caan: 2011; Oygur and McCoy: 2011). Focusing on the user is the premise of User Centred Design.

## **2.3 User Centred Design**

User Centred Design, human-centred design, user-friendliness or otherwise referred to as people-centred design is a problem-solving approach to design that has at its core the focus of the experience of the user of the product, building or website (U.S. Department of Health and Human Services: 2006; Lupton: 2014; Interaction Design Foundation: 2020). The focus of the design is often only on one user, the primary user or stakeholder, and the mantra of this design approach is 'know your user' (Norman: 2005). User Centre Design utilises different methodologies depending on the application of the concept within the design field in which it is used. The principles within the industry of interior design are not formally established, but User Centred Design shares similar principles throughout different design industries (U.S. Department of Health and Human Services: 2006; IDEO.org: 2015; Interaction Design Foundation: 2020), they are:

- Understanding the context of use
- Deeply understanding the user
- Creating design solutions

- Implement and re-evaluate the design

Many architects and interior designers intuitively have centred their design approach on the user through a method that has worked for them. One example, Ilse Crawford, an interior designer known for her book, 'Sensual Home' has approached the interior design of spaces by asking the question: "what is the user's sensory experience?". To answer this question, she spends time with the client, observing them for months, paying particular attention to their sensory preferences and how the client is drawn to them (*Episode 8: Ilse Crawford: Interior Design: 2017*).

An authority on sensory design, architect, Peter Zumthor, has said that knowing the client and understanding their experience comes naturally to him. "The feeling for the place I guess I always had, I find there is nothing special, I go somewhere and I think it's rather easy to feel the space and see it and so on, and have an idea how I should react there as an architect (Wanger: 2015)." He goes on to talk about his preunderstandings that influence his design, such as media, education and lived experience and how this enables him to empathise with the client in their need for a specific type of architecture. Zumthor draws from not only the imagined experiences to create a building but on meeting with the client, discussing their needs and seeing their proposed site (Wanger: 2015).

The term User Centred Design was first coined by the product designer, Donald Norman. Norman was the first to formalise focusing on the user within design and created principles for this focus. Since then, these principles have been expanded on in other fields, but for the purpose of this study it is not necessary to go in depth with this expansion. Next, I will set out to explain the relevant principles that relate to creating an experience for the user within a built environment found within the literature. But first, in order to focus on the user of a space and the objects within the space, there are a few key aspects that need to be understood about the user

and the user's relationship to space and objects. We use our senses to perceive the space and objects around us, and our senses also enable the use of these objects and space. This particular perception is called affordance. However, we do not only perceive affordance, but we also perceive meaning which is attached to the objects and space. The perception that encompasses the affordance and attached meaning of space is what creates the experience. The following section will elaborate further on this concept of perception and created meaning by first starting with Donald Norman's concept of visibility and affordance, as it will then set the foundation for the concepts to follow.

### **2.3.1 The experience of space: usability**

#### **2.3.1 A Visibility**

The principles of usability by Norman (1988) are simply as the name suggests, the use of things. Norman (1998: 3) insists that "the human mind is exquisitely tailored to make sense of the world. Give it the slightest clue and off it goes, providing explanation, rationalisation and understanding". That is, visibility within design is key to creating a product, or in this case an interior, that creates a clear understanding of operation. With product design this is where the 'natural signals' as Norman (*ibid*) calls them are visible clues that give indication and direction, and in turn highlight the difference between two things. This highlighting between two things within product design can be the action and then the results; that is, cause and effect. This is what Norman (*ibid*) says makes good design. In the context of interior design this could be direction in terms of wayfinding. Wayfinding is a form of navigation of understanding where you are and where you need to go, using visual clues such as landmarks and signage. The type of user of the space needs to be considered to provide a successful wayfinding system. This form of navigation is used within complex environments such as hospitals to guide patients through the passages from one place to the next (Foltz: 1998; Devlin: 2014; International Health Facility Guidelines: 2016; Harper *et al.*: 2018).

### **2.3.1 B Affordances**

The second Donald Norman (ibid) principle that relates to interior design is the principle of Affordance. Norman (ibid) based this principle on James Gibson's work (1986) on the ecology of perception. Gibson (1986) explains that "the affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill". Norman (1998) then elaborates on affordances as it "refers to the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used". Simply explained, affordances are "an object's capacity to support an action (Lupton: 2014: 29);" the cues or prompts on how to use a physical object, the qualities of an object and its perceived use. Among the examples Norman (ibid) uses to demonstrate affordance, are how doorknobs are for turning and door plates are for pushing. Norman (ibid) echoes Gibson's work by explaining that objects' material properties also afford their use. Glass, for example, is transparent and allows the user to see through it. Part of using affordances is the causality of the action used against the affordance in its perceived use.

According to Maier, Fadel and Battisto (2009); the approach that Gibson (1986) has towards affordances is a description on how the user perceives their environment; whereas Norman's (1998) approach to affordances is a prescription, which gives "guidelines" on how to design objects or "everyday things" which lacks the guidance of designing for artefacts in architecture. As a result the term affordance has been adopted by Maier, Fadel and Battisto (2009) as a conceptual framework and described as an understanding between how people interact with the forms and functions of the environment over time and their projected meaning of these elements for physical use.

In a contrasting opinion Betsky (2015) elaborates that affordances are not based on form and function but rather based on the user's perspective of how they see the

space and its endless opportunities for use, as “architecture is an evolving and interactive landscape (Betsky: 2015: para. 6 line 2)”.

Within architecture, affordance can be seen as two separate systems which complement each other. This concept can be broken into two categories: firstly, artefact-user affordances, which is the built environment and the user. The second is artefact-artefact affordances, which is the relationship of structural elements between each other. The relationship between affordances can be explained in three categories: first, *behaviour*; second, *structure*; and third, *purpose*. That is, “systems afford behaviours via their structure for a purpose (Maier, Fadel and Battisto: 2009: 394)”. This would mean that a physical feature of a building would encourage a certain set of behaviours on the perceived use of this feature (Lupton: 2014).

It is my argument that the ideas of affordances within architecture can easily be transferred to interior design, and in like manner, the relationship of affordances that is most applicable is the artefact-user affordance. Consequently, environments can be seen as an affordance of possibilities. Belser (2014) notes that in order to create a successful interior one would need to understand how interior design relies on affordances that can encourage certain actions or set of actions. Belser (ibid) illustrates this point by referencing the layout of tables in a restaurant: how close or far apart the tables are from each other would determine how one would move through the space and in turn create a path for use.

### **2.3.2 The experience of space: the perception and the attachment of meaning**

The philosopher, Martin Heidegger, asked the questions, “What is it to dwell?” and “How does building belong to dwelling?” (Heidegger: 1954: 347). Heidegger is directly challenging us to examine the physical structure and its bearing on the user;

the experience of the user within that structure. And by asking these questions, posing this challenge, that to dwell in a space is more than to be in it. It is the sensory experiences, the emotions and memories that connect you to it (Sharr: 2007). This line of questioning has influenced many postmodern architects, such as Norberg-Schulz, Alvar Alto, Peter Zumthor and Steven Holl. Heidegger's questioning not only dealt with the ontological questions related to life experiences but also to the meaning of how a person relates to and experiences space. For Heidegger (1971: 362),

“dwelling, however, is the basic character of *Being* in keeping with which mortals exist. Perhaps this attempt to think about dwelling and building will bring out somewhat more clearly that building belongs to dwelling and how it receives its nature from dwelling. Enough will have been gained if dwelling and building have become worthy of questioning and thus have remained worthy of thought.”

Thus, as Heidegger has explained, to be in a space is to experience it on a deeper level than merely physical; and at interior design's core is to understand how the built environment can be manipulated to create a narrative that provides an experience, so influencing how we see ourselves and how we relate to others (Caan: 2011; Power: 2014; Dadich: 2017). The experience of space is determined by its perceived attached meaning and use. Goldstien (1981) explains that perception is not about the biology of sight. Rather, perception is an activity whereby the observer moves through the environment with their entire being. Gibson (1986) explains,

“The world of physical reality does not consist of meaningful things. The world of ecological reality, as I have been trying to describe it, does. If what we perceived were the entities of physics and mathematics, meanings would have to be imposed on them. But if what we perceive are the entities of environmental science, their meanings can be discovered”.



We view our environment as an active observer who moves throughout space with our sensory capabilities that help us investigate our surroundings. This moving about space is to sense the concrete properties of space, the texture, shadows, colours, surfaces, edges, and shapes, then attach meaning to these concrete properties of space (Gibson: 1986). As White (2016) puts it, we discover our environment created by our ecological perception. A number of researchers and architects seem to agree that there are several factors that influence experience and ultimately how we create meaning. Meaning is created by our perceptions as the observer moving throughout space. The user brings with them, themselves and their subjectivity (Goldstien: 1981; Gibson: 1986; Malnar and Vodvarka: 2004; Waxman: 2004; Zumthor: 2006; ArchDaily: 2013). Perception is filtered through emotions, feelings, cultural background; and past understanding influencing our present understanding (Goldstien: 1981; Gibson: 1986; Norman: 1998; Frascara: 2002; Malnar and Vodvarka: 2004; White: 2016). Subjectivity is also seen through our preference, as preference influences our perception. Preferences are based on function, perceived usefulness, maintaining one's orientation, and previous experience of space (Malnar and Vodvarka: 2004). These factors that influence experience all work together simultaneously. This meaning comes from our ecological perspective of the world (Gibson 1986), as we "invent" our places (White: 2016).

Power (2014) explains that space can also be engaged in a theoretical encounter, which refers to the thoughts and spiritual aspect involved with engaging with the qualities of space. This particular engagement with the qualities of space is what Power (ibid) calls the *interiority* of space. Furthermore, Power (ibid) and Caan (2011) both explain that the concept of space can be a relative construct. Power (ibid) and Caan (ibid) go further to say that when it comes to interior designers and architects

using the term 'space', it is understood with distinct qualities unlike any other profession. Section 2.3.3 explores the concept of space within architecture.

### **2.3.3 The experience of space: the architectural sense of space**

Heidegger, the philosopher, believed that part of questioning the *Being*, was to also question how much sight played a part in the experience of architectural space. For many centuries within western culture the sense of sight had been praised above all the senses, hence architectural typology focused on aspirations of beauty (Malnar and Vodvarka: 2004; Sharr: 2007; Pallasmaa: 2012). Heidegger's question was essentially challenging the two-dimensional view of architecture to become three or four-dimensional.

Janson and Tigges (2014) explain that the concept of type has a broad spectrum of meanings, but it is primarily understood as the features of architecture that are based on construction and design. Types are characterised by their functional features, use, access and their plan (Janson and Tigges: *ibid*). The particular style of typology was based on a way of life and form, and each specific shape varied from society to society (Malnar and Vodvarka: 2004). However, Malnar and Vodvarka (*ibid*) state that typology's objectified architectural attributes are essentially an abstract framework for spatial ordering. Typology is therefore more than an architectural experience for sight, it is an all-encompassing sensory experience that contributes towards a sense of place. Malnar and Vodvarka (*ibid*) further emphasise that the home is where this is clearly seen. The home is not devoid of emotion; within its space the integration of thoughts, memories and dreams are kept, and it is a place for dwelling (Malnar and Vodvarka: *ibid*).

Hillier and Hanson (1984: 27) state that the experience and the arrangement of space is done intrinsically and subconsciously as part of our culture, where it is

dependent on social behaviours. When we see a layout of a society, we experience an everyday lived experience, and as such the built environment is really social behaviour. The internal layout of space within the built environment is based on the closeness of the relationships of the users of the space and reaffirmed over time by continual use. Therefore, it is important to understand the contextuality of the inhabitants; that is, if they are low context or high context relationships and how this dynamic works (Malnar and Vodvarka: 2004).

Part of understanding the dynamics of relationships is to understand the concept of territoriality. Territoriality for people as explained by Hall (1959), and Sebba and Churchman (1983), is the space in which they interact, and part of this interaction is the taking possession of it for use as well as their defence of it. This is dependent on culture. An example of territoriality within the home as explained by Alfirević and Alfirević (2019) is that the home is divided into two zones, the size of each zone dependent on the users' personalities and needs, in addition to culture. These two zones are often divided into two zones; private (intimate and family spaces) and public zones (social spaces). Feelings of territoriality arise through feelings of comfort or anxiety when these spaces are occupied by other people (Alfirević and Alfirević: 2019).

On an individual level, territoriality is the need for privacy (Caan: 2011); to be by yourself in a space of your own. Privacy, according to Caan (ibid), is not an innate need, but rather an individual need based on the influence of culture, varying with time and place, existing between individual and group. It is an experience, which separates ourselves from the outside. That is, privacy is finding refuge in the mind or in a quiet space; and we only fully understand our need of privacy when there is an absence of it. Privacy, elaborated by Pallasmaa (2012), is the uneven intensity of light and the play of shadow that adds interest to, and creates a sense of intimacy, within public spaces. Distance of vision narrows, and the sense of touch heightens

within dimly lit spaces. This play of shadow and light allows for the clarity of thought and the provision for private spaces within an emotional experience. Gibson (1986: 126) presents privacy as an affordance of place: “an important kind of place, made intelligible by the ecological approach to visual perception, is a place that affords concealment, a hiding place.” In this instance the level of privacy is determined by the opacity of materials and the structures we perceive as private; that is, our perceptions determine the degree of privacy we are able to experience. If we are able to perceive that the physical environment is private, then we are able to feel that it is private.

The sense of security is an innate need for space. In essence, a safe environment protects us from harm (Malnar and Vodvarka: 2004; Caan: 2011). Caan (2004: 54) explains that “a secure environment is more than just safe. It is not only devoid of any dangers; it allows people to relax, and perform their activities with confidence, and free of worry.” What Caan (ibid) is referring to is the need for a space to be simultaneously psychologically safe and physically safe. According to Caan (ibid) within the built environment there are two different approaches to creating a safe environment. The first is to create open, visible, bright spaces and the other approach is to create small, refuge-like spaces.

Newman (1996) did three case studies of poor areas in housing projects in New York and Ohio. He used the concept of territoriality to create a sense of place, thereby reducing crime rates and increasing perceived safety in areas previously thought of as dangerous. Newman (ibid) achieved this by reducing the wide-open spaces in front of apartments by creating perceived barriers such as plant borders and physical barriers such as fencing. This enabled the residents to take ownership of their plot. Likewise, a study by Bernardo and Palma-Oliveira (2013) found that where the residents had a greater place identity of their neighbourhood, those residents

perceived the neighbourhood to be safer and of better quality, even if outsiders had a negative perception of that neighbourhood.

Waxman (2004) elaborates on place identity as a collection of memories, related feelings, ideas and perceptions of a place that is incorporated into the larger concept of self. Place identity does not define an individual but rather adds to the development of the sense of self. Place identity, says Waxman (ibid), is an important part in creating a sense of place. Waxman (2004: 12) states that “the term sense of place refers to the transaction between people and place”. The individual’s past experiences and background influence the judgement that they have on the place that in turn creates the impression of it. Therefore, place identity directly influences the perception of a space which determines the outcome of the experience. This experience of a space is dependent on how long an individual will stay there. Waxman (ibid) also explains that a person who is unfamiliar with a place may see it as more dangerous than it is, and that the more acquainted they are with a space, the less dangerous it may seem. Preference for a place is therefore dependent on past familiarities. People also prefer environments that are easily understood and that they are able to make sense of. Waxman (ibid) further explains that the person’s behaviour and the person’s attachment to a place is dependent on the person’s ability to cope with it. Within User Centred Design the physical and psychological feelings of safety are major components in the success of a place (Waxman: 2004). Place identity and therefore feelings of safety are necessary for the success of a SAPS station. Examples of place identity are explored in section 2.4.1 with the success of Studio Gang’s basketball court adjacent to the local police station.

Thus, it is understood that our experience of space is based on the perception of it. As Steven Holl (2013) the architect articulates, “The idea drives the design, but the experience is in the phenomena. The real test of architecture is in its experience and it’s in the moving through space, the overlapping perspectives and the incomplete perception, and how a building can draw you through, the quality of

material, the smell, the sound, the quality of the light". Interior design is not dissimilar, as Caan (2011) explains that "designers specialising in interiors think about how people occupy and experience spaces". Oygur and McCoy (2011) state that "understanding the user experience is the first step in solving any interior design problem, regardless of the interior setting or building type".

In the same way, the perception of space creates an experience in how it is occupied (Power: 2014). Power (2014) refers to the theory of proxemics, which is how we define space in relation to ourselves, where we define personal boundaries and what is the socially acceptable distance between people in a public place. Yet, Malnar and Vodvarka (2004) contend that perception is based on far more than how we relate space to ourselves. Occupying space uses all one's senses and the interpretation of these senses. We also create a narrative and place meaning on the space and other objects that occupy that same space. In addition, we perceive space through our cultural inferences and contextual meaning (Malnar and Vodvarka: 2004).

Hall (1959: 191) clarifies that "thousands of experiences teach us unconsciously that space communicates". What Hall (1959) is saying is that we are taught through spatial cues while growing up that space has meaning and context, and it is organised in each culture differently with regard to the space between individuals while in conversation, to how people relate to space that is around them in an environment. Hall (ibid) calls this the "spatial accent" which is shown through cues. These cues are often expressed through language, such as having names for an object and sometimes no names for other objects. Some cultures have names for the spaces between objects. The Trukese, for example, have a word for the gap between the thumb and index finger (Elbert: 1946); whereas Westerners have names for the edges of spaces, such as the rim of a cup (Hall: ibid). The Hopi culture has no words for the interior three-dimensional spaces for a room, and no names for

rooms with a specific function such as a dining room, even though they may have a dining room (Hall: *ibid*). Culture conditions behaviour, as Hall (1959: 204) explains that “spatial changes give tone to a communication, accent it and at times even override the spoken word”.

In contradiction to this notion of designing space to create an experience, (Frascara: 2002) argues that “we can never really ‘design experience’. Experience is a constructive activity”. When designers start to consider the experience of space, as Frascara (2002) asserts, the designer and the occupant have a conversation. Frascara (*ibid*) says that it is helpful for a designer to understand what people think because when the designer understands the user’s perspective, emotions and feelings, the designer is able to empathise with the user. If the designer understands what is influencing the user’s experience, then the designer can understand what is being communicated to that user, since what is expressed by the design of space is filtered through the user’s past experiences, memories, senses and projected meaning.

This section of the literature review has established that User Centred Design is focused on the experience of the user. Experience is based on how the environment is perceived. This perception is based on the usability of space, which is further broken down into two concepts: visibility and affordances, to which the user attaches meaning. Space also communicates cultural signifiers; which in turn communicates territoriality which translates to a sense of safety and privacy. In essence the built environment is a social behaviour determining our relationships to it and with each other. Furthermore, the environment is experienced through the senses. The sensory perception is perceived as an atmosphere or mood of a space, and then experienced as such. Our sensory experience is explored in section 2.3.3.

### **2.3.3 The experience of space: our sensory experience of space**

The architect, Zumthor (2006) coined the term 'atmosphere' when describing the feeling we get of a space through our emotional sensibilities, experienced through the senses. Atmosphere is evoked by memories and imagined experiences, often based on initial instinct. Pallasmaa (2016: 133) further elaborates that mood and atmosphere are one and the same, "thus predominantly an emotive, pre-reflective mode of experience". Mood, as described by Pallasmaa (ibid), is something that is unstructured, unintentional, and unobserved when it is experienced. That is, it is closer to the haptic sensation than to something that can be seen, as it is a 'knowing' that is part of our mental construct, understood as a sensory experience, felt by the entire being. Malnar and Vodvarka (2004: 80) talk about the genius loci, which is the 'spirit of place', that it can be likened to its "generative energy". The generative energy is felt by the user of the space and the user is able to invoke memories and then is able to recall a time and place and base their memory on these sensory experiences of the space.

An environment needs to emotionally move a person, observes Zumthor (ibid). To be moved emotionally by an environment is to experience a collection of conditions that creates the atmosphere, such as the architectural forms, colour, lighting, sensory stimulation, a person's mood and expectations (Zumthor: 2006). For architects such as Zumthor, these imagined sensory experiences are tapped into when trying to create an atmosphere of a building they are designing (Zumthor: 2006; Wanger: 2015). Understanding how the senses work and how these modalities influence a person in a physical setting is the foundation for designing space to create an experience (O'Neill: 2001; Malnar and Vodvarka: 2004; Zumthor: 2006; Theart: 2010; Caan: 2011; Pallasmaa: 2012; ArchDaily: 2013; Osei: 2014; Dadich: 2017).



It is a common agreement and understanding that we have one perceptual system which is composed of independent senses that work as interconnected modalities (Howes: 2003; Di Bello: 2007; Schreuder *et al.*: 2016; Stoffregen, Mantel and Bardy: 2017). Schreuder *et al.* (2016) explain that because all the senses interact in a non-linear fashion, this can give one sense clarity to another sensory modality; or sometimes senses cooperate, and the sense stimulation is multiplied; or a stronger sense may cancel out another weaker sense; or senses may create novel effects. Within neuroscience, Howes (2006: 383) outlines that “there is evidence for extensive multisensory interactions whereby primary sensory areas of the cortex can be activated in a task-specific manner by stimuli of other modalities”. To explain further, Di Bello (2006) shares a finding that there has been research in visual stimulation activating parts of the brain that are typically associated with other senses. For example, when a person sees motion in a movie, the part of the brain associated with motion is activated. Di Bello (2006) also shares a finding that when blind people touch an object, the visual parts of the brain are activated.

Thus, Bull *et al.* (2006) expound that the sensorium, which is the “the entire perceptual apparatus as an operational complex” is a social construction, that throughout cultures and history the understanding of how we perceive and experience the world through the senses is constantly changing, because it has been understood differently with each group of people. As a result, “cultural patterns are embodied through everyday experiences (Howes: 2003: 14).” In like manner Geurts (2003: 23) defines sensing as “bodily ways of gathering information” and she too believes that the senses are a social construction understood differently from culture to culture. To further elaborate, the senses are a means to embody “cultural categories or making into body certain cultural values or aspects of being that the particular cultural community has historically deemed precious and dear (Geurts: 2003: 29).”

Howes (2003) offers a Russian author's detailed account of the smells that are smelt during a walk along his street and how he remembers his wife by how her palms smell, as an example of how the culture can influence sensory experiences. The author would have given a different account of the sensory experience had he been American, according to Howe, since certain aspects would not normally be remarked on or noticed in American culture. Luhrmann (2014) opinion is that cultural training of attention is more important than the biology of a person. According to Di Bello (2006), scientists agree that our senses, instead of being completely instinctive, are shaped by environment, culture and social circumstances.

Interestingly, not only does culture influence our sensory perceptions but also, sensory stimuli is influenced by behaviour, social context, personal traits and mood (*Schreuder et al.: 2016*). Schreuder et al. (*ibid*) observe that when a person is excited, their sense of smell intensifies, they get tunnel vision, and hear sounds selectively. Schreuder et al. (*ibid*) then surmise that a desired effect in one instance may not have the same effect in another instance. In a hospital with white walls, for example, patients disclose more information and exhibit greater levels of trust in their doctors' abilities, whereas the same white walls increase patients' stress levels. Furthermore, Schreuder *et al.* (*ibid*), found that strong emotions strongly affect the perception of an object or the environment. That is, positive emotions result in the positive perception of an environment. Also, the positive assessment of an environment contributed to a person's positive intentions towards that environment.

Even though it is now recognised that the perceptual system is one system, each of the senses has been prioritised in order of importance throughout history according to cultural emphasis. In Western society the modality of vision is the most important (Howes: 2006; Di Bello: 2007; Kerr: 2013; Osei: 2014). This belief can be traced back to Aristotle. And currently, within the architectural industry, it can be agreed that most buildings are designed with the sense of sight as the foremost thought,

and it is taught as such (Malnar and Vodvarka: 2004; Pallasmaa: 2012). This is not far from the reality of interior design where the main focus of the industry, reinforced by its portrayal in the media, is perceived to be aesthetics (Moorman: 2008; Caan: 2011; Dadich: 2017).

Furthermore, it also becomes evident that when engaging with architectural literature that it tackles each sense as separate but as part of an interacting system, thereby placing one sense as more important than the other. As Di Bello (2006: 399) concludes,

“splitting the senses seems to be important to create disciplines and to establish notions of disciplined behaviour; at art exhibitions, concerts, at the table, or in the laboratory and the lecture room. Splitting the senses, at least in Western cultures, seems to be fundamental in defining a "clean and proper" self or identity, at both conscious and unconscious levels”.

Seen here as an example, Pallasmaa’s (2012) work advocates firmly that the strongest sensory ability is touch. He says that;

“all the senses, including vision, are extensions of the tactile sense; the senses are specialisations of skin tissue, and all sensory experiences are modes of touching, and thus related to tactility. Our contact with the world takes place at the boundary line of the self through specialised parts of our enveloping membrane” (Pallasmaa 2012:12).

However, in a study done by Fenko, Schifferstein and Hekkert (2010), they found that the sight and the touch of a material determined the physical then the subsequent figurative association of warmth of a product. It was therefore neither one nor the other, but both senses that were contributing factors.

Malnar and Vodvarka (2004) suggest that the strongest sense we have is smell and that close behind it, is sound. They say that the olfactory and auditory senses work together to create a deeper more meaningful environment (Malnar and Vodvarka 2004). These senses give the background information, the context on an unconscious level. The information we gather from the scent of a place filters our perception of it, and in turn, it can create either a good or bad impression. Smell has a strong association with anamnesis, or recollection, connecting past experiences with current experiences. As a result, the past experience informs the present experience creating a filter of perception for the environment (Malnar and Vodvarka 2004). In a design of an airport there was great effort to ensure that the smell of jet fuel was not wafting into the waiting lounge as patrons internalised this smell to mean that the airport was unsafe and unhealthy (Leone: 2008).

Sound enables spatial judgement and can create reassurance. Reassurance of a user of a space is created by hearing familiar sounds. A sense of privacy is also created by using sound: using white noise, for example, in an open plan office space so that the users of the space feel that phone conversations are not overheard by others; or office workers' use of headphones in open plan offices to gain a sense of seclusion to be able to focus on tasks at hand (Malnar and Vodvarka 2004). The use of white noise, such as running water, within busy areas can also create a sense of calm (Leone: 2008). Within hospitals Huisman *et al.* (2012) found that noise caused by staff such as talking and working with office equipment increased stress levels of patients, decreased recovery rates and prevented patients from sleeping. Huisman *et al.* (ibid) recommends using noise dampening measures, as merely closing the door to the rooms did not help.

Malnar and Vodvarka (2004) also explain that the sensory modality of kinaesthesia, which specifically refers to the movement of muscle - such as the movement of

fingers, eye muscle movement and leg muscle movements - helps us to determine how far away items are from each other. Such as understanding the layout and size of a SAPS station.

The way that one thinks about the senses or the use of metaphors or similes can have an effect on the perception, memory or thought process of a person or culture group (Howes: 2003; Di Bello: 2007; Luhrmann: 2014). Howe (2003) recounts an anthropologist's documentation of a sensory profile of a culture that placed greater emphasis on hearing than seeing. Their cultural tradition was primarily oral, and defined space by the sound of it more than the sight of it. In turn, Howe (2003) observes that the senses not only influence how people interact with each other but also the form in which they think. Howe (2006) explains that sensation is fundamental to our existence and experience of reality. Luhrmann (2014) explains that the use of metaphors in explaining sensory stimulation was powerful enough to disrupt perception and that these perceptions and the thought process associated with them could change over time.

Di Bello (2006) questions if all the senses are flexible or mouldable, and therefore subject to change due to previous experiences, as he recounts the finding of a scientific research paper that concluded that memory plays an important part in relating vision. Vision is not passive, but interactive; multisensory and an embodied activity. The imagination creates the filling in of blind spots, which are the split seconds during the scanning of our environment, when we actually do not see anything. Di Bello (2006) also says that we draw on past information of what we have found attractive and that it will inform what we will find attractive in the future.

To understand how the client perceives and experiences the SAPS station, we need to understand the relationship the client has with the SAPS officers which then

determines the message that is being communicated to the client through the language of space. The following section outlines the current message that the client perceives of the SAPS organisation through the current SAPS stations. Then the literature gives a few international examples of police stations that have been considered successful in communicating the SAPS officers' mandate through the communication of space. Following this, the psychological environment of the SAPS is also explored to further understand the general SAPS station experience. Lastly, the literature will dive into the client persona and how the client persona will experience the communicated space through trauma.

## **2.4 The South African Police Service**

The police station is an important mechanism within society, as it is a non-verbal link between police officer and the client, that can be used to attain the trust of the citizen. Money, or low crime rates, does not automatically gain the trust of the citizens of South Africa. Trust needs to be seen throughout the police force, including within the interior design of the police station (Newham: 2018). The South African Police Service (SAPS) views the police station as a tool to combat crime, and that the presence of the police station is a symbol of safety and security within communities. The SAPS also provides means of taking care of the victims of crime with the provision of victim friendly services within the police station interior (South African Government: 2020).

### **2.4.1 Perceptions of the police station**

In South Africa, not only has the Apartheid regime and current media coverage of police corruption scandals influenced the current perceptions of the police, but the previous architectural vernacular was typically taken from the design of the fortress (Hoffmann: 2007). As such, the pre-1994 South African Police (SAP) sought to create buildings that were difficult to get into and out of due to the need to control

safety, the physical as well as the emotional, thereby creating a presence of strength or domination, depending on one's viewpoint (Hoffmann: *ibid*).

As a result, the typology of the police station had significant meaning within South African communities. Hoffmann (2007) describes the architectural devices that were used to create the image that the SAP wanted to portray, which was one of strength, dominion and as such the image of a fortress. These typology devices were:

- Difficulty getting through the entrances with turnstile gates and gatehouses.
- Walls and fences
- Blue light, flags and motifs
- Low sand berm with corrugated metal sheet and timber pillboxes at entrances, and corners. This was at the height of Apartheid.

Today, the police station is seen by the SAPS as a tool to implement community policing, where community and police can have positive interactions, as it is one of the means to take care of community needs (Buthelezi: 2010). However, the perceptions' of the SAPS station have been described either as unfriendly, unsafe, under-resourced, dirty, retraumatising and not user friendly by Pennington (2004) Snyman (2010); Democratic Alliance (2016); SABC News Live (2016); Dlamini (2019); SABC Digital News (2019) because of these reasons:

- Unsafe (vulnerable to attack or have been attacked).
- Too small.
- Not enough Victim Friendly rooms.
- Not private.
- Poor allocation or not enough resources (such as furniture and equipment)
- Disrespect for resources and assets (such as furniture and equipment)
- Poor maintenance of station building.
- Needs to be tidier and cleaner.

- Needs more plants and pictures.
- Needs signage or has a lack of signage.

Furthermore, the expectation on the standard of maintenance of the environment is dependent on the socio economic status of the client that goes to the SAPS station; that is, the wealthier the station the higher the expectation to have an environment that is aesthetically pleasing.

Yet, the revival of the police station has been underway in other countries such as America, the United Kingdom and Australia because of changing procedures and policies that move towards community policing (*Ren et al.: 2005; Longstaff et al.: 2015*). The driving force in the design of refurbishments and the construction of new stations has been the recognition of the importance of how the community sees the symbol of the police station in relation to them. Although literature on how the new aesthetic of the police station can be achieved through typology and vernacular is scarce, there are a number of new examples to draw from, that seemed successful in winning the public's hearts and minds. I will consider how the following police station examples won over the hearts and minds of the public.

In particular, a common thread with the rise of the newly constructed stations and refurbishments is the need to create places that balance physical and visual security with the desire to create open and transparent spaces. Hoffmann (2007) uses the example of the Vaal police station in Holland, in how it creates or establishes the authority of the police. This is achieved through the manner in which the citizen enters the station: the use of movement up the ramp. The person entering the police station moves past the different functions of the station, such as the holding cell, which are clearly visible. The visibility of these functions creates a sense of authority as each step is taken towards the building. Lootsma (1996) writes that this is the



reminder of the friendly and not so friendly experiences that one might have with the police. However, Hoffmann does not mention the play of transparency with the use of glass screens or windows to conceal or expose functions of the space within the station. As part of the brief, the concept of the design was to create openness as reflected in the reorganisation of working (Lootsma: 1996). There were a number of ways in which the glass walls, windows and screens were used. Lootsma (1996) describes the function of each room needing a different application of glass wall depending on the privacy each required. Where more privacy was needed then opaque glass would be used. Where a lesser degree of privacy was required, then the transparency would be from standing height. Some areas such as the workstation areas would have completely clear glass “since good communication is essential in police work”. According to Lootsma (1996) the use of glass throughout to create clear or “masked” views for the client or police officer to view through, brings to the fore the question that the architect poses: “who is looking at who”? The importance of glass as a material choice for the architect is used to portray literally the “assumption that transparency in the judicial system has a positive effect on society at large (Lootsma 1996: 28)”.



**Image 1:** External view of Vaal police station, Holland. (Unknown: 2011)



**Image 2:** External view of Vaal police station, Holland, showing the ramp to the entrance. (Unknown: 2011)



**Image 3:** Internal view of Vaal police station, Holland, showing levels of privacy with the use of glass screens (Unknown: 2011)



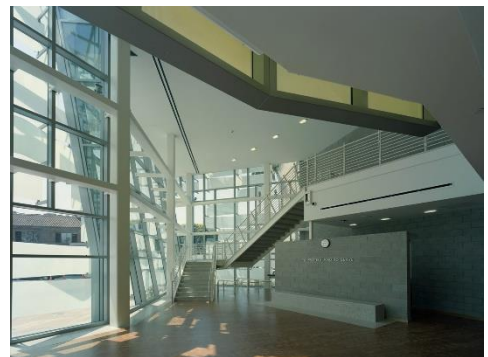
**Image 4:** Internal view of Vaal police station, Holland, showing seat with low window (Unknown: 2011)



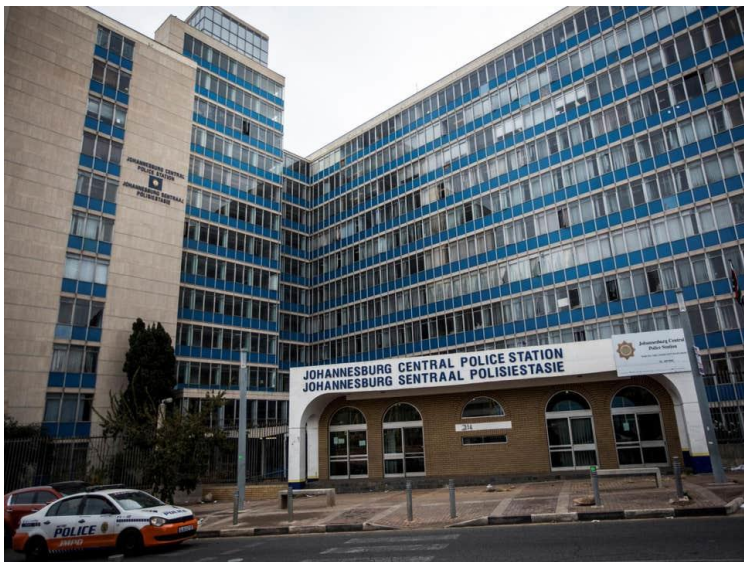
**Image 5:** External view of Hollenbeck police station, USA, showing the glass façade (Hursley: 2011)



**Image 6:** Hollenbeck police station, USA, showing internal view of entrance (Hursley: 2011).



**Image 7:** Hollenbeck police station, USA, internal view (Hursley: 2011)



**Image 8:** Johannesburg Central police station, South Africa, present day external view (Khan: 2019)



**Image 9:** John Vorster Square in 1982 (ahmedtimol.co.za : 1982)



Another police station that brings the concept of transparency to the forefront of the design priority is the Hollenbeck police station in the suburb of Boyle Heights in East Los Angeles, designed by architect David Martin in 2009. The entire outer façade is constructed of glass walls overlaid with glass panels. This glass, however, is able to withstand being fired at with automatic weapons, as Boyle Heights is known as a dangerous area with drug and gang related crimes being the most prominent and where drive-by shootings are not uncommon (Busch: 2009). The clear façade acts as a comforting reminder to law-abiding citizens or a warning to criminals that the police are watching (Busch: *ibid*). The glass façade also acts as a statement that the police want to be part of the community, as the transparency creates the openness that is desired to interact with those around it instead of being hidden behind high walls. The idea is that the glass façade would dismantle the image of the fortress-like police station in order to create a welcoming environment (Busch: *ibid*).

Having established in the previous paragraphs that the use of certain materials can create a sense of welcome or safety in an environment, I will now show that the layout or arrangement of space is an important factor of the design of a police station. The city of New York has sought to put pen to paper by creating a guide that encourages the use of design principles that makes the visitor of public buildings feel welcome and safe. This guide is called the “Design and Construction Excellence 2.0 Guiding Principles” (2016) and one such principle expressed in the guide is called equitable design. According to this guide this principle means that one should design for all, where a person of every age, background and culture is welcomed in a public building no matter the function of it, by the clever use of design. The guide speaks of equitable design by using the 40th Precinct Police station meeting room as an example, where the open plan meeting room is highly visible, providing an “open, safe space for community engagement (Department of Design and Construction: 2016: 129)”. One can infer from this example that a space that is not closed off or that has a clear layout creates a sense of welcome to those who would

like to use it, that the public ought to desire transparency in a police station and the police are trying to encourage this desire through the design of the police station. Studio Gang, a Chicago based architecture firm, established the Polis Station Project that sought out the opinions of community leaders, activists and the youth as part of the design process. They support the notion that “to emphasise a commitment to transparency and accountability in police interactions with the public, police stations could employ physical transparency in their architecture. This openness, from inside to outside, is both symbolic of and literally supports enhanced visibility, accountability, and trust (Gang: 2015).”

Gang (2015) also emphasises that in the construction of a police station it is of vital importance that the local community is engaged through their project called Polis Station project. This community involvement may seem like an obvious point, since engaging and working with the community is at the core of community policing policy. This is, however, not the case in South Africa. Instead, South Africa works on a tender system in the event of constructing and repairing stations across the country (Public Works and Infrastructure: 2020) . The South African Government issues a tender call on its website (South African Government: 2020). Then, if an architecture company successfully wins the tender, the architect has the free reign on how to design the station within government stakeholders’ opinion and feedback. The result is that the architecture company can choose to engage with the principles that they feel strongly about, and completely neglect the interaction of the local community altogether.

Studio Gang’s Polis Station Project was considered a success for the following reason: that the project highlighted the current public perspective of the police station. By including the public within the design of the station it can be argued that place identity is created. Unfortunately, the public opinion of the existing police stations was mostly negative. The project then found common interests and

activities that the police and the public shared. The purpose of finding these shared interests and activities was to create trust between the locals and the police (Gang: 2015). Creating trust would then move towards “opportunities for mutual familiarity and fellowship” (Gang 2015: 22). Through Studio Gang’s research of the area surrounding the tenth district of Chicago called North Lawndale, they found that the common shared interest was basketball. They then created a half court to play basketball on, within walking distance of the police station. Now police officers coach games for youth that live in the area. It has been such a success they are now extending the court (Gang: 2015). Studio Gang also found that meeting rooms that are available for the public to use are a key component to creating trust between the police and public, as it quite literally can create conversation between the public and the police. Gang (2015: 24) stresses that the meeting room needs to be “accessible and comfortable”. In my opinion the term accessible in this context can be likened to the principles of equitable design, which is, designing for all to be able to use the room without discrimination of abilities and age.

#### **2.4.2 The environment of the police station in South Africa**

Police stations in South Africa are typically known for their stressful environments and in some instances, this has caused re-traumatisation (SABC News Live: 2016; SABC Digital News: 2019). In a news report on the police station in KwaDukuza, victims of rape and abuse were allegedly interviewed outside the police station because the police station was full to capacity and too small; but this attempt at gaining some privacy resulted in re-traumatising the victims. This news report went on to explain that the KwaDukuza police station is reflective of many in the province of KwaZulu-Natal (SABC News Live: 2016; SABC Digital News: 2019).

In 2015 the National Victims Crime Survey reported that 42,4% of the population would not call the police when in need of rescue from crime (Statistics South Africa: 2015). In comparison, when the 2018 to 2019 National Victims Crime Survey asked,

“what would you do when witnessing a crime”, 55,1 percent of respondents said that they would “call the police”. However, the question “would you call the police when in need of help” was not asked in the 2018 to 2019 Statistical Release P0341 Victims of Crime: Governance, Public Safety and Justice Survey (Statistics South Africa: 2019). Responses to the question, “what would you do when witnessing a crime” where 55,1 percent of respondents said that they would “call the police” questions are indifferent and the rise in percentage of calling on the police is not necessarily based on trust.

The then spokesperson for the Minister of Police, Musa Zondi (2015: para. 3) commented:

“For a long time, police stations were a symbol of our oppression and fearsome places for political activists. Many a life was lost in police stations across the country. These edifices assumed a grotesque symbol of oppression and the expression of that oppression for many of our people.”

What Zondi (2015) illustrates in his speech is that the police station is a symbol and that our past experiences and present interactions with this symbol determines its meaning. This perspective is shared with a criminology researcher, Andrew Mille (2012), who has done an exploratory study on the reassuring presence of a police station in communities across Britain; in particular, what the architecture of a police station would portray to the community. He concludes that it is very important to understand the views of the community towards the police station architecture and its representation, as it then informs how a police station could move towards being a symbol of reassurance (Millie: 2012).

Architectural symbolism can be achieved through the functions or procedures that are performed in it, as Hoffmann (2007) states, and not only by the architect's intentional design. Hoffmann (ibid) gives an example of one such South African police station, the John Vorster Square, now currently the Johannesburg Central Police Station, which gained its notoriety during the Apartheid era. The building itself, its typology, looked frightening, because of its association with the police who were a pivotal part of the Apartheid state apparatus; and because of the functions of the much-feared Security Branch that were performed there. This resulted in the building becoming a symbol of the reign of terror, of power and secrecy (Hoffmann: 2007).

In the attempts to rebrand the 12-storey building to reflect the new South African democracy, there were very few changes. The first change was the change of its name to the Johannesburg Central Police Station and the second was the removal of the John Vorster bust from the main entrance. Thirdly, there were a few internal layout changes due to department changes and the disbandment of the interrogation rooms on the infamous 10th storey floor. The aluminium louvers that were put up in the later days of apartheid to shield the internal workings from the outside were removed. Hoffmann questions whether these changes were enough to remove the stain of its negative reputation.

Furthermore, a study by Pennington (2004), conducted with 33 Gauteng police stations, showed that the interior of the Community Service Centre was rated low by the clients who commented that the environment needed to be improved upon by improving cleanliness and tidiness; and that plants, pictures and more chairs needed to be added (Pennington: 2004). A report from The Standing Committee on Community Safety, Cultural Affairs and Sport, conducted spot inspections of police stations in the Western Cape, and found that a few SAPS stations had broken lights, litter accumulation, broken equipment and furniture, and not enough space (South



Africa: 2013). The Snyman (2010) study on police professionalism found that there was disrespect for the police station resources and assets. The Democratic Alliance (2016) in a report of their own found that there was poor allocation of resources which included equipment and furniture, and that the building was poorly maintained. The Parliamentary Monitoring Group published minutes of meetings between the SAPS, Public Works and parliament that showed that the existing station buildings were not being maintained by landlords; that there was very slow progress with appointed tenders to improve, build and repair buildings, resulting in poor morale of police staff (Parliamentary Monitoring Group: 2002, 2012, 2017).

## **2.5 Understanding the client: The user in User Centred Design**

It is important to understand who the client is, as the user or the persona is a primary concern within User Centred Design. This persona is the primary user of the space, and as such all design decisions are based on the needs, wants, goals and ultimately the experience of the user within the space. The purpose of using personas within User Centred Design is to bring the user to life (Nielsen: 2007; Goltz: 2014; Ilima: 2015; Dam and Teo: 2018). Cooper (2004), the original creator of the tool of personas, asserts that when designing for a broad range of people it is best to design for a specific person, even though it goes against logic. By doing so, one is able to focus the design to please one person rather than having a design that is burdened with compromises and is ill fitting to no one in particular (Blomkvist: 2002; Cooper: 2004). This approach helps to prevent creating the “elastic user” (Blomkvist: 2002; Cooper: 2004; Goltz: 2014). The elastic user stretches to meet the design’s requirements rather than the design stretching to the needs of the user (Blomkvist: 2002; Cooper: 2004; Goltz: 2014). The most appropriate type of persona for the purpose of this study is the designed persona or engaged persona. This type of persona is not representative of an average user or facts of a real person. Instead, it is a real representation of the emotions, psychology, backgrounds, the pattern of behaviour and goals that the user may have towards the product or service (Rikke Dam and Teo Siang 2018 and Ilima 2015). This persona uses the narrative of actual target uses. This persona is then specifically used as an emphatic tool by designers.

In the police station the user is both the police officer and the client. In light of the SAPS's focus on service, putting the people of South Africa first and the SAPS's needs second, the focus of this study is the people the police serve. There are two types of clients within the police station environment. One is the client that is there for mundane tasks, such as certifying documentation. The other is there to report a crime (South African Police Service: 2014). As stated in the South African Constitution, 1996. Section 205(3):

“The objects of the police service are to prevent, combat and investigate crime, to maintain public order, to protect and secure the inhabitants of the Republic and their property, and to uphold and enforce the law.”

The SAPS's main client is therefore the client who reports a crime, as opposed to the clients that are there to do mundane tasks. Both are not mutually exclusive of each other, yet it can be said that the most vulnerable of the two is the victim of a criminal act as they are the most emotionally vulnerable. I believe it is best to use the definition of a victim that The Victims Charter (2004) has outlined, because the SAPS will draw on this definition for their understanding.

A victim of crime has been defined by The Victims Charter (2004) as:

“A person who has suffered harm, including physical or mental injury, emotional suffering; economic loss; or substantial impairment of his or her fundamental rights, through acts or omissions that are in violation of our criminal law. The victim also includes, where appropriate, the immediate family or dependent of the direct victim. A person may be considered a victim regardless of whether the perpetrator is identified, apprehended, prosecuted or convicted and regardless of the familial relationship between perpetrator and the victim. Victims are inclusive of all without prejudice of any kind on the grounds of race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual

orientation, age, disability, religion, conscience, belief, culture, language and birth”.

In this study, the user persona is dominated by the idea of trauma as a police station client. This added layer to understanding the client of the police station is to understand that a person who is a victim of crime would be experiencing stress and trauma (Substance Abuse and Mental Health Services Administration: 2014). The more grievous the crime, especially if the crime was a contact crime, the more severe the client's trauma (South Africa: 2011). The next section therefore explains the nature of crime-related trauma.

### **2.5.1 Client trauma and Post-Traumatic Stress**

There are numerous definitions of trauma, but they all outline the following: trauma is caused by a sudden event or something unexpected. Trauma can result from either physical and or emotional hurt or threat. Trauma has long lasting negative effects on how a person functions and on their well-being; that is, trauma affects a person's emotional, spiritual, physical, or social life. Trauma is an emotional response which overwhelms a person's ability to cope. Trauma can bring about feelings of helplessness, being scared, angry or guilty. Fundamentally, trauma can be life altering.

The response to trauma varies from individual to individual. However, trauma does elicit what is known as the fight, flight or freeze response as trauma generally overwhelms an individual's coping mechanisms (Substance Abuse and Mental Health Services Administration: 2014). Trauma produces a sense of fear, vulnerability and helplessness (Substance Abuse and Mental Health Services Administration: 2014). It is also believed that the coping mechanisms of individuals to trauma is subjective and affects individuals in their own way (Substance Abuse

and Mental Health Services Administration: 2014). The biggest factor of recovery is understanding the cultural and the complex interaction of the biological, physiological and social background of the victim. Douglas (2010: para. 1) phrases it this way:

"A broad understanding of culture leads us to realise that ethnicity, gender identity and expression, spirituality, race, immigration status, and a host of other factors affect not just the experience of trauma but help-seeking behaviour, treatment, and recovery".

Understanding the effect of trauma is important for understanding how the individual interprets the experience of the trauma (Substance Abuse and Mental Health Services Administration: 2014).

However, the Substance Abuse and Mental Health Services Administration (2014) outlines a wider, more comprehensive response to traumatic stress. There are immediate and delayed, physical, cognitive, behavioural and existential reactions (please see section 2.5 table 1) (Substance Abuse and Mental Health Services Administration: 2014). Yet, if one is still experiencing stress responses after three days to within a month, it would be considered Acute Stress Disorder (ASD) (Elklit and Brink: 2004; American Psychiatric Association: 2013; Substance Abuse and Mental Health Services Administration: 2014). ASD is a normal reaction to an abnormal event and it is more likely that a person who has experienced trauma will recover quickly from ASD, within this month (Substance Abuse and Mental Health Services Administration: 2014; Center of Nonviolence and Social Justice: 2017) It has been found that if one is experiencing ASD symptoms, it often leads to PTS (Brewin *et al.*: 1999; Brewin, Andrews and Rose: 2000; Lowenstein: 2000; Elklit and Brink: 2004). A key indicator of ASD becoming diagnoses for Post-Traumatic Stress (PTS) or Post-Traumatic Stress Disorder (PTSD) is the dissociation symptom during the traumatic event (Substance Abuse and Mental Health Services Administration: 2014). PTSD is usually diagnosed after three months of experiencing the PTS

symptoms and sometimes there can be a delayed onset of PTSD, months or years after the traumatic event.

PTSD is an anxiety problem that may develop after a traumatic event, where the person experiences emotions of intense fear, helplessness and horror. This traumatic event usually happens when the person or someone they know has been threatened with death or bodily harm or when a death has occurred. As a response to this trauma the person then is highly aroused and avoids stimuli that can remind them of this event. Avoidance is a coping mechanism that the traumatised person adopts to avoid triggering an episode of reliving the traumatic event. The hallmark of PTSD is the reliving of the pain and memories of the trauma all the time. The reliving of these memories comes in the form of flashbacks, nightmares and intrusive memories. These memories can be triggered by anything that reminds the person of the trauma. This anxiety can become debilitating to the extent that it can disrupt their normal life. The person first experienced this anxiety after the traumatic event occurred (Davidson: 2000; American Psychiatric Association: 2013; The South African Depression and Anxiety Group: 2020).

In essence, the client of the police station would experience the station in a context of trauma and stress. It also has been established that the police station is a symbol in society, and in South African society it is a symbol based on its history of brutality and untrustworthiness. The changes to the physical police station buildings themselves have been superficial and by the presented comparisons, much can be done to improve the perception of the symbol of the police station. Therefore, in order to change the negative connotations of the symbol of the SAPS to a positive one, one would need to understand how we perceive the environment around ourselves.

### **2.5.2 SAPS station clients' sensory processing of station environments**

We experience the world through our different senses and the way our brain receives, organises and responds to this sensory stimulation. How we then behave is referred to as sensory processing (Brown *et al.*: 2001; Dunn: 2001; Dean *et al.*: 2018; Metz *et al.*: 2019). Dunn (2001:1) conveys that “the experience of being human is embedded in sensory events of everyday life”.

The brain and nervous system regulate the sensory input of the environment by creating thresholds that regulate this input. Once there is the right amount of sensory input, the brain's neurons then elicit a response. How quickly a neuron responds to the stimulus will determine whether one has a high or low threshold. If neurons respond quickly, then a person has a low threshold to stimulus. If neurons take a bit longer to respond, then one would have a high threshold to stimulus. It is widely acknowledged that genetic and environmental factors contribute to the type of threshold that a person has. This means that everyone has a different threshold and a different threshold for all of their different sensory inputs. Therefore, the threshold for these sensations contributes to a person's mood, temperament, ways of organizing their lives and affects their daily choices (Brown *et al.*: 2001; Dunn: 2001; Lujan: 2016; Dean *et al.*: 2018; Metz *et al.*: 2019).

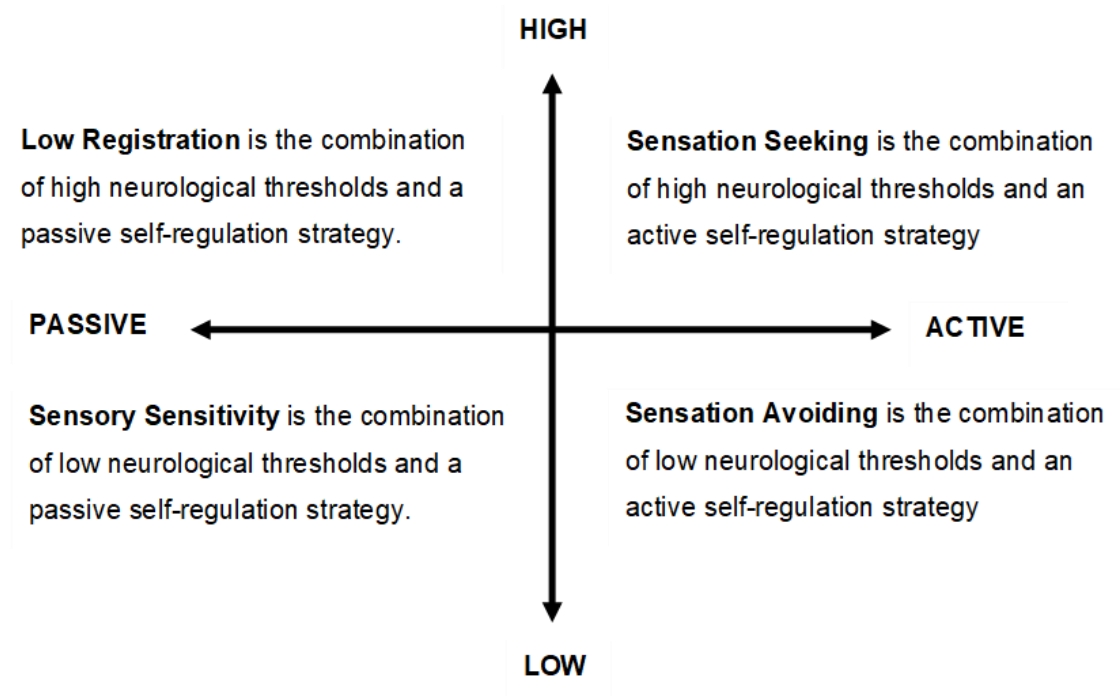
Dunn developed a model in 1997 that can map a person's thresholds and how a person manages their sensory stimulation. How a person manages the sensory stimulation from the environment is known as behavioural self-regulation (Dunn: 1997; Brown *et al.*: 2001; Dunn: 2001; Lujan: 2016; Dean *et al.*: 2018; Metz *et al.*: 2019). These two axes are a continuum from low to high thresholds and from passive to active self-regulation. Passive self-regulation is when a person reacts to the stimulation as it happens, and active self-regulation is when a person plans to react to the stimulation (Dean *et al.*: 2018). These two axes create four quadrants

that are four classifications of sensory processing patterns (Dunn: 1997, 2001; Dean *et al.*: 2018), as depicted in graph 1.

Everyone is on a continuum scale of sensory processing and no one is alike (Dunn: 1997 and 2001). Brown (2008) reports that everyone has a comfort range on which they can function on this continuum scale. However, Engel-Yeger and Dunn (2011) explain that those on the edge of the continuum have extreme sensory processing patterns. As a result, they may have higher emotional burdens which in turn may negatively affect them in their day to day functioning. Engel-Yeger and Dunn (*ibid*) also note that those with PTSD show similar characteristics to those who are on the extreme ends of the continuum. They state that it is common for those with PTSD to have extreme responses to environmental stimulation, which in turn affects their mood, emotions, behaviour and their ability to adjust their environment stimulation Engel-Yeger and Dunn (*ibid*).

Moreover, Engel-Yeger and Dunn (*ibid*) have established the sensory profile of the person with PTS. In their study they found that the PTS people have exaggerated responses to stimulation, related to sensory patterns of those that have a low

**Graph 1:** *The four classifications of sensory processing patterns*



threshold; that is those that are sensory sensitive and sensory avoiding (Engel-Yeger and Dunn: *ibid*). They did note that there were very few PTS participants who had sensory patterns that related to high threshold; that is the low registration and sensory seeking sensory patterns. To explain this finding, it was surmised that the brains of those with high sensory threshold were in a state of “shutdown”.

In addition to this, Engel-Yeger and Dunn (2011) found that symptomology such as intrusive thoughts was related to the avoidance of touch, low registration to auditory input, lower tendency to seek vestibular stimuli and touch stimuli. The results of this study concluded that the PTS participants have a sensory filtering disorder, which means that they are unable to correctly filter sensory stimulation.

Furthermore, the (Engel-Yeger and Dunn: 2011) study confirms Stewart and White's (2008) study which concluded that those suffering from PTSD have a sensory filtering disorder (Stewart and White: 2008). The inability to correctly filter out environmental stimulation caused PTSD sufferers to be easily distracted, in particular by things that are generally unnoticed by others; and to over-include stimulation, as well as to have a distorted perceptual modulation (Stewart and White: *ibid*). Perceptual modulation is the emotional and behavioural response to sensory input. The central nervous system is able to adjust to the environmental stimulation and in turn a healthy person then elicits an appropriate response, including suppressing irrelevant information (University of Pretoria: 2018). This means that those with PTSD are unable to respond correctly to sensory input and are unable to suppress irrelevant sensory information. Notably, Stewart and White's (2008) findings show that PTSD sufferers are generally sensitive to loud sounds and are unable to distinguish loud sounds. This contributes to the startle response, and when there are increased amounts of stress, the person experiences auditory flooding. Stewart and White (2008) point out that this then makes a PTSD person vulnerable to stress-fatigue.



In addition to this, Kleim, Ehling and Ehlers (2012) found that stimulation such as a visual cue (for instance a blurry picture) that is related to the trauma can cause triggering of intrusive memories in PTSD. They also found that if a person has been perceptually primed, then hearing words that are related to the trauma can also cause triggering of intrusive memories. Perceptual priming “refers to a form of implicit memory that is characterised by facilitated perception of a stimulus as the result of previous exposure to this stimulus” (Kleim, Ehling and Ehlers 2012: 174).

A more recent study by Clancy *et al.* (2017) into the resting state of those with PTSD, provides useful insight and understanding of the sensory processing patterns of people with PTSD. They establish that a person with PTSD at resting state is constantly hypervigilant; that is, they are scanning their environment continuously, even when they don’t realise it. What is more, they are unable to properly perceive their environment stimulation correctly. All this sensory input then overloads their brain, and they feel like a “flooding of emotions and stimulation”. Therefore, Clancy *et al.* (2017) validate the surmise of Engel-Yeger and Dunn (2011) that the brain “shuts down” when under stress with too much sensory input.

To conclude, a person with PTS or PTSD has a very different sensory profile or perhaps “cultural experience” to a person who would be considered in the normal sensory processing range. Therefore, a designer will have to take this particular information into consideration if they want to create an environment that provides a dignified experience for the client in a police station.

## 2.6 Summary:

### Client trauma and user-centred SAPS station design

The experience of a traumatised client of a SAPS station may be summarised by drawing upon the Treatment Improvement Protocol (TIP) 57 analytical table showing immediate and delayed reactions to trauma (Substance Abuse and Mental Health Services Administration: 2014).

**Table 1: TIP 57 Analytical Table: Immediate and Delayed reactions to trauma**  
(Substance Abuse and Mental Health Services Administration 2014: 62 - 63)

| <b>Immediate Emotional Reactions</b>  | <b>Delayed Emotional Reactions</b>   |
|---|--|
| Numbness and detachment<br>Anxiety or severe fear<br>Guilt (including survivor guilt)<br>Exhilaration as a result of surviving<br>Anger<br>Sadness<br>Helplessness<br>Feeling unreal; depersonalization<br>(e.g., feeling as if you are watching yourself)<br>Disorientation<br>Feeling out of control<br>Denial<br>Constriction of feelings<br>Feeling overwhelmed | Irritability and/or hostility<br>Depression<br>Mood swings, instability<br>Anxiety (e.g., phobia, generalised anxiety)<br>Fear of trauma recurrence<br>Grief reactions<br>Shame<br>Feelings of fragility and/or vulnerability<br>Emotional detachment from anything that requires emotional reactions (e.g., significant and/or family relationships, conversations about self, discussion of traumatic events or reactions to them) |
| <b>Immediate Physical Reactions</b>   | <b>Delayed Physical Reactions</b>  |
| Nausea and/or gastrointestinal distress<br>Sweating or shivering  | Sleep disturbances, nightmares<br>Somatization (e.g., increased focus on and worry about body aches and pains)   |

|   |  |
|---|--|
| <p>Faintness</p> <p>Muscle tremors or uncontrollable shaking</p> <p>Elevated heartbeat, respiration, and blood pressure</p> <p>Extreme fatigue or exhaustion</p> <p>Greater startle responses</p> <p>Depersonalization</p>  | <p>Appetite and digestive changes</p> <p>Lowered resistance to colds and infection</p> <p>Persistent fatigue</p> <p>Elevated cortisol levels</p> <p>Hyperarousal</p> <p>Long-term health effects including heart, liver, autoimmune, and chronic obstructive pulmonary disease</p>   |
| <p><b>Immediate Cognitive Reactions</b></p> <p>Difficulty concentrating</p> <p>Rumination or racing thoughts (e.g., replaying the traumatic event over and over again)</p> <p>Distortion of time and space (e.g., traumatic event may be perceived as if it was happening in slow motion, or a few seconds can be perceived as minutes)</p> <p>Memory problems (e.g., not being able to recall important aspects of the trauma)</p> <p>Strong identification with victims</p> | <p><b>Delayed Cognitive Reactions</b></p> <p>Intrusive memories or flashbacks</p> <p>Reactivation of previous traumatic events</p> <p>Self-blame</p> <p>Preoccupation with event</p> <p>Difficulty making decisions.</p> <p>Magical thinking: belief that certain behaviours, including avoidant behaviour, will protect against future trauma.</p> <p>Belief that feelings or memories are dangerous.</p> <p>Generalization of triggers (e.g., a person who experiences a home invasion during the daytime may avoid being alone during the day)</p> <p>Suicidal thinking</p> |
| <p><b>Immediate Behavioural Reactions</b></p> <p>Startled reaction</p> <p>Restlessness</p>  | <p><b>Delayed Behavioural Reactions</b></p> <p>Avoidance of event reminders</p> <p>Social relationship disturbances</p>  |

|  |   |
|--|---|
| Sleep and appetite disturbances<br>Difficulty expressing oneself.<br>Argumentative behaviour<br>Increased use of alcohol, drugs, and tobacco<br>Withdrawal and apathy<br>Avoidant behaviours   | Decreased activity level<br>Engagement in high-risk behaviours<br>Increased use of alcohol and drugs<br>Withdrawal  |
| <b>Immediate Existential Reactions</b><br>Intense use of prayer<br>Restoration of faith in the goodness of others (e.g., receiving help from others)<br>Loss of self-efficacy<br>Despair about humanity, particularly if the event was intentional.<br>Immediate disruption of life assumptions (e.g., fairness, safety, goodness, predictability of life) | <b>Delayed Existential Reactions</b><br>Questioning (e.g., “Why me?”)<br>Increased cynicism, disillusionment<br>Increased self-confidence (e.g., “If I can survive this, I can survive anything”)<br>Loss of purpose<br>Renewed faith<br>Hopelessness<br>Re-establishing priorities<br>Redefining meaning and importance of life.<br>Reworking life’s assumptions to accommodate the trauma (e.g., taking a self-defence class to re-establish a sense of safety) |

## 2.7 Conclusion

The context that surrounds the present-day police station is based on the past frame of reference. In the past the police station was viewed as an ill-equipped, sexist, paramilitary fortress. Current clients view police station environments as unfriendly, uncaring, under-resourced, and frightening, as little has been done to change the physical building structures of the police station interior. The police station functions or officers’ actions can also influence the symbolism of the police station in society.

The precedents of police station buildings showed that architects are using materials and open spacious layouts to create a sense of welcome and safety. These precedents considered the user of the police station by creating community involvement, community meeting rooms and ensuring that the decisions for material choices and planning were based on local cultural contexts and experiences.

Within this literature it was also found that the most common response to trauma is Acute Stress Disorder, which if untreated may become Post-Traumatic Stress, especially if symptoms persist for longer than three months. Both ASD and PTS alter sensory perception, which results in negative moods, aggressive behaviour and poor sensory modulation. In essence, the client of the police station who has experienced trauma would experience traumatic symptoms.

It was also found that User Centred Design has two main focuses: the built environment and the experience of the built environment. The built environment would be based on affordances and visibility. The experience of the user is far more nuanced and relies on a number of factors such as perception, which is based on experience and attached meaning. Experience of a space is further influenced by how the space is occupied, culture and sensory perception. Further still, the senses are influenced by mood, emotions and cultural upbringing.

## **3. Research Design and Methodology**

### **3.1 Introduction**

This study aims to explore the understanding of interior design of selected police stations with regard to User Centred Design. User Centred Design is solving problems and coming up with solutions that specifically meet the needs of the user. It is mainly focused on the user's experience and usability of the interior space. The assumption is that the design of a SAPS station that considers the most vulnerable would then benefit the other users of the space, as outlined in chapter two. Chapter two established that the most vulnerable is to be the client who reports a crime to a police station. This client would be stressed, anxious, and showing signs of Acute Stress Disorder. In order to understand the perspective of this client when encountering the interior of the police station, three questions have been asked:

- What are the clients' perceptions of a SAPS station environment?
- In what ways are SAPS stations user-centred or not user-centred?
- How can the design of police station be improved upon to become user-centred?

These questions have been set to guide the aims and objectives of this study and the proposed outcome would be to understand the essence of a police station in order to make User Centred Design decisions.

Flick (2011a: 3) states that qualitative research is "an umbrella term for a series of approaches to research in the social sciences". Flick's (ibid.) viewpoint is that qualitative research is formalised as it uses methods that are appropriate to studying social realities and using text as empirical material. That is, it is the paradigm, understanding of the data and the aims and objectives of the research that makes it qualitative (Creswell: 2007; Willis: 2007). In the same vein, Mason (2002) states that qualitative research should create relevant and practical knowledge on the topic to be explored. The benefit of qualitative research is that it is flexible in that it

explores the levels and nuances of the social world with an application that resonates with the wider field, without being stuck in a niche of instantiation (Mason: 2002; Flick: 2011a).

Accordingly, the social construct indirectly explored within this study is the reporting of a crime at the police station, as seen in chapter two, User Centred Design focuses on the experiences of people within the police station. Through hermeneutic phenomenology this experience is explored and used to inform User Centred Design decisions and applications to the SAPS station.

## **3.2 Research design**

### **3.2.1 Research paradigm**

The interpretive paradigm is best suited to this study because the view of those with an interpretivist approach is that reality is socially constructed; and the purpose of research is to understand this construction. Therefore, the understanding of data is contextual, as the very nature of knowable reality is that it is shaped by assumptions, pre-existing theories and world views of the researcher (Dowling: 2004; Willis: 2007; Bhattacharya: 2008; Kelly, Dowling and Millar: 2018).

As Black (2006: 320) states, “beyond subjectivity the interpretive paradigm is one that thrives upon subtlety, it is one where hidden and important meaning is buried within superficially inconsequential inflections of voice, body language or situational details”. Black (ibid) means that within the interpretivist paradigm, it is important to take note of the context and part of this context is to take note of how the participants respond to the researcher and situation through body language. Understanding this detail is to understand, in part, the perceptions and experiences of the participants. Within this study I looked at the subtle body language, such as wringing of hands and the shrug of the shoulders and the anxiety in their voice, with reference to certain

topics or points. This enabled me to gain better insight into the client's thoughts at the moment in time they reported to the SAPS. (Black: 2006; Willis: 2007).

Willis (2007) explains that because of its interpretive nature, the study's perspective is subjective; therefore there "is not a single understanding of the "right" way of viewing a particular situation. Instead, it is an understanding of multiple perspectives on the topic." Furthermore Willis (ibid) explains that the result of the study is not an objective truth but rather, as Thanh and Thanh (2015); Kelly, Dowling and Millar (2018) explain, a variation of truths with multiple perspectives or realities and as a result there is no 'right' answer. The purpose of the interpretive paradigm is the understanding of a particular context which affect the interpretation of the data (Willis: 2007).

### **3.2.2 Hermeneutic phenomenology ontology**

Having established interpretivism as the paradigm of this study, I intend to use phenomenology, in particular hermeneutic phenomenology, as a supporting philosophy in order to better understand the participants and the context of the SAPS station. Martin Heidegger developed hermeneutic phenomenology in reaction to the philosophy of Edmund Husserl. Husserl stated that reality can be viewed objectively, where the researcher brackets their judgements, and the phenomena are studied in isolation. This technique is called Epoché (Thorsby: 2016; Peoples: 2017; Smith: 2018). This approach is problematic in the context of this study, and for this reason I have not chosen Husserl's Phenomenology. Instead, I have chosen to use Heidegger's hermeneutical phenomenology as it understands the subjective lived experience and it fits well with the interior design approach of User Centred Design.

In order to understand how hermeneutic phenomenology fits well with User Centred Design, one needs to first understand the key component of hermeneutic



phenomenology. This key component is the understanding of *Dasein* or *Being*, as Levinas (1996) explains that “man's essence consists in existence that Heidegger designates man by the term *Dasein* (being right-there)”. This quote indicates that phenomenology is an ontology where the existence and mode of being or entity is explored and indicates a part of our humanness that can reflect and inquire about the meaning of existence. This humanness is not a physical body but a philosophical entity. This entity or existence is seen in relation to life, living or the surrounding world and the values that are placed on this existence. This inquiry of “what is *Being*” is done through the exploration of experiences and moments (van Manen: 1990; Levinas: 1996; Lavery: 2003; Sharr: 2007; von Herrmann and Maly: 2013; Smith: 2018; Wheeler: 2018). Then the question is asked, what is the mode of *Being* that is relevant to this study within the context of the police station? Along the same line of thought, the question “Who is the user?” is asked within User Centred Design. Therefore, it can be said that *Being* in this study is the client that is in a state of stress. This answer satisfies both ontological positions of User Centred Design and Hermeneutic Phenomenology.

Furthermore, van Manen (1990: 36) says that the “lived experience is the starting point and end point of phenomenological research”. van Manen (1990) explains that the phenomenon that is under study is the specific experience that a person goes through and the meaning that the phenomenon holds for that person. Phenomenology then constructs a possible interpretation to this experience, to make sense of this event by understanding the essence of this experience. This essence is more than a person's sensory experience; it is the combination of the meaning placed on objects, self and others (van Manen: 1990; Creswell: 2003; Adams and van Manen: 2012; Sloan and Bowe: 2014; Peoples: 2017; Bynum and Varpio: 2018; Smith: 2018). Chapter two explores at length the correlation between the senses, the environment, cultural upbringing and past experiences and how these factors are not mutually exclusive of one another. Section 2.3.2 in particular dealt in depth with how the user attaches meaning to a space and how this contributes to the

overall experience. Therefore the participant's overall experience would encompass their perspectives of how they experience the station in relation to the furniture, other clients and sensory experiences of the building. With this in mind, the essence of the police station experience would be waiting in line to report a crime.

Heidegger also questions the use of space and architecture in the same manner that he questions, "What is *Being*?" He asks the questions: "What is it to dwell?" and "How does building belong to dwelling?" (Sharr: 2007). Sharr (ibid) explains through Heidegger's most influential essays how these questions of dwelling are questions of how a person experiences and perceives the world around them and how the world then influences them, highlighting the emotional and sensorial responses of a person in a space. This too, is the purpose of this study, to understand how the client that is in a state of stress interacts, relates and perceives the police station, which then creates the client's overall experience.

In addition to this, van Manen (2017: 183) explains that "phenomenology in its original sense aims at retrospectively bringing to our awareness some experience we lived through to be able to reflect phenomenologically on the living meaning of this lived experience". What van Manen (2017) is saying is that the lived experience is the everyday common occurrence. We do not reflect on it in the moment. To do so is to step out of the present and step away into the sphere of reflection of the primordial experience and ask ourselves, "what is it like?" In looking at the experience we should not impulsively try to understand or to explain the experience in the moment; instead, we should look back and see what we have missed and what stands out of the experience (van Manen: 1990, 2017). As a researcher who is trying to understand the perspectives of the SAPS station user, I would need to reflect on the participants' answers to the question: "what is the SAPS station like?" In terms of User Centred Design, this means, "What is the perception of the station

like?” and “what is the genius loci or atmosphere like? And is this conducive to creating a good experience?”

### 3.2.3 Epistemology

Epistemology asks questions of what is knowable (Mason: 2002) and illustrated here is what knowledge is knowable with regard to hermeneutic phenomenology in relation to this study. Phenomenology, as Smith (2018: chpt. 5 para. 5 line 1) asserts, “helps to define the phenomena on which knowledge claims rest.” What Smith (ibid) means is that the nature of consciousness through the first-person perspective is knowable. Consciousness is the essence of the human experience; passive and active experiences, such as walking, hearing or reading (Smith: ibid). In like manner the consciousness that is part of the human experience within the SAPS station is to explore the experience of sensory processing or sensory experiences as explained in section 2.5.2, which then informs User Centred Design principles such as designing for the senses.

To elaborate on the interpretation process further, phenomenology is a revealing and unveiling of phenomena as Heidegger explains when he took the two words *phainomeno*, meaning ‘to appear’ and *logos*, meaning ‘reason’ and concluded that “*to let that which shows itself be seen from itself in the very way in which it shows itself from itself*” which is a play on the Greek roots of the meaning (Tan, Wilson and Olver: 2009; Smith: 2018). This shows that Heidegger is using interpretation and going beyond description, as a form of knowing. “In this sense life is like a text” (Tan, Wilson and Olver: 2009: 4), and in the same way, the experience of a person is known through interpretation which is the unveiling of things of the phenomena or the essence. This interpretation is done through the use of hermeneutics; that is, seeing the lifeworld through the viewpoint of narrative and text in context. This lifeworld is the background, upbringing and culture of the participant (Tan, Wilson and Olver: 2009; Kafle: 2011; Adams and van Manen: 2012; Smith: 2018; Neubauer,

Witkop and Varpio: 2019). Thus, this study deals with what is knowable through the participants' experiences of the SAPS station interpreted through the use of language in text and narrative, going beyond mere description.

### **3.2.4 Methodology**

On the surface level there is criticism in using the hermeneutic phenomenology, as the criticism has often cited that there is not a definitive set of methods in collecting and compiling data, meaning there is no organised structure, such as in the case of positivism (Geanellos: 1999; Lavery: 2003; Dowling: 2004; Tan, Wilson and Olver: 2009). However, Vis (2008) talks about the paradox in conducting research to find a method of interpretation in hermeneutic phenomenology but realising that there is no set method of conducting hermeneutic phenomenology. Instead, Vis (2008:12) realises that it is a process set on guidelines and principles which is "bitter-sweet". Even van Manen (1990: 30) an authoritative voice (Creswell: 2007; Willis: 2007; Sloan and Bowe: 2014) exclaims "Indeed it has been said that the method of phenomenology and hermeneutics is that there is no method!" Some authors (Geanellos: 1999; Tan, Wilson and Olver: 2009) propose using Ricoeur's Theory of interpretation (1998) to formalise and create a set standard of data analysis. However, these same authors have all said that this method has been adapted in some way to be usable for their study, therefore it can be seen as still a work in progress.

Adams and van Manen (2012: 5) state that "the concept of lived experience possesses special methodological significance for phenomenology." What Adams and van Manen mean (ibid) is that phenomenology is a way of thinking and Heidegger's methodology is to study the conscious experience and to interpret it in its context using the tool of language and text. This is done using a first-person point of view. Familiar things are looked at in context and within the background of this experience, where notable features are highlighted and looked at in greater

detail. One such example from my research would be looking at the lighting within the Community Service Centre, and the participants' expression around this issue. This is done to find something "telling" and thematic (van Manen: 1990; Tan, Wilson and Olver: 2009; Wright and Losekoot: 2012; Sloan and Bowe: 2014; van Manen: 2017; Smith: 2018). Sloan and Bowe (2014) state that the use of language attaches meaning to the phenomena that is to be understood.

Although this study is not a phenomenological study, it is using phenomenology as a means of understanding the participant and the context of the SAPS station, by using the tools of phenomenology (narrative and text) to understand the SAPS station within User Centred Design. The participants' narrative regarding the experience of the police station environment is enough without delving further into the deeper reaches of the lived experience.

### **3.2.5 Methods of data generation**

In this study I have oriented myself as an interior designer with an interest in understanding the SAPS station interior perception when reporting a crime (van Manen: 1990). As the main research question was to answer: "What are the clients' perceptions of a SAPS station environment?" This answer would then inform the additional questions posed: "In what ways are SAPS stations user-centred or not user-centred?" and "How can the design of the police station be improved upon to become user-centred?" Therefore, my approach to collecting data focused on a hermeneutic phenomenological method of inquiry, the interview.

#### **3.2.5 A. Semi-structured interviews**

Walker (2011) explains that the style of interview used in qualitative research is based on a continuum. Thus, van Manen (1990) says that to choose the appropriate

interview style depends on the research question that you are investigating, instead of allowing the method to dictate the flow of questioning. As the first research question is about the client's perspective, it was appropriate to choose semi-structured interviews with participants. In hermeneutic phenomenology the purpose of choosing such a method is to gather narrative data on the experience, such as the emotions, and sensory opinions of the participants when entering and waiting at the Community Service Centre (CSC) at the SAPS station (van Manen: 1990). The semi-structured nature of the interview allowed the interview process to remain on topic (as opposed to talking about lunch) and the answers as close to the experience as it was lived out (van Manen: 1990). Additionally, semi-structured interviews allowed for flexibility and for answers to be followed up with an explanation (van Manen: 1990; Walker: 2011; Hugh-Jones and Gibson: 2012). The third reason for choosing this interview structure was that there was a research agenda (Flick: 2011c; Hugh-Jones and Gibson: 2012) of understanding User Centred Design. This was part of how I chose to introduce my preunderstanding of being an interior designer and researcher (Creswell: 2007). As my orientation to the phenomena is as an interior designer, the literature in chapter two guided the types of semi-structured questions that were asked, as my research agenda was the understanding of the interior of a police station in a state of stress (van Manen: 1990; Hugh-Jones and Gibson: 2012).

I found participants through the snowball sampling method (Mason: 2002; Creswell: 2007; Flick: 2011b). Posts on social media, such as Facebook, WhatsApp, and Instagram were utilised. I put my phone number on the posts and asked those interested in participating to contact me. A few participants passed on my details to friends and associates who might be interested. I did not approach any participants directly. Participant selection was based on the following criteria: all participants were volunteers and comfortable with talking about the experience of the police station; they were all over the age of 21; and they had to have been to a Durban police station to report a crime.

In total nine participants were interviewed, eight out of the nine went to report a crime to the police station, although the ninth person had intended to report a crime to the police station but in a set of events the participant was falsely accused and arrested instead. The ninth participant was still included as this participant had experienced the Community Service Centre (CSC) area in a state of stress caused by a wrongful arrest that was committed against the participant. By not focusing on a particular crime, such as violent crime, I allowed for the opportunity to have varied responses from the participants towards the SAPS station built environment. I recorded the participant interviews on my cell phone; then emailed these interviews to myself, deleted them from my phone and then transcribed the audio recordings myself. The interviews took place at a location and time that suited the participants. A qualified counsellor was present at every interview. It was explained to every participant before the interview that the counsellor was present for their benefit. The counsellor looked for signs of emotional distress and acted as a buffer between the participant and myself, as she was ready to stop the interview if she felt that the questions were upsetting the participant. The counsellor was available for every participant for a debriefing session after the interview. Two participants required a debriefing session which was handled by the counsellor directly. I left the room and was not present for these debriefing sessions. Although all participants who did not speak English as their home language were offered a translator, all of them declined this offer.

### ***3.2.5 B. Semi-structured and Structured interviews***

Although the perspective of the police station officer was not the priority of this study, interviewing the SAPS officers who work in the SAPS stations gave me an opportunity to understand the physical layout and procedures that a client would go through while reporting a crime. As it is important to comprehend how a police station functions as a working space in order to understand the context of the application of User Centred Design, it also gave context to the environment that the

clients who were reporting crimes were stepping into. Planned, structured interviews took place instead of observations, because gatekeeper permission for observing the three police stations was declined. The Lieutenant-General Provincial Commissioner for the SAPS believed that observations by civilians were a security threat to the officers and stations.

However, request for gatekeeper permission to interview SAPS officers was given by the Lieutenant-General Provincial Commissioner for the SAPS. The Lieutenant-General Provincial Commissioner then put me in contact with an official liaison who then gave me contact details of the Station Commanders who gave me permission to interview officers at their stations. In total I interviewed six police officers from three police stations in Durban. One police station was chosen as it had the third largest number of reported crimes in the whole of South Africa in 2019 (eThekweni Municipality: 2018; Crime Stats SA: 2019). The second police station had registered the most reported crime in Durban in 2019; and the third police station that was chosen was ranked number two for reporting “the highest crime rate for the first time in over five years” in 2017 (eThekweni Municipality: 2018: 215). It is also anecdotal that the third police station was the most aesthetically pleasing SAPS station in Durban, which I wanted to use as a comparison against the other two police stations.

All SAPS police participation was voluntary; that is, it was their choice to answer my questions and the interviews were done at a time that was convenient for the officers at their offices. These police officers were interviewed with a set of 38 structured questions. Not every interview was bound by the questions. Some of the officers did express personal opinion, which I followed up with follow up enquiries.

The choice to conduct structured interviews as opposed to semi-structured interviews was based on the last two questions of this study, “In what ways are SAPS



stations User Centred or not User Centred?” and, “How can the design of police station be improved upon to become User Centred?” Therefore, the questions were based on the function of the police station and based on literature on User Centred Design and the SAPS as found in Chapter Two. The second reason was that the nature of structured interviews gave control. Control in comparison of the answers given about the functioning of the station and it gave the police control of what was said in the interview. All of the SAPS officers required reading through the questions before hand before being willing to be interviewed, and many did not want to be recorded. Handwritten notes were taken for those officers who did not want to be recorded. Only one SAPS officer and I were present at each of the interviews; bar one instance where two officers decided to do their interview together. I then took all the answers and compared them in a table format.

### **3.2.5 C. Reflective notes**

My first impressions, feelings and thoughts of my experience and observations of the structure of the three Durban police stations before, during and after interviewing each officer, were recorded in a notebook. It was a means of capturing my sensory experiences and impressions, to be able to reflect on and use in the data analysis process.

### **3.2.6 Acknowledgement of biases and preunderstandings**

Laverty (2003) explains that there is an interplay of our background, which is our cultural upbringing and world views that influence us and in turn we influence our cultural and world views, and through this lens we interpret experience. This is called preunderstanding, and according to Laverty (2003) Heidegger believed that this was part of being human. This interpretation creates meaning from the phenomena of the experience. The researcher’s background cannot be made completely separate from the study; instead, it becomes part of the interpretation process (Armour,

Rivaux and Bell: 2009; Kafle: 2011; Adams and van Manen: 2012; Bynum and Varpio: 2018).

There are three main biases that inform my preunderstanding of the police station environment. The first bias is my experience of the SAPS. Namely, there are two prominent experiences, the first experience is my lived experience of seeing a vulnerable person reporting a crime while I was standing in line to certify documents; the very reason for wanting to do this research. Also, the second experience is that during this research I had to assist my mother in reporting a crime to the police station; this was very traumatic for both of us for different reasons.

The second main bias is my knowledge of interior design before the commencement of this study, as this inherent knowledge can get in the way of understanding what is needed in terms of User Centred Design of the police station based on the data collected.

The third bias which I had is the influence of personal biases from participants and officers. During interviews it was initially difficult to separate the personal relationship developed with participants and officers and their opinions on conduct, and the organisation of the SAPS as a whole. This bias, if left unchecked, would influence my view on the data, making it about the service of the SAPS and not about the physical station environment. It was a conscious effort on my part to remove such opinions from the data analysis process, and to focus the study on the built environment, namely the SAPS station.

Thus, it would be a better fit for this study and for me not to bracket judgements, assumptions and biases and to instead acknowledge them. For if these biases,

assumptions and judgements are ignored they then creep back into the study because I am unable to forget them; instead, it should be decided how I will introduce them into the study (van Manen: 1990; Adams and Van Manen: 2012; Peoples: 2017; van Manen: 2017; Bynum and Varpio: 2018; Smith: 2018). The way these biases and preunderstandings were introduced into the study was through the collection of data by the questions that were asked during semi-structured interviews and structured interviews. The second approach was the use of the double hermeneutic, especially in dealing with the context analysis and the participant analysis. This approach is explained in further detail in the following sections and chapter.

### **3.2.7 Validity Issues**

To ensure that this study is credible, I have gone into great detail about the processes and the decisions which have led to these conclusions. In this regard, I have made an effort to understand the context of the police station, via a context analysis. I have also used literature on trauma to reveal my view of client trauma in a police station environment, followed by an analysis of client data regarding experiences in a SAPS station environment. (Morse *et al.*: 2002; Whitehead: 2003; William: 2006; Maxwell: 2008; Carter *et al.*: 2014). The principles of the study can be transferred to other contexts, but it is dependent on the next researcher's perspectives and application of the research. Overall, I feel that I may therefore make a tentative claim of the 'trustworthiness' of this study as a validity benefit.

### **3.2.8 Ethical considerations**

I have ensured that I have made every effort to respect the ethical rights of the participants and SAPS officers, by ensuring that they were treated with dignity and respect (The British Psychological Society: 2014; Durban University of Technology: 2018). Durban University of Technology has a set of guidelines that are based on

the following basic ethical principles: respect of persons, beneficence, and justice which are in keeping with the South African Research Ethics Guidelines (Durban University of Technology: 2018).

The principle of the respect of persons refers to the respect for the autonomy of an individual to make decisions for themselves and to be able to act upon their own goals and considered opinions unless it is harmful to themselves (Department of Health; Education and Welfare: 1979; South Africa: 2015b; Durban University of Technology: 2018). In this regard, it was important to give as much detail to the participant and the SAPS officer about the nature of the study. An information letter (Appendix A) was given to the participant, via email and/or WhatsApp document, about a week to a few days before the interview took place, to read through and ask questions. The SAPS Station Commander was given the information letter and interview questions via email and/or a hard copy was hand delivered to the station a week to a few days before the interview to read through and ask questions. The SAPS Station Commander informed the SAPS officers in an announcement in a general meeting that I was conducting interviews. The interview questions were passed around at this meeting. Before the interviews with the SAPS officers and the participants, I went through the information letter with them. I asked if they had any questions or if there were any points, with regard to the nature of the study, that were confusing. It was also explained to the participants and SAPS officers that the interview was voluntary and that they could leave or stop the interview at any time without any explanation. It was also explained that they could refuse to answer any questions without explanation and decline having the interview recorded. I also showed the participants, and the SAPS officers the contact details, on the information letter, of my supervisor and of the Institutional Research Ethics Committee in case they had any complaints to make against me at a later stage. A period of one month has been allowed for the participants or SAPS officers to remove themselves from the research after the interview without explanation (The British Psychological Society: 2014; Durban University of Technology Institutional

Research Ethics Committee: 2020). Although none of the participants or SAPS officers have chosen to do so, if a participant did choose to withdraw, then all data on that participant will be permanently destroyed. Hard copies of data will be destroyed by fire and electronic data will be formatted.

Beneficence refers to not doing any harm to the participant, or to minimise risk and maximise benefits (Department of Health; Education and Welfare: 1979; South Africa: 2015b; Durban University of Technology: 2018). There were no direct benefits to the participants but the recommendations at the end of the study can be used to inform the design of the interior of the SAPS station and this may indirectly benefit the participant. Although there was no direct physical harm or contact, and the focus of the interview with the participant was not to concentrate on the event of the trauma but rather the physical environment of the police station, there was the risk of re-traumatization, due to the nature of trauma and of Post-Traumatic Stress. Re-traumatization can occur during interviews because talking about the situation and the sensory inputs could cause the reliving of the trauma. Therefore, I ensured that a counsellor was present during every interview with participants. The counsellor watched out for signs of distress and agitation and, at their discretion, could end the interview. The counsellor also was available after the interview to debrief the participant. A few of the participants chose to have a debriefing session after the interview and they are still in contact with the counsellor for any future counselling sessions if they felt that they needed it. I was not present at any of the debriefing sessions the participants had with the counsellor. Subsequently after the interviews four of the participants had expressed to me that the experience of talking about the SAPS station was cathartic and of benefit to them.

Due to the sensitivity of the information that was shared with me during the interview, it was important to ensure that personal details such as age and background, the specific information relating to the trauma and the personal opinions the participants

had of the SAPS and of the South African legal system remained confidential and were not shared in this paper. In addition, the information used in this study could potentially be revealing of a participant's identity, therefore it was important to use pseudonyms for each participant. It was also especially important to maintain the anonymity of the participants, as I am required to submit a copy of this study for the SAPS records, as per the agreement with the Head of Strategic Management of the SAPS.

Each SAPS officer's identity was also kept confidential as they had expressed personal opinions which may negatively affect the SAPS officer should this information become known to the SAPS organisation. Together with the confidentiality of the officers, the SAPS station name was also kept confidential because the identity of the station could reveal the identity of the officer. There were also strict terms and conditions placed on myself by the Head of Strategic Management, due to the security-sensitive nature of the SAPS. Please refer to Appendix C, paragraph six.

The principle of justice within ethical research is the obligation to ensure that all participants within the study are treated equally, with no burdens or benefits to specific individuals (Department of Health; Education and Welfare: 1979; South Africa: 2015b; Durban University of Technology: 2018). In order to maintain the ethical integrity of this study, I did not limit the sample selection to a specific demographic; instead, I tried to find a diverse sample of people with the only limitations being age (above 21 years old) and that the participant had to have been to a police station in Durban to report a crime. I also did not approach participants directly, so that they could not be coerced into participating. I met every participant and SAPS officer at a time and place that suited them, as I did not want to disrupt duties or work obligations. All interviews with SAPS officers and participants were voluntary. With the SAPS officers in particular I made this point in private, without

the presence of the Station Commander, as I did not want the officers to succumb to the pressure of obligation to or from their superiors.

### **3.2.9 Limitations**

It would have been preferable to observe the use of the police station as someone waiting in line in the CSC or to use architectural plans, to give guidance on the functional layout of the SAPS station. However, because the SAPS station environment is security conscious and documenting these actions may pose a threat to the SAPS officers or clients if this study were to be read by persons with ulterior motives, in the end it was decided that the structured and semi-structured interviews with the police officers gave far more information. I was able to reflect on the space and then ask direct questions relating to the space that needed clarifying. I was also able to understand the perspective of the police officers which provided a richer context for the narratives of the participants to be interviewed against.

Initially, I believed that language would be a barrier, as I would not be able to glean the deep meaning of the words that the participants used. However, I found that the participants whose first language was not English were far more descriptive with their words in trying to convey meaning, and as a result their interviews were richer in detail.

Phenomenology requires a richness and depth of interview data, which means a longitudinal study. However, I did not have the luxury of time, as there were academic time constraints and reliance on third parties. In addition to this, not all of the participants that volunteered were willing to meet repeatedly, as they had busy lives. Therefore, the participants' interviews were assessed against a context analysis to ensure credibility.

### **3.2.10 Data Analysis**

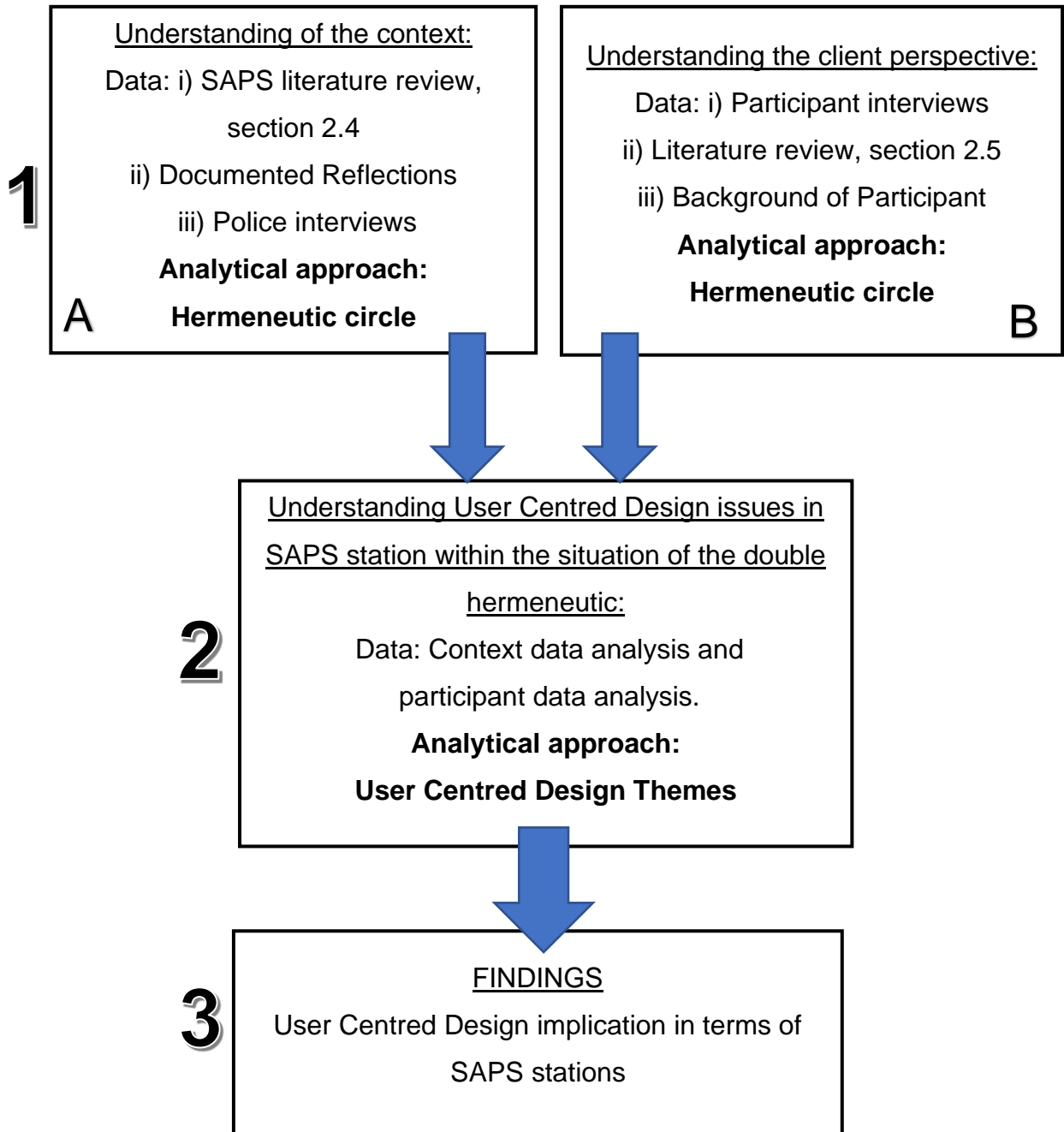
On a deeper level, van Manen (2017) explains that “Phenomenology in its original sense aims at retrospectively bringing to our awareness some experience we lived through to be able to reflect phenomenologically on the living meaning of this lived experience.” What van Manen (2017: 813) means is that the spirit of phenomenology is about the lived experience; that is people and their world view, and the interpretation of this lived experience through projected meaning, and “what gives itself.” Hermeneutic phenomenology is unlike Positivism because life experiences cannot be tabulated, coded or calculated because life experiences are messy and not universal, even though there are commonalities. Positivism is an approach where one has to be objective or removed from the process. Instead, hermeneutic phenomenology encourages involvement of both the participant and researcher (van Manen: 1990; Dowling: 2004; von Herrmann and Maly: 2013; Khan: 2014; Sloan and Bowe: 2014; van Manen: 2017; Bynum and Varpio: 2018).

Yet, phenomenology is not ‘airy fairy’ in its approach. While van Manen (1990, 2011b, 2011a, 2011c, 2017) does elaborate that there are traditions of data collection and interpretation that have been used by the past thinkers and authors of hermeneutic phenomenology. Hermeneutic phenomenology is purposeful in its reflection of data analysis and uses methods such as themes, the hermeneutic circle and methods of interpretation, such as the double hermeneutic.

The following sections outline how I approached the data analysis and for further clarification Figure 1 explains the methodology of this study, outlining the data and analytical approach of the data. Figure 1 shows that there were three processes of how the data was dealt with within chapter four and five. The first process found in chapter Four, was understanding the context (block A) and the participant (block B) via the hermeneutic circle as explained in section 3.2.10 A. The participant (block

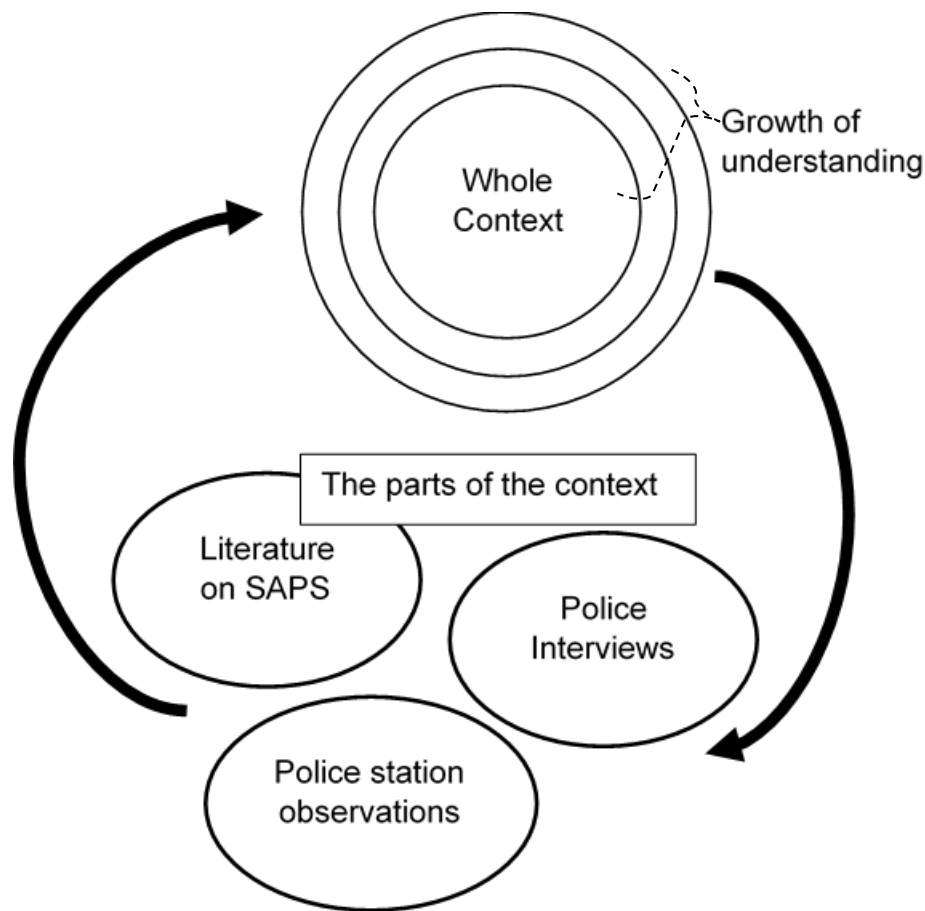


B) was also compared to literature on trauma as per section 3.2.10 B. The second process found in chapter Four, was to bring the two analyses together within the double hermeneutic as per section 3.2.10 C. Process two was done by the construction of themes by reflecting on the analysed context (section 4.1) and analysed participant (section 4.2 and Appendix E). The third process is found in chapter Five, where the findings of chapter Four is discussed. Appendix E is a condensed summary of transcripts which has been tabulated for easier comparison between participant opinions. Column headings are based on User Centred Design themes.



**Figure 1:** The methodology of this study, outlining the data and analytical approach

### 3.2.10 A. The Hermeneutic Circle

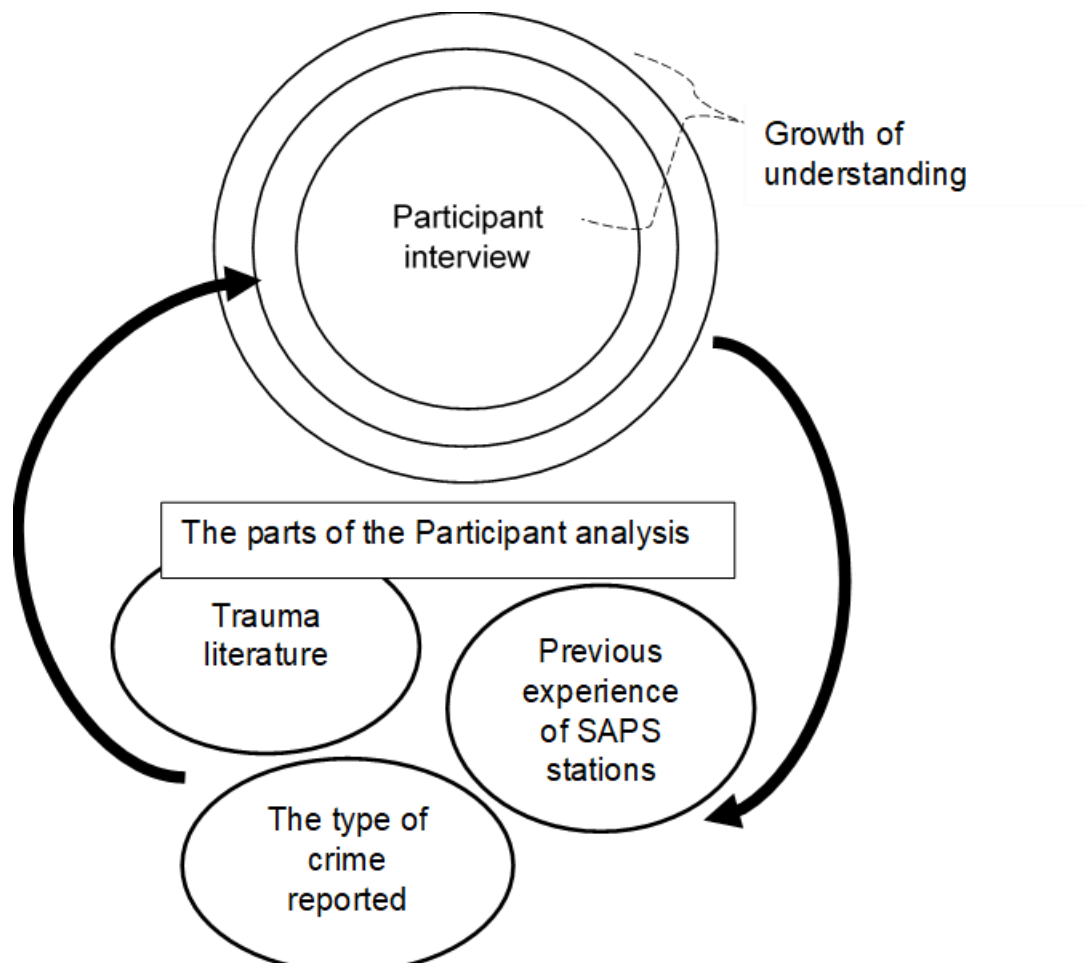


**Figure 2:** The hermeneutic circle as applied to understanding the context.

The hermeneutic circle is a process of thinking and interpretation, as Armour, Rivaux and Bell (2009: 106) elaborate that “the researcher’s use of self is the primary analytic tool; reading and reflecting on the description of the lived experience of respondents is the primary analytic activity.” I went through a process of thinking of the data as a whole, then in parts and then as a whole again, and this was repeated, all the while reflectively writing through this process at each stage (Lavery: 2003; Kafle: 2011; Mantzavinos: 2016; Peoples: 2017; Neubauer, Witkop and Varpio: 2019). This intentional thinking and writing caused me to be reflective (van Manen: 1990). The researcher’s reflective writing guides the data analysis; therefore, the researcher’s voice is through the interpretation of the data (Lavery: 2003; Tan, Wilson and Olver: 2009; Kafle: 2011; Neubauer, Witkop and Varpio: 2019). I cannot

fully understand the perspective of the participant, but I understand enough of the perspective of the participant in terms of the persona of User Centred Design.

The hermeneutic circle was applied to understanding the context of the SAPS station. The documented literature on the SAPS, the observations of the SAPS station and the interviews with the police officers were all parts of the whole. The process of reflective writing created a deeper understanding of the context, which later on contributed to a deeper, richer understanding of the participants' perspectives.



**Figure 1:** The application of the hermeneutic circle in participant analysis

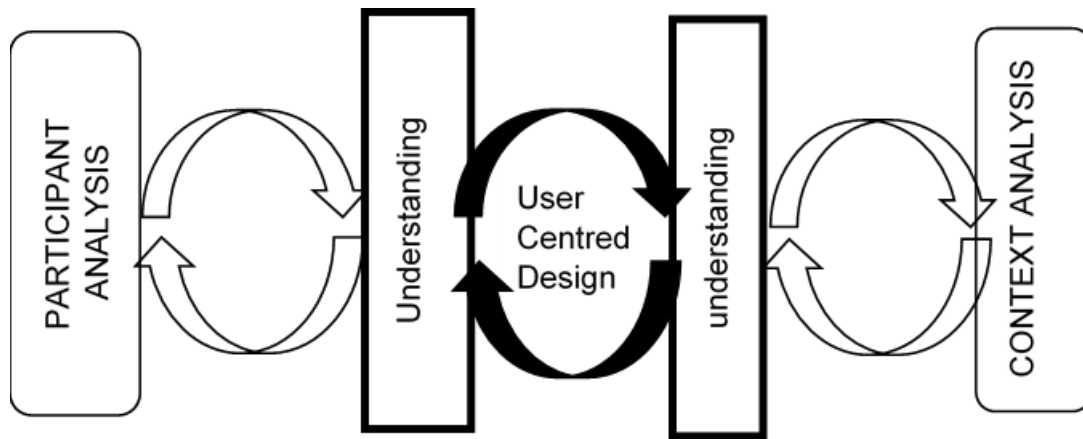
**Figure 2:** Double hermeneutic showing interpretation of data **Figure 3:** The application of the hermeneutic circle in participant analysis

Furthermore, the process of using the hermeneutic circle was also applied in a second analysis of data, to understand the perspective of the participant. As stated previously, I cannot fully understand the perspective of the participant, but I can understand enough of the participant's perspective in terms of User Centred Design. The hermeneutic circle was applied as the text (in this case the transcripts) was looked at as a whole, and then examined line by line for what stands out in relation to their experience relating to trauma and background information. To elaborate, in terms of User Centred Design, the participants' background information descriptions were based on the following information: i) the crime that the participant was reporting to the police station, ii) how many times they had been to a police station previously, iii) the perceived socio-economic status of the police station that the participant visited based on the area. All this information was considered in part of the interpretation process when listening to the audio interview and reading through the transcripts. However, this information is not included in this paper for the privacy of the participants and for fear of revealing their identities.

### ***3.2.10 B. Comparison between data source and literature***

In this study the idea that the client reporting a crime to the SAPS station would be experiencing trauma is a dominant idea of the persona of User Centred Design. Therefore, the participants' interviews were correlated against the documented literature in chapter two sections 2.4; 2.5 and Table 1: TIP 57 (2014: 62 and 63): Immediate and Delayed reactions to trauma. This was to establish that the participant was experiencing trauma at the time of reporting the crime, which would then allow me to infer an interpretation of the environment through this basic understanding of trauma.

### 3.2.10 C. Interpretation and the double hermeneutic



**Figure 4:** Double hermeneutic showing interpretation of data

In hermeneutic phenomenology the researcher attempts to interpret the participants' already interpreted experience. That is, the participant's experience is regarded as internal and unreachable, because it is filtered through their language (Nørreklit: 2006). Yet, the phenomenological researcher must make meaning of the participants' experience. For this to be attempted, great attention needs to be paid to the context of the participants' experiences (van Manen: 1990; Brogden: 2010).

The double hermeneutic is an approach to meaning-making which requires the researcher's reflexivity in the light of participant data and in the light of the study goals (Brogden: 2010). The double hermeneutic is the means by which the researcher places themselves within the research. Within this study, the first layer of the double hermeneutic is the context analysis (subject) and the second layer of the double hermeneutic is the participant analysis (object). These two layers of understanding (the participant analysis and the context analysis) are brought together through understanding User Centred Design which then completes the double hermeneutic. By using User Centred Design principles as a means of bringing the two halves of the double hermeneutic together, I am inserting myself into the research.

### **3.2.10 D. Themes**

Many hermeneutic phenomenologists agree that themes are an expression of the lived experience, where they express meaning of the phenomena, and all lived experience can be thematised (Creswell: 2007; Armour, Rivaux and Bell: 2009; Kafle: 2011; van Manen: 2011b; Adams and Van Manen: 2012; Sloan and Bowe: 2014; Bynum and Varpio: 2018). However, Ho, Chiang and Leung (2017: 1759) go one step farther and explain that one has to “dwell” in language to understand and find themes, where language “leads the thinking”. This allows for the true spirit of the ontological questioning of *Being* to be preserved within the use of themes.

Furthermore, Ho, Chiang and Leung (2017: 1760) explain that “thematic analysis helps us to reflect on daily taken-for-granted understandings and to unravel the surface of these realities, which we use to explain phenomenon under metaphysical traditions”. Themes are the analytical ordering of thoughts where we make known our interpretation of the data. It is in our nature to develop themes through our preunderstanding. Therefore, in order to guard against shallow interpretations of themes, I have asked myself particular questions to keep focus, which would use the current understanding of participant and context analysis to create User Centred Design themes. Within hermeneutical phenomenology these questions need to be focused on the self; that is how the phenomenon is seen through the perspective of the lived experience. In this instance these questions of focus are the perspective of the participants’ experience and how they use language to express it. I looked at the language used to describe the interior of the police station, the language used to describe their sensory perspectives and their relationships to others and their relationship towards the space that is described (Ho, Chiang and Leung: 2017).

In addition to this, van Manen (2011b, 2011a, 2011c) gives practical advice on how to sort through the data to find these themes, by using Macro-Thematic Reflection and Micro-Thematic Reflection, where the text is looked at as a whole and then through line by line analysis.

### **3.3 Conclusion**

I have explained hermeneutic phenomenology in depth to illustrate how this is a suitable philosophy to underpin User Centred Design, as both have the same epistemological aim. This aim is to understand the clients' (*Being*) perspective (lived experience) of the interior design police station (context). I have also elaborated on the appropriate tools for collecting and analysing the data that is in keeping with phenomenology. The following chapter deals with the analysis of the collected data.



## **4. Data Analysis**

Chapter four is an audit trail of dealing with the analysis of the data that was collected from literature and interviews. This chapter is divided into three main sections that relate to the concept of the double hermeneutic. The double hermeneutic is a situation where the researcher finds oneself in the position of trying to understand the participants' perspectives, but the participants are making sense of the situations themselves. The application of the double hermeneutic within this study is done within the practice of reflexivity. The first section of this chapter deals with understanding the context of the SAPS station. I used the hermeneutic circle to apply reflexivity within the first section that deals with context. Here I reflect on the whole and the parts of the SAPS station environment. This would be the first layer of the double hermeneutic. The second section, the second layer of the double hermeneutic, deals with understanding the participant. Here, too, I apply reflexivity through the hermeneutic circle. The whole of the participant analysis is exploring the participants' perceptions and the parts are what make up the accumulative experience. Finally, the third section deals with bringing the two layers, the context, and the participant, together, thereby completing the double hermeneutic. This bringing together of the two layers of the double hermeneutic is done again with the practice of reflexivity, but this time using the tool of themes. The themes that were used are based on the principles of User Centred Design.

### **4.1. Double Hermeneutic Layer One:**

#### **Understanding of the SAPS station context**

Before understanding the context (the first layer) of the double hermeneutic one needs to understand the context as a whole in all of its' accumulative parts. The understanding of the context (the whole) was done using the reflective device of the hermeneutic circle, as described in section 3.2.10 A. The reflections of the parts (documented SAPS literature, observed reflections and SAPS interviews) are

recorded as inferred interpretations of sections 4.1.1 to section 4.1.4. Then in summary of all the parts, section 4.1.5 is the inferred interpretation of all the accumulate parts that form the whole context.

#### **4.1.1. Part of the context: Documented SAPS literature**

Within the literature reviewed in chapter two, it seems that the SAPS station has two main identities. The first identity is based on its past Apartheid persona and the second identity is based on its present democratic persona. Per the literature review, in section 2.3, various referenced authors described the SAPS station of the past as a symbol of fear oppression, humiliation and brutality. The present SAPS station has since been described as stressful, without privacy, cramped, unsafe, disorganised, dirty, lacking in signage, poorly maintained and lacking Victim Friendly (VF) rooms. It was also found that the client expectations of the SAPS station environment depended on the socio economic status of the area that the SAPS station building is in (Pennington: 2004).

#### **4.1.2. Part of the context: Durban Police Station reflections**

My reflections and sensory experiences of Police Station One, Two and Three are recorded from moments, during and after the interviews with the police officers, where only the physical environment of the station has been reflected on and documented, as per sensory perceptions and impressions of the moment. The following reflections are consolidated and edited into sections 4.1.2 A to 4.1.2B.

##### **4.1.2 A SAPS station one**

###### ***The entrance***

I walk through the turnstile gate into a very narrow dark and dirty passage, and I immediately feel anxious. It is red brickwork, but it is black with dirt and none of the lights are on, even though one side of the wall has glazing with double glazed doors

that lead to a small bricked up courtyard. It feels like there is no light, perhaps not from a lack of natural light but it is one of those spaces that just absorbs the light in it, like dark matter. There are so many people walking through that passage. A few bumped into me as I bumped into them, but I was confronted immediately with an old beaten table with a man sitting at it. An officer in plain clothes. He is friendly and happy to help and leads me to the Station Commander's office.

### **The Community Service Centre**

The Community Service Centre (CSC) is a reasonably sized room with a brickwork counter and black granite top which takes up most of the space. The lights are bright, and all are working. There is a brickwork bench to one side along a wall. The whole room is painted a soft yellow, but years of scuff marks are at its base, and there is no skirting, so dirt is trapped against the crack between the bottom of the wall and the tiles. I am not sure what to make of the tiles, as they are an odd pattern that has aged quite a bit. My impression is that once they maybe looked like imitation marble. There is a crack on the floor near the entrance to the room, where it looks like someone has dropped something large and heavy. Besides the old, torn, wanted posters of angry faces, South African Rights posters and three red shining plastic highchairs, there is nothing else. The room echoes, and it feels cold and hard. Once all the sweaty bodies have gone, there is a quiet smell that is left behind of old furniture, dust and that cold concrete smell that I recognise from going to building sites.

### **The Victim Friendly Room**

There are two cane armchairs to the side of the entrance way that leads into the room. Between them there is a small side table with a cloth. The chairs look comfortable, and I am happy to see them. It speaks to me of "making an effort". But in the main space, it is a different story. It is small and it is dark, as the main ceiling light is broken and there is no natural light coming through the window to the side,

because the blinds are closed. The walls have been freshly painted in a muted olive green; in any other setting it would look sophisticated. The colour appeals to me, but with the lack of light and oversized dark brown, faux suede couch and imposing dark mahogany melamine cupboard, it makes the space feel sad. There is no light to make this colour work for the space. I can smell that strong odour of paint and turpentine. The posters are oddly placed on the walls, but they are a happy under the sea theme, appropriate for the location of the station and perhaps the space as well. However, the posters of South African rights are quite scary looking and visually loud. It takes over the entire space with its confusing paragraphs of writing with a blurry body part in the corner of them.

**Part of the context: descriptors of the SAPS station one building.**

The following table Two shows the adjectives from the reflections that are used to describe the different areas of the SAPS Station One, which in turn indicate the atmosphere that is felt within the space. This table of adjectives is a part of the whole (context) within the cycle of the hermeneutic circle, used to infer interpretation.

**Table 2\_ Part of the context: descriptors of the SAPS station one building.**

| <b>Entrance</b>  | <b>Community Service Centre</b> | <b>Victim Friendly Room</b> |
|------------------|---------------------------------|-----------------------------|
| Narrow           | Good size                       | No light                    |
| Dark             | Brick                           | Dark wall colour            |
| Black with dirt  | Black granite                   | Cane armchairs              |
| Brickwork        | Bright lights                   | Comfortable chair           |
| No lights        | Soft yellow                     | No natural light            |
| Glass doors      | Scuff marks                     | Faux suede                  |
| No natural light | No skirting                     | Dark melamine furniture     |
| Crowded          | cracks                          | Confusing posters           |
| Old beaten table | aged                            |                             |
|                  | imitation                       |                             |
|                  | old                             |                             |

|  |                          |  |
|--|--------------------------|--|
|  | torn                     |  |
|  | Red plastic high- chairs |  |
|  | echo                     |  |
|  | sweat                    |  |
|  | Cold                     |  |
|  | hard                     |  |
|  | Musty                    |  |

#### **4.1.2 B. SAPS station two**

##### **The entrance**

This is a large station. It says Community Service Centre in large, brushed steel letters over the slate exterior, but I still look at the sign board to the side and try and figure out where the entrance is. The doors are hidden behind large imposing columns. I walk in the wrong direction. I walk circles in the parking lot. I make myself nervous because I realise, I am walking towards the cell blocks. I walk back to the board to try again. I decide to walk up the slate stairs towards what I think could be the entrance. The lights in the vestibule are not working and the area is bare. I am hesitant about walking there. It does not fill me with confidence that I have the right place and it is dark. Darkness can be a sign that no one is there.

##### **The Community Service Centre**

I step into very bright light. I am confronted with these bulky brickwork counters that have brickwork dividers and clad in dark tile; they are dominating, oddly placed creatures just standing there. They remind me of a defender of a sports team, blocking the way to the other side. There are lots of people that fill the space, just too many for me to handle. Clearly the officers are busy. I do not immediately see anything to sit on. I am confused about where to go and who to talk to, so I walk out the room and back out again through the glass doors. I walk up another set of stairs and make circles again at the top, deliberating whether to go inside or back to where

I came from. There are no lights on behind those glass doors. There is an awful high-pitched sound coming from there that is overwhelming and makes me panic a bit. I calm myself down with a few deep breaths. I decide to go back to the room where I had just come from. This means going down a corridor to get to the CSC. Instead of going down the corridor, I take a longer way as it looks dangerous. In my mind I did not trust who would be wondering about in the dark, even in the police station. Again, I step back inside, as I look around this time, I see the wooden bench against the wall that was blocked by people when I had first gone in. I sit down and take the space in. The walls are light icy blue. I groan at the colour decision. Not practical for a space like this. The walls have a natural ombre that goes from the icy blue to the dirt brown from bodies brushing up against it and years of wear. It makes the slate look even harder against this light, cold colour. I then notice the colourful A4 signs stuck up with Prestik. Bright green, pink and white. They colour code the pigeonhole counters. These signs are torn with the Prestik oil coming through. Someone has gone and drawn all over one with pen. I suspect a bored client. As I wait for a free face, I am reminded of that same bare empty echo that Station One has, and how this station has it too. This one is just larger and more utilitarian in its appearance. It is a space that feels matter of fact and down to business. Nothing makes me want to stay. In situations like this I would normally hide in the book I am reading but instead I write, while I wait to be served.

### **The Victim Friendly Room**

Dismal is the only way to describe it. It is the tiniest room with one low two-seater armchair and a table squashed up against it. The table is too high for such a low chair. The room smells bad, like sweat and stale air. The lights are all broken. It has never been dusted or cleaned, as seen by the large dust bunnies in the corners of the window behind the armchair. The once white net curtains are now yellow. Everything is the colour of dust. I do not spend long inside. I just do not want to. I leave that space feeling horrified, then sad.

### **Part of the context: descriptors of the SAPS station two building**

The following table Three shows the adjectives from the reflections that are used to describe the different areas of the SAPS Station Two, which in turn indicate the atmosphere that is felt within the space. This table of adjectives is part of the whole (context) within the cycle of the hermeneutic circle, used to infer interpretation.

**Table 3\_ Part of the context: descriptors of the SAPS station two building**

| <b>Entrance</b> | <b>Community Service Centre</b> | <b>Victim Friendly room</b> |
|-----------------|---------------------------------|-----------------------------|
| Large           | Very bright                     | Dismal                      |
| Brushed steel   | Bulky brick counter-dominating  | Tiniest                     |
| Slate           | Dark tile                       | Dirty                       |
| Confusing       | Not enough chairs               | Sweat and stale air         |
| No lights       | Missing lights                  | Broken light                |
| Bare            | High pitched sound              | Dust                        |
|                 | Icy blue                        | Old                         |
|                 | Dirt                            |                             |
|                 | Wooden                          |                             |
|                 | Hard                            |                             |
|                 | Colourful signs                 |                             |
|                 | Echo                            |                             |

#### **4.1.2 C Police Station three**

##### **Entrance and Community Service Centre**

It is clear by the entrance that I am walking into the police station. The exterior walkway is adorned with police flags and plaques. The entrance is a double-glazed

timber door that is set with large windows on either side. The entrance flows directly into the CSC, making one large area. I walk into a space that has a very different atmosphere. It is busy, but it feels calm. It does not have that underlying hysterical tension that the other police stations that I have been to have. I can see immediately where I need to go, as the CSC desk is in a familiar office reception-styled desk, with warm timber countertop and inset light concrete base panels. The columns have a pretty light pink-purple shining mosaic tile. There is someone staring directly at me from behind this counter and we make eye contact. This officer then directs me to double doors at the other end with a sign board with various names on it, with each name and the direction I need to go, left or right. However, the corridor does not show me where to stop, unless I walk back and forth to see the names on the doors. A while later, I am back in the CSC, waiting to speak to someone else. I sit on a comfortable timber bench and look outside clean windows to manicured potted plants and flowers. It is a gloomy day outside, but I feel comfortable and warm inside. I am calm and relaxed sitting there. There is no dirt or litter lying about. There are no piles of papers on desks and shelves, files are in neat pigeonholes, all pointing in the same diagonal direction. All the wooden furniture is polished and clean. There are no randomly stuck up posters and papers with Prestik on any of the walls. Instead, all paper items are on a designated notice board. The space is filled with natural and artificial light, and there are no dark spots.

### **Victim Friendly Room**

I am greeted with bright blue happy walls and bright lights. It is a nice sized room and directly in front of me is a light grey couch. It looks new. There are two armchairs to either side and a glass coffee table in the centre of the room. On the one wall there are black and white ocean scenes. There is a fully functioning kitchenette in soft grey melamine timber. The kettle, cups and tea are easy to find. So is the newly renovated white tiled bathroom. It also has a grass mat and clean towels. It is a very comfortable space and I leave it feeling impressed.



### **Part of the context: descriptors of the SAPS station three building**

The following table Four shows the adjectives from the previous reflections that are used to describe the different areas of the SAPS station, which in turn indicate the atmosphere that is felt within the space. This table of adjectives is part of the whole (context) within the cycle of the hermeneutic circle, used to infer interpretation.

**Table 4\_ Part of the context: descriptors of the SAPS station three building**

| <b>Entrance and Community Service Centre</b> | <b>Victim Friendly Room</b> |
|--|-----------------------------|
| Flags and plaques                            | Bright blue                 |
| Glass  | Good size                   |
| Calm   | Light grey                  |
| Clear direction                              | New                         |
| Reception desk                               | Glass                       |
| Timber                                       | Black and white print       |
| Light concrete                               | Functioning                 |
| Light pink mosaic tile                       | Soft grey melamine          |
| Comfortable chair                            | White tile                  |
| Clean  | Grass matt                  |
| Manicured                                    | Clean                       |
| Warm   | Comfortable                 |
| Polished                                     | White trim                  |
| Lots of natural light                        |                             |

#### **4.1.3 Part of the context: summary of SAPS reflections and documented SAPS literature**

What stands out to me from the tabulation of the description of Station One is that there are a lot of dark colours, and a lack of natural and artificial light. This is further emphasised by the narrowness of the entrance and the well-used furniture and rooms (cracks and torn), and the use of hard materials (glass and granite). As the hard, dark and old items overwhelm the sensory experience of the space therefore the softer, gentler items (soft yellow and faux suede) or new items (red chairs) within the space are negated or look odd because there is just not enough to balance out the experienced inhospitable atmosphere of the SAPS station.

In like manner, Station Two has a particular sensory experience that also creates an inhospitable atmosphere, although Station Two has far more hard and bare artefacts. This sensory experience can be further inferred as intimidating when reflected alongside the interpreted documented literature (section 4.1.1).

Not only is SAPS Station Three well looked after, but there is also new furniture and décor items and the material choices throughout the station are varied. It seems that there is a contrast between light and dark, matt and polished, and soft and hard. What also makes this station stand out from the other two is that there is no vestibule or entrance lobby to the CSC. The station CSC is easily accessed straight from the road. The CSC also has a lot of natural light which makes a difference to the atmosphere compared to the other police stations. It was physically and psychologically warm, in comparison to the others.

#### **4.1.4 Part of the context: Interviews with SAPS officers.**

The User Centred Design needs of a space are not only based on the physiological needs of the user but also based on the physical requirements of the interior. The interviews with the SAPS officers provided understanding of the physical requirements, in addition to understanding the special limitations, restrictions and procedures that only a SAPS station would have in comparison to any other kind of interior space. These SAPS officer interviews also are part of understanding the whole of the context. The whole is the complete understanding of the context; the context being the SAPS station built environment. These interview questions were also detailed to provide for the lack of being able to sit and observe the Community Service Centre (CSC) due to gatekeeper restrictions. The questions that were asked were based on principles of User Centred Design and Frontline Service Delivery (FSD) and answers were transcribed, edited, and tabulated for comparison (table five). When interviewing the officers, I found that some of them preferred taking me on a brief tour of the station and others used Closed Circuit Television (CCTV) as a visual aid in giving answers to the questions that were asked. This resulted in writing down observed answers which added to the officers' spoken word. I also found that there was more than one officer needed for the interview as each officer was a "specialist" in their field of work and could fill in the gaps of knowledge that the other officer did not know. Table five is a tabulation of the police officers' interviews.

#### 4.1.4 A. Table 5\_Tabulation of SAPS officer interviews

| Police station one   | Police station two   | Police Station three  |
|--|--|---|
| <b>1. Is your police station accessible to everyone in the public?</b>                           |  |   |
| No, the layout is not accessible for those that are physically disabled.                         | Yes, the station is accessible for the physically disabled | Yes, the station is accessible for the physically disabled  |
| <b>2. Does each space, office, room distinctive from each other?</b>                             |  |   |
| No, just room signs  | No, police officers give directions                        | Yes, doors have names and there is a board that gives directions to offices. There is also a queue marshal, which is the CSC assistant. |
| <b>3. Do you find that clients wander about looking for places/ offices?</b>                     |  |   |
| Yes, but trying to find the court room   | Yes, we have lots wandering around                         | No.   |
| <b>4. Are there well-structured paths that link room to room or building to building?</b>        |  |   |
| No   | Yes  | Yes   |
| <b>5. Visually how are the different areas divided?</b>  |  |   |
| All the areas look the same.   | All the areas look the same.                               | All the areas look different.   |
| <b>6. Do clients get confused with where to go and what to do when trying to perform a task?</b> |  |   |
| No, the officer feels that clients do not get confused with directions and the order of tasks    | Yes. Clients get confused and lost                         | No, the officer feels that clients do not get confused with directions and the order of tasks   |

|   |   |   |
|---|---|---|
| <b>7. Do people often stand in the wrong queue or get confused with where to stand or wait?</b>         |   |   |
| No confusion with queues.   | No, as there is a floor plan in the CSC area that shows clients where to go. There is also a floor manager that can also give direction and guidance. | No confusion with queues.   |
| <b>8. Do clients complain about other clients jumping the line?</b>                                     |   |   |
| No  | No  | No  |
| <b>9. What physical features are there that provide a sense of security and safety?</b>                 |   |   |
| Motorised gates, everything is remote controlled. We have turnstiles at the entrance and security gates | Yes. Closed Circuit Television. Security gates, plain clothed officers on watch duty  | The actual police officers are the reassurance, that is that they provide safety and security. There is also an organisation that is called in sometimes to provide trauma counselling. |
| <b>10. Is there a flow of foot traffic in the office space?</b>   |   |   |
| No traffic flow, people walk into each other upstairs. Downstairs is fine                               | Adequate space to move about  | Office space is limited and there are no more than 2 officers per office  |
| <b>11. Do officers/ clients ever use furniture other than its original intention?</b>                   |   |   |
| Yes. Officers and clients sit on the tables   | Yes, that day an officer used the chair as a trolley  | No, if caught then there is disciplinary for officers, as there are cameras and things are followed up on.  |

|  |  |  |
|--|--|--|
| <b>12. Are the officers noisy in the CSC?</b>  |  |  |
| Other officers become loud when the station commander is out   | No. I think there is all about respect, and stuff like that.   | Yes. We do not see it as a problem to speak loudly to each other, especially in offices. They do interact with each other as they are not allowed to leave their post in the CSC.  |
| <b>13. Is the working office space open planned, cubical or divided?</b>   |  |  |
| Offices for individuals and small groups of people except that the CSC is open planned and separated from the offices                  | Offices for individuals and small groups of people except that the CSC is open planned and separated from the offices  | Offices for individuals and small groups of people except that the CSC is open planned and separated from the offices  |
| <b>14. Is there adequate airflow in the CSC?</b>   |  |  |
| Yes, but in some areas, there is air-conditioning  | Yes, there is adequate air flow  | It can get hot and stuffy when it's hot outside. The public donated ceiling fans in the CFC. The aircon in the offices are not connected as there is no money from the government. |
| <b>15. Please describe the lighting in the police station in the various areas.</b>  |  |  |
| The lighting has been upgraded in the offices to energy saving lights. New Lighting in the CSC. Still waiting on suppliers for the VF. | There are a couple of lights in the charge office, that are not working, most of the fittings have actually packed up due to load shedding. CSC, corridors and in front of public toilets and some floors don't have working lights. Police members only allowed to go up to a certain height on a ladder, the CSC is above our standards. | There station has had some renovations done due to public donations. The CSC was remodelled and the VF room as well. As a result, the lighting is good in every area.              |

|  |  |   |
|--|--|---|
| <b>16. When talking to clients do you find you have to shout?</b>  |  |   |
| Do not raise voice levels above talking, even when busy.   | Do not raise voice levels above talking, even when busy.   | Do not raise voice levels above talking, even when busy, but it is difficult to hear.   |
| <b>17. When working do you find that someone else's phone is distracting?</b>                                |  |   |
| No cell phones in CSC allowed, but it's such a small area you can hear everything.                           | No cell phones in CSC allowed  | No cell phones are allowed in the CSC area and there have been workshops on this.   |
| <b>18. Do you have images/ pictures up on the walls? What are they?</b>                                      |  |   |
| Yes, Top 10 most wanted person, rights and missing persons. We have rules for images that are not regulation | It is the code of conduct regarding rape. It's all about where you lay a complaint, women abuse. There are different things. | The posters that are up are wanted posters, lost pets and community news, information on organisations that can help such as the children's home and there are the normal required posters from government that speaks of rights. |
| <b>19. Do you have a tv in the waiting area?</b>   |  |   |
| No   | No   | Yes, clients have been impressed with this. The TV shows campaigns, police commitments; they show their community outreach programs, such as going to the old age homes. And clients have no control over the tv.                 |
| <b>20. Are clients and suspects ever in the same room at the same time? Why?</b>                             |  |   |
| Yes, there is only one entrance as the layout is an old house.   | No   | No, never   |

|   |  |  |
|---|--|--|
| <b>21. Can clients see the prison cells?</b>  |  |  |
| No  | No   | No   |
| <b>22. Are there separate entrances for suspects and clients?</b>   |  |  |
| No  | Yes  | Yes  |
| <b>23. Do you have a room that the traumatised can go to?</b>   |  |  |
| Yes   | Yes  | Yes. It has been renovated.<br>The items in it are sponsored and there is no involvement of public works.  |
| <b>25. Is this VF room clearly distinctive from a typical office?</b>                                       |  |  |
| Yes, it was being repainted.  | Yes, at the time of the interview there was a public person donating to the VF room because they felt it was not up to standard. The police officers have been known to break and abuse the room therefore the room is locked all the time and the key is given to a person in charge. | Yes, it is painted bright light blue with black and white artistic pictures in white frames, it has a central glass table and small table and chair painted white to the side. It also has a newly installed kitchenette and a bathroom that has been retiled. It looks really good. |
| <b>26. What kind of seating/ furniture is in this VF room?</b>  |  |  |
| One old soft couch, two cane armchairs, a narrow table with a wooden chair, a cupboard with tea and coffee, | In the VF room there is a table with a tablecloth and a flowerpot. There is a couch, a window with curtains and teddy bears which they hope makes it friendly and comfortable.   | Lounge seating i.e., couches and armchairs.  |
| <b>27. What kind of lighting is in the trauma room?</b>   |  |  |
| Broken / no lights  | Broken / no lights   | Good bright lighting.  |



| <b>28. Frontline Service Delivery (FSD)</b>  |   |   |
|--|---|---|
| Rules to FSD are followed. If there is a need then there is a budget, and procurement processes, there are different support structures. If you are talking about support in terms of crime, then there are internal structures, yes, when we need support, we get it. | The police are governed financially by budgeting control and each department is allocated a budget for different expenses. Budget is based on different needs and the finance committee makes recommendations, including allocation to basic necessities such as the furniture and blue lights. | There is someone appointed to be in charge of making sure that the FSD is implemented and adhered to. There are FSD workshops and the 6 point Batho Pele plan to follow. At all times each officer has the 6 point plan on them, and it is stuck up in the offices. |
| <b>30. What do you think the community impression of SAP service is?</b>   |   |   |
| We are trying to build trust, not many people like the police, but we have gained the trust of the people. People are willing to assist in the VF room which shows the officers that the SAPS are gaining the trust of the community.                                  | People first. It is a symbol of authority against crime.  | The police are a symbol of safety and security, and crime prevention. Kids are very happy to see the officers when spotted in public places like shops. The blue lights are a symbol.   |
| <b>31. What do you think the community's impression is of this building?</b>   |   |   |
| Not good   | The public's impressions are that the station is not that bad in comparison to other police stations in Durban. It is considered as a professional government building with good equipment.   | Yes, personally they feel that they have gained trust from clients because they have built relationships with a few. They also have clients confiding in them.  |

| <b>32. How is your station involved with the local community?</b>   |   |   |
|---|---|---|
| The social crime prevention team and the community liaisons are out there giving out pamphlets. The day of the interview community liaisons were giving pamphlets on information against elderly abuse. It is all helping change the image of the police. | The public's impressions are that the station is not that bad in comparison to other police stations in Durban, it is considered as a professional government building with good equipment. It is a symbol of authority against crime.  | The public is impressed with the building as the public have only seen worse in comparison. They have been told it is beautiful as a hotel reception. |
| <b>33. Do you hold any community events in the police station?</b>  |   |   |
| Yes, like the imbizo, the victim friendly event on rights, and we hold them in the boardroom as the CSC is too busy.  | The community police forum holds events that connect the public with the police, the police are present to give advice. And distribute pamphlets. The SAPS also use media such as the radio station Umzani Radio, where they talk about challenges and give updates and to inform the public in how to deal with crime. | Yes, they organise community events, held at other venues.  |

| <b>34. Do you believe that you have the trust of clients?</b>   |  |   |
|---|--|---|
| The station commander gives the public his personal cell phone number for any complaints. There is also the community police forum that have been elected by the community to be a service, a contact centre, any concerns from the community are raised at that meeting. It is believed that if the community didn't trust the SAPS, then they wouldn't come report the crime. | The trust of the public is shown by the fact that they phone for help. There is a suggestion box where the public can make complaints or compliments to the SAPS. It encourages the SAPS when they get compliments. Everyday someone does go through the box and they are dealt with. An example is that there was a police officer that got four compliments on service in one week from different people, so now the SAPS are implementing a certificate of acknowledgement. | Yes, personally they feel that they have gained trust from clients because they have built relationships with a few. They also have clients confiding in them.  |
| <b>35. SAP station positives</b>  |  |   |
| I am fond of the area where the station is. It's a very difficult area but you build relationships with the community. The officer has a soft spot for the elderly.   | The area that they work in and the colleagues that they work with.   | They like to help people, and they give an example of helping a homeless guy. They love the building because the old one was a trailer. The current building accommodates everyone, and it is in the best location. |
| <b>36. SAP station negatives</b>  |  |   |
| The building itself.  | Client abuse and the misconceptions of the job   | Office politics   |

#### **4.1.5 Whole context: Understanding of the SAPS station context.**

The whole context is understood as an accumulation of all its parts. The parts are per the reflected and written sections 4.1.1 to section 4.1.4. The interviews with the

SAPS officers are considered together with the documented literature reflections and the reflected observations, where all of these parts have bearing on each other and are understood as such.

The previously established sensory perceptions that were reflected on the SAPS station interiors (section 4.1.2) indicated that there are two SAPS station interior environment types. The first environment is the well-resourced station with a good layout and proper signage. The second SAPS station environment is one that could be classified as inhospitable, intimidating, and lacking in resources. The interviews with the SAPS officers provided insight into the two different SAPS station environments that were experienced. The SAPS officer interviews highlighted that the source of finance plays an important part in providing for the basic needs of a station. Unfortunately, the police are governed financially by budgeting control and each department is allocated a budget for different expenses. Budget is based on different needs and the finance committee makes recommendations, including allocation to basic necessities such as the furniture and blue lights. They are also governed by the Public Works department and the process that they have to go through to get items fixed. The resources that the SAPS station has, had direct implications for the type of appearance that was provided.

I found that Station Three was the station that received the most support from the public via donations and sponsorship, where Stations One and Two either had little or no financial support from the community. Financial support from the community for Station Three resulted in renovations and improvements to the Victim Friendly (VF) room and the Community Service Centre (CSC). Lighting is good in every area, good adequate signage was present, and Station Three was given fans and a television in the CSC. In comparison, Station One and Two had worn out spaces and furniture, within both the VF room and the CSC. Station One and Two had the

same issues of no proper signage and broken lighting. As a result, these two stations had issues of wandering and confused clients.

The layout of the three stations was an issue that was uniquely dependant on the original intention or circumstances of each SAPS station. Station One had a layout based on a repurposed house. Station Two had a layout that was specifically built for the purposes and functions of a busy large station, while Station Three's layout was purposed for a newly built building for a smaller and less busy area. The original intention had direct impact on the functions of the station and the safety of the clients, such as suspects being ushered through the CSC to the cell area at the back, as in the case of Station One. The layout also determined the amount of space the officers had and the kind of interaction the SAPS officers had with the community, such as having community police forums held at the station or at a different venue.

All three police stations were part of the Frontline Service Delivery (FSD) program and had officers in charge of ensuring that the station meets these requirements and that the SAPS officers conduct their duties in the correct manner. It is important to note this, as the implementation of the FSD meant that all three stations had access to the same resources from Public Works and the same building standard and officer professionalism required throughout all three stations. The FSD has eight Key Performance Areas that every station must adhere to and of these eight areas five of them apply to the built environment (Planning Monitoring and Evaluation South Africa: 2018). These five Key Performance Areas that apply to the built environment are:

1. Location and accessibility
2. Visibility and signage
3. Queue management and waiting times
4. Cleanliness and comfort
5. Safety

In addition to the FSD there is the adherence to the Batho Pele principles. During interviews with officers, three of the officers referred to the Batho Pele principles and two of these officers pulled out pieces of laminated paper from their personal wallets with the principles printed on them. The Batho Pele principles are also on posters on every police station CSC wall. These officers took pride in knowing these principles and conscientiously working with them in mind. Another officer explained that when a person comes into the station and has a serious case, these clients are then put on to a list that would put them at the top of the queue before other clients with complaints of a less serious nature and taken straight to the victim friendly room. The application of the Batho Pele principles have an implication on how officers and clients move about the stations, which implicate layout requirements. In addition, the FSD and the Batho Pele principles require that all clients are to be treated with dignity and respect. The perceived environment can contribute to the feelings of dignity and respect, as mentioned in section 2.2.4. by using intangible criteria while considering the wellness of space.

Once such unintended consequence of the application of the Batho Pele principles, is that due to the system of sitting in line waiting to see the officer, the clients still have to go through the process of standing and telling their case in front of the entire room before being ushered into the victim friendly room. Due to the current layout and set up of police stations, officers are not able to tell which case requires sensitivity until the clients are spoken to.

The noise in the CSC was a varying issue between the three stations. While Station One claimed that officers were not loud, I witnessed that every time that I was there, SAPS officers became so loud that I could hear them at the opposite end of the station; and at times interrupting my interviews. Station Two did not have shouting SAPS officers as there was a strict policy of no shouting or bantering within the CSC.

In stark contrast was Station Three where the general attitude of SAPS officers was that it was normal for them to be loud and for it not to be frowned upon. However, when I was at the station it was not noisy.

The reflections of the three SAPS stations in section 4.1.3 together with the interviews with the SAPS officers are both parts of the whole that when brought together create a development of understanding and bring a deeper understanding of context. To clarify further, the reference to the whole is the complete understanding of the context, the context being the SAPS station built environment that the participants step into.

The cumulative whole context understanding, which consist of sections 4.1.1 to 4.1.4; is that the SAPS station built environment is dictated by the original intention for the building, and whether this layout is conducive to procedures. The socio-economic status of the area has an impact on the appearance and maintenance of the station. The present-day SAPS station is completely about function. Therefore, the spaces are psychologically and physically hard on users. Noise within the CSC and VF needs to be a consideration factor of User Centre Design decisions.

It is also clear that the outlier of this study is the police Station Three as it has public donations that have contributed to the resources and appearance of the station. This has resulted in adequate signage and good lighting and ventilation. In reflecting on these differences, this does have an impact on the overall experience of a station. However, I believe that this means that Station Three is the exception rather than the rule. Station One and Two are the typical examples of police stations, as seen in the articles and reports established in section 4.1.1. Thus, the experiences of the participants will be viewed with the background of understanding the stations One and Two SAPS built environment. Station Three will be considered for the User

Centre Design considerations it does display, within the third section of this chapter when brining the two layers of the double hermeneutic together.



## **4.2 Double Hermeneutic Layer Two:**

### **Participant experiences and perceptions**

This section is the second layer of the double hermeneutic, the participant analysis. The application of the double hermeneutic within this second layer is done with the practice of reflexivity. Reflexivity is conducted by using the tool of the hermeneutic circle where the whole of the participant analysis is exploring the participants perceptions and experiences and the parts are what makes up the accumulative experience. The participant experience consists of the following parts: i) the participant background, ii) the previous SAPS station experiences, iii) the type of crime that was reported, iv) the preconceived environment expectations placed on the SAPS station due to the socio-economic status of the area and lastly v) the participant's traumatised or stressed state.

#### **4.2.1. Participant background as part of the experience and perceptions of the environment.**

The background information of the participants were parts of the whole, that were included in order to understand their perceptions as per the points 4.2.1 A, 4.2.1 B and 4.2.1 C. I made note of participant information that had a direct bearing on their opinion of the built environment such as their job, reason for being there, and their gender but this type of information was not always considered if it did not relate to the built environment. I made a conscious effort as far as possible to interview a variety of people with different backgrounds, culture, ages, and gender, in an attempt to gather a variety of responses.

#### ***4.2.1 A. Part of the participant analysis: previous SAPS station environment experience***

Here I examine the correlation between the number of stations that a participant had been to and how/whether this impacted their current experience. Eight out of nine participants had previously been to SAPS stations to report a crime. The four out of the eight that had previously been to SAPS stations either compared their experiences or got confused between experiences, as seen below with participants Eight's comment.

Participant Eight "...just remember filing, which it could be [name of station], which I could be getting confused [between the two stations that were visited]."

Therefore, their previous SAPS station experience had a direct bearing on the current SAPS station experience and influenced their outlook on the interior design of the SAPS station. In total, there were 15 SAPS stations that all nine participants had visited. This was important to consider as some of them had been to the same station and to the very station that I had previously visited. Therefore, opinions on the built environment of the same stations were compared for similarities and differences.

Table six shows how many participants went to the same station and which station I had been to as well. All SAPS stations have been given aliases from the letter A to K. All participants that went to the same SAPS station described the station in a similar manner. For additional data please refer to Appendix E. Appendix E is a condensed summary of transcripts which has been tabulated for easier comparison between participant opinions. Column headings are based on User Centred Design themes.

**Table 6\_ The overlap of visited SAPS stations by participants and researcher.**

| Station Name:  | A  | B                    | C              | D  | E  | F  | G             | H  | I   | J  | K  |
|--|----|----------------------|----------------|----|----|----|---------------|----|-----|----|----|
| Participants station visit:<br>(Participant alias given) | 1  | 1,<br>8,<br>and<br>9 | 1,<br>and<br>8 | 2  | 3  | 4  | 5<br>and<br>6 | 6  | 7   | 9  | 9  |
| The stations that the researcher visited:                | no | no                   | yes            | no | no | no | yes           | no | yes | no | no |

Table 6 shows that three participants went to the same station called “B”, two participants went to the same station “C” and lastly two participants went to the same station called “G”. In addition to this, I went to three of the same police stations as three of the participants (shown as highlighted).

#### ***4.2.1 B. Part of the participant analysis: the crime that was reported to the SAPS station.***

The type of crime that was reported and how the participant felt about this crime was considered as this impacted the experience of the SAPS station. All nine of the participants were not able to separate the reason for being at the police station from the SAPS station environment. As such, when talking about particular aspects of User Centred Design, the participant needed to explain the crime to then justify their answer that referred to an interior design aspect. For some participants they constantly went back to the crime as part of the SAPS station experience. I concluded from this that the trauma of experiencing a crime must be considered when trying to understand the perspective of the participant.

#### ***4.2.1 C. Part of the participant analysis: the perceived socio-economic status of the SAPS station***

The location and the perceived socio-economic status of the SAPS stations was considered. Because the SAPS station in a wealthier area was perceived to have more resources and to be better in appearance than the SAPS station in a less wealthy area, these perceptions impacted on the expectations that were placed on the built environment. As Pennington (2004) had found in her study, and as per the statement by previous Deputy Minister of Police Fikile Mbalula (2015: para. 5 line. 1) implied in the opening of the first FSD police station in Amagwe, that wealthier communities have better stations than poorer communities: "The Front-Line Service Delivery Project is thus levelling the field, by closing the gap between the poorly developed police station infrastructural capacities (scarce resources, skills, and isolated support), and those that are already developed, as found in affluent areas". Therefore, the area the station is in needed to be a consideration in understanding participant perspectives and opinions about the station's built environment. Table seven shows the perceived socio-economic area from the participant's point of view where the participant expresses it in the interview. However, where the participant did not express their socio-economic view on the area of the SAPS station, an interactive map of the wards of Durban that gives economic statistics of the area from the 2016 community survey was used (Wazimap: 2020) as an indicator of the socio- economic status of the area. All SAPS stations have been given aliases from the letter A to K, and are the same stations shown in the previous table six.

**Table 7 \_ The perceived socio-economic areas of the SAPS station location**

| <b>Station Name:</b>   | <b>A</b> | <b>B</b>           | <b>C</b>   | <b>D</b>     | <b>E</b> | <b>F</b>           | <b>G</b>     | <b>H</b> | <b>I</b>     | <b>J</b> | <b>K</b>     |
|--|----------|--------------------|------------|--------------|----------|--------------------|--------------|----------|--------------|----------|--------------|
| <b>socio-economic status of the SAPS station area:</b>         | Poor     | Upper middle class | Low income | Middle class | Poor     | Upper middle class | Middle class | Affluent | Middle class | poor     | Middle Class |
| <b>Participants station visit: (Participant aliases given)</b> | 1        | 1, 8, and 9        | 1, and 8   | 2            | 3        | 4                  | 5 and 6      | 6        | 7            | 9        | 9            |

I concluded that all participants felt that the station could be improved in some way, regardless of the socio-economic area of the SAPS station. Participant Three went to a poor station and expressed that it “looks like healthy”. Later that same participant states: “the wall of the buildings that were inside were sick, not pretty.” I took this to mean that the participant did not have expectations placed on the environment to look a certain way but that the general condition could be improved upon. The participants who visited the middle to upper class SAPS stations (participants 1, 4, 5, 6, 7,8 and 9), did have expectations on the SAPS station environment to look a certain way and their opinions reflected that. These participants opinions are recorded below.

Participant Six: “They can’t even be bothered to make this place; this space look good for you.”

Participant Eight: “there is a disconnection of what it is supposed to be. It’s like they should have the same grandeur of a hospital but not to that same scale.”

Participant Nine who went to three different socio economic status SAPS stations concluded that they were all very similar. The appearance of these police stations is further explored in section 4.3.

#### **4.2.2 Part of the participant analysis: client trauma as part of the experience and perceptions of the environment**

The perception of the SAPS station environment is influenced by the emotional state of the user, in this case the participant. Every participant that went to report a crime used a descriptive word or phrase for immediate emotional, physical or cognitive reactions to trauma. Their descriptions were compared against literature on trauma reactions in section 2.5; Table 1: TIP 57 Analytical Table: Immediate and Delayed reactions to trauma (Substance Abuse and Mental Health Services Administration 2014: 62 - 63). The preceding table Eight compares the participant description to the typical reactions to trauma. Table Eight was included to show the level of trauma the participant was experiencing and how this trauma would influence the perceived environment, thereby adding another contextual layer of understanding of the design of a police station.

**Table 8\_ The comparison of participant interview to trauma literature**

|   | <b>Participant quote</b>  | <b>Trauma comparison against Table 1 in section 2.5</b>   |
|---|---|---|
| <b>Participant 1</b>  | "I was so like... down and out"   | Detached  |
|   | "you don't know what to expect, you don't know anything."                               | Disorientation  |
|   | "what you could hear is pe, pe, pe... (puts a beating hand to chest).                   | Elevated heartbeat  |
|   | "Your mind is in denial; you don't want to think that this is, what it is."             | Denial  |
|   | " <b>Why</b> is he here?"   | Confusion   |
|   | " <b>They</b> were <b>hiding</b> something from me." And "People were <b>debating</b> " | Referring to 'they' and 'people' is an emotionally distant way of referring to family. The fact that the participant felt as if family were hiding something and then debating about it, made the participant scared. |
| <p>Participant One used the most words and phrases to describe their reaction to the trauma. This participant was nervous at the beginning of the interview. I could tell because the participant looked down when talking and fiddled with my phone/recorder constantly. When referring to the news of the death, I could feel the sadness. I have subsequently listened to this audio recording at least six times and every time this participant talked about their first encounter of the police station, I have felt the sadness and heard it in the participant's voice. Every time, I have had to take a break as it is emotionally challenging. When the participant started to talk about their present experience of the police station, the participant's entire body language became more aggressive; the participant's arms were waving about and there were huge gestures, and also the anger is heard in their voice.</p> |   |   |

|  |  |  |
|--|--|--|
| <b>Participant 2</b>   | "...because of the anger that was in me, you know?"  | Anger                                    |
| Participant Two's gestures became progressively more animated as the interview proceeded. Then the participant became reflective of the situation towards the end of the interview. There was a lot of frustration that was felt initially, then sadness when reflecting on the expectations of the police and how the participant was treated.  |  |  |
| <b>Participant 3</b>   | "I was so nervous; I was so scared"  | fear of the unknown,<br>feeling helpless |
| The nervousness in Participant Three's voice at the beginning of the audio recording is audible. This participant sat across from me on couch with arms folded on the participants lap and looking down. At one point the participant got up to make tea, when the conversation became difficult. I then left the room so the counsellor could talk to the participant. Once I came back, the participant's attitude had changed and became open, more expressive in pointing to items and furniture to aid explanation. |  |  |
| <b>Participant 4</b>   | "I actually felt like I was the criminal...So I did feel that I was doing something wrong by going there. But I wasn't." | guilt and anxiety                        |
| This participant, seated across from me, had their arms folded, sat back and stared. The participant was very intimidating. When talking about the incidents the participant leaned right in and put their hands on the table. Looked around often.  |  |  |



|   |  |   |
|---|--|---|
| Participant 5   | “that was a traumatic experience, and you are needing that kind of <b>containment</b> .”   | feeling of being overwhelmed and out of control |
| This participant sat on a couch across from me drinking tea. This participant was very reflective, as there were long pauses and looking at the cup or into the distance.   |  |   |
| Participant 6   | “I was feeling not very engaged.” And “I’ve never really tried to engage with the space...or even try and engage with the people in the space” | numbness and detachment                         |
|   | “when we were there, it was kind of blurry, even though there were scenes kind of blurred into one image.”                                     | Difficulty concentrating                        |
| When initially talking and remembering something the participant would suddenly look up at me and then just talk in a long stream. But then, at a point, this participant looked down a lot and stared at the floor when remembering the police station environment. There was something so sad about the participant when looking down, it was at the point of the below quote. I am not entirely sure why this is, but perhaps it was the quietness of the participants voice, and the participant shrinking into self. |  |   |
| Participant 7   | “I just kind of gone into this automatic thing... I’m just going for an insurance point of view.”  | helplessness and resignation                    |

|   |  |   |
|---|--|---|
| I could feel the resignation of Participant seven the moment they started talking. Physical motions included shrugging of shoulders and sighing which I perceived as a sense of resignation.  |  |   |
| <b>Participant 8</b>  | "I just thought that something was going to go down at any point."   | anxiety and fear  |
| This participant was the most relaxed with me, they used hand gestures, especially dismissive ones when talking about the most frustrating parts of the police station. With every point of frustration, the participant became louder. With regard to the quote, the participant was very serious. They looked me straight in the eyes, made a very definitive hand gesture of pointing and shaking their head no, very seriously. |  |   |
| <b>Participant 9</b>  | "Yes spinning, I was only just like more like what I was seeing, and everything is just like more almost like flitting images in my head, I can't believe what was happening." | denial, detachment, feeling out of control, racing thoughts, intrusive memories |
| This participant used the coffee cup in front as a shield. Whenever the participant started to feel uncomfortable with remembering, they would fiddle with the cup. There were some very long silences and staring into the distance. And shrugs of the shoulders. And at times hands became fists when angry   |  |   |

Table Eight shows that all participants were experiencing some degree of trauma.

#### ***4.3.3 The whole of the participant analysis: the participant perception and experience***

The participant's previous SAPS station experience had an impact on the whole of the experience of the SAPS station built environment. Most notably, participants had difficulty separating the experience of the crime they reported from their perceptions of the SAPS station environment. Every participant at the time was

experiencing various degrees of trauma. This meant that at the time of reporting the crime these participants were feeling anxious, on high alert and feeling vulnerable. The literature review (section 2.4) shows that trauma does affect the client's sensory profile, and therefore the sensory perception of the client within the police station. Those with Acute Stress Disorder or Post-Traumatic Stress have very different sensory profiles to people without these anxiety disorders. Three participants expressed that the environment amplifies their emotional state and all participants felt that the SAPS station environment could be improved on in some way, regardless of the socio economic area the SAPS station was in. More importantly the participant brings with them their background to the SAPS station which impacts their opinion of the SAPS station. Therefore, in bringing the two layers of the double hermeneutic together we are able to summarise the persona of the client as anxious, overwhelmed, hypervigilant, and having feelings of fear, vulnerability and helplessness, unable to separate past SAPS station experiences with the present day SAPS station experience; with expectations that the SAPS built environment is poorly maintained and aesthetically unpleasant.

#### **4.3 Bringing the two layers of the double hermeneutic together with reference to User Centred Design**

The two layers of the double hermeneutic were brought together using the process of reflexivity by creating User Centred Design themes. Themes are a method of organising life world experiences and creating meaning-making, which allow for the deeper interpretation of the experience through understanding the language of the participants. The lifeworld experience that is organised is the reporting of a crime under the condition of trauma and stress. The participants' analysis and the corresponding interviews were looked at against the context analysis. The following themes and resulting sub-themes are principles found within User Centred Design and the context and participant experiences were ordered as such.

#### 4.3.1 Theme 1: Atmosphere

Atmosphere, as Zumthor (2006) describes it, is the emotional quality of the space that is felt through the senses. To be moved emotionally by an environment is to experience a collection of conditions that creates the atmosphere, such as the architectural forms, colour, lighting, sensory stimulation, a person's mood and expectations (Zumthor: 2006).

This would be the consolidation of the sub-themes of:

- Lighting and colour of the interior of the SAPS station
- Sensory descriptions and emotional reactions to sensory perceptions
- Perceptions of police station furniture and the state of the environment

##### **4.3.1 A. Sub- theme 1: *Lighting and colour of the interior of the police station***

Lighting is a quantifiable element that contributes to the wellness of space, as it can alter the mood of a space because it alters sensory perception. Table 9 shows the participant and their statement that qualifies the sub-theme of lighting and colour.

**Table 9 Participant statements on lighting**

| Participant        | Qualifying statement   |
|--------------------|--|
| Participant Two    | Very dull but I wouldn't say dark but not too bright... when you go to the police station to report a case, you are already depressed by the case you have come to report. And now to get into that environment of that dullness, it makes you even more depressed." |
| Participant Seven  | "it doesn't feel dark from a light point of view but though the colour of everything else does feel a bit dirty and dark."   |
| Participant Eight; | "The lights were not working half of them...they were fluorescent lights with that suspended ceiling... so, it really was dark and   |

|  |   |
|--|---|
|  | dingy. And the colours, brick and that grey and that off blue... they always have these pictures that are yellow... and it was full that day, so it was even darker.” |
|--|---|

Most of the participants observed the lighting to be broken or dull. In addition to this the colours of the materials within the interior contributed to the overall feeling of darkness, making the interior of the police station feel dark, dingy and depressing. This further contributed to the negative mood of the participants. This, in turn, impacted the perception of the police station interior.

Participants also made comments on the colour choices within the SAPS station. Table 10 is a compilation of the participants comments as well as my interpretation of how the SAPS colours made them feel (column: inferred interpretation), where the participant did not expressly give the emotion that the colour made them feel.

**Table 10 Participant statements on colour**

| <b>Participant</b> | <b>Qualifying statement</b>  | <b>Inferred interpretation</b>                         |
|--------------------|--|--|
| Participant One    | “...even the colours, ok, because it is very rare to go to someone’s house and find this colour, you can only find this colour here, it <b>disturbs</b> you.”                          | The chosen colour makes this participant feel anxious. |
| Participant Three  | “The wall of the buildings that were inside were sick, not pretty... I would paint it like that colour of that house (points to house next door) the inside of my house is like that.” | The colour is unpleasant.                              |

|                   |  |                               |
|-------------------|--|-------------------------------|
| Participant Four  | "The blue walls, every police station has got those blue walls. And it's that kak blue." | The colour is unpleasant.     |
| Participant Eight | "that off blue"  | The colour makes them uneasy. |
| Participant Nine  | "and that off blue."   |                               |

The station colour blue is not comforting or familiar, or perhaps has political associations and as a result is not encouraging of positive emotions. These references to the colour blue are in relation to the station being "dark and dingy." The phrase or either of those words were used by most participants to describe the impression of the interior of the station.

#### ***4.3.1 B. Sub-theme 2: Sensory descriptions and emotional reactions to sensory perceptions***

The way that an individual perceives the senses, or the use of metaphors or similes can have an effect on the perception of a person or culture group. Descriptive words were highlighted that had significant connection to the sensory perception of the environment and my interpretation of this connection between expression and sensory perception is offered. Table 11 is a compilation of the participants comments as well as my interpretation of how they reacted to the sensory stimulus is offered if the participant does not expressly state the emotions that were felt.

**Table 11 Participant statements on emotional reaction to sensory perceptions**

| Participant     | Qualifying statement   | Inferred interpretation                      |
|-----------------|--|--|
| Participant One | "I know how noisy it is sometimes, sometimes we have to close the door because they are shouting." | The station is typically a noisy environment |

|                   |   |  |
|-------------------|---|--|
| Participant Two   | <p>"I think because I was a bit stressed, you know when you are stressed you don't like too much noise? You feel that, you wish that everything that could be, everything can accommodate your situation at that time."</p> | <p>loud noise added to the feelings of being stressed and overwhelmed</p>  |
|                   | <p>"It's the kind of smell that <b>talks</b> to depressed people"</p>   | <p>The smell has reminded the participant of a familiar work experience that has the connotation of depression and emotive qualities. It is only saying specific things to specific people. When you are in pain you smell pain, like when you are depressed you smell depression. To clarify, when one is in the situation it is all-encompassing</p> |
| Participant Four  | <p>"It's like a <b>coldness</b> almost"</p>   | <p>The lack of warmth or emotional feeling</p>   |
| Participant Seven | <p>"the building feels pretty run-down... It just feels a bit disorderly...they all have that similar kind of feel"</p>   | <p>this is in reference to other police stations that the participant has been to. The haptic sense of feeling the atmosphere of chaos. In addition to this the sight of the station gave the impression of chaos that added to the participants feelings of despair.</p>  |
|                   | <p>"The appearance doesn't look professional; it looks a bit dirty... I feel like walking into that space, I really do not get a sense that they</p>  |  |

|                   |  |  |
|-------------------|--|--|
|                   | are on top of things. It (the station) just feels a bit disorderly.” |  |
| Participant Eight | “It felt hard, so it felt cold.”                                     | physical touch had an emotive quality  |
| Participant Nine  | “That thing is freaking loud, that thing can <b>kill</b> someone.”   | In reference to a sound that the participant heard in the cell and subsequently upset the participant after the event. The sound is so loud and startling that it is violent |

The qualifying statements in table 11 highlight the type of atmosphere that is felt through the SAPS station environment. This atmosphere can be summarised as chaotic and depressing.

The following table 12 is based on the most commonly used descriptive word or the only descriptive word for a particular sense that the participant describes within their interview. These descriptive words were used to gauge the genius loci or sense of atmosphere of the police station that were talking about. Malnar and Vodvarka (2004) talk about the genius loci, that is the generative energy of the place that is felt, based on the same idea as Zumthor’s atmosphere (refer to section 2.3.3). One can think back on a memory and be able to recall time and place and base the memory on these sensory experiences, which they would also refer to as sensory imprinting. Table 12 is the summing up of the sensory imprints of all participants to create a whole understanding of the SAPS station sensory perception, which gauges the police station atmosphere that was felt.



**Table 12\_ The participants sensory experience of various visited SAPS stations.**

Refer to section 2.3.3 for a discussion on the sensory experience.

| <b>Participant</b> | <b>sight</b>                                    | <b>sound</b>                            | <b>smell</b>   | <b>touch</b>          | <b>movement</b>         | <b>space</b> |
|--------------------|---|---|----------------|-----------------------|-------------------------|--------------|
| <b>1</b>           | sad faces                                       | beating heart                           | death          | X                     | X                       | X            |
| <b>2</b>           | dull  | Shouting officers<br>Whispering clients | depression     | hard bench            | officers                | X            |
| <b>3</b>           | ugly  | talking shouting                        | body odour     | X                     | X                       | X            |
| <b>4</b>           | dingy   | radio                                   | body odour     | cold                  | X                       | small        |
| <b>5</b>           | piles of paper<br>dark                          | Very noisy                              | body odour     | grimy                 | self officers<br>people | open         |
| <b>6</b>           | Melamine wood                                   | X                                       | X              | Melamine wood<br>dirt | X                       | small        |
| <b>7</b>           | bright light<br>dark materials<br>Melamine wood | X                                       | old greasy pie | X                     | officers                | small        |
| <b>8</b>           | Dark dingy                                      | Shouting officers                       | body odour     | cold                  | officers                | small        |
| <b>9</b>           | grey  | Toilet flushing                         | X              | cold                  | X                       | X            |

Although it is very difficult to pigeon-hole every participant's sensory experience into neat categories of the exact same experience, precisely because each participant experienced the SAPS station environment in their own unique way, there are

commonalities in a few of the participants' descriptions. Descriptions that related to the sense of sight were based on first impressions, that the SAPS station is generally run down, and that it was dark or dingy. Most of the participants felt that the SAPS station was too noisy, and this added to their stress and anxiety. The primary smell described by the participants in the station CSC was body odour. Other smells that were described included the smell of urine, and in one participant's case the smell of "vrot oily pie" as food was being eaten. To further illustrate the perceived environmental experience, Participant Six couldn't remember the smell of the station but gave it a smell based on the emotional experience, describing it as: "how we felt at the time in making that report, and maybe it was in conjunction with the experience we had, but it felt like a dustbin... because we felt watched, I would have probably, like a turpentine smell, like a sharp acidic smell." The touch experience was mostly described as cold and hard. The movement that was experienced was not from the client but that of the officers and the perceived size of the station was commonly described as small.

#### ***4.3.1 C. Sub-theme 3: Perceptions of police station furniture and the state of the environment***

Section 2.4.1 mentions the current state of furniture within the SAPS station as broken and poorly allocated and section 2.4.2 concludes that the appearance of the furniture reflected how resourced the SAPS station was as a whole. It was important to ask the participant what the state of the furniture was as this question determined if the participant made the same conclusions as the literature discussion in 2.4.1 and 2.4.2. In addition to this, Malnar and Vodvarka (2004) make the statement that furniture determines the friendliness of a room, in turn making the visitor feel welcomed or not.

The following tables (tables 13 and 14) in this section are compilations of the participants description of the furniture that was seen and used at the SAPS

station. The type of furniture used and seen was divided into two groups, general furniture, and the CSC counter, as the prominence of the CSC counter warranted a separate table. Only where there was body language used by the participants to emphasise their feelings towards the furniture, and which at that time stood out to me was recorded and added to the table below to further emphasise their emotions towards the furniture and CSC counter.

**Table 13\_Participant comments on the general furniture:**

| <b>Participant</b> | <b>Qualifying statement</b>  | <b>Body language</b>                            | <b>Inferred interpretation</b>   |
|--------------------|--|---|--|
| Participant Three  | "The chairs were like that make and with handles on the side... they were old"                             | the participant was pointing to an office chair | The typical chair style that was used is the office chair  |
| Participant Five   | "I think people were sitting on the floor... furniture that is old and that has not been well maintained." | Not documented                                  | In some places of the station people were not able to sit on chairs, this is not considered as dignifying a person |
| Participant Nine   | "the furniture was old like that typical South African office furniture. Very, very lifeless."             | Not documented                                  | The current style of office furniture was not liked by the participant.  |

Two other participants also used the description of 'typical South African' to relate to furniture or the space. When I asked these participants what they meant by this description, it was that the office furniture they commonly encountered looked like it was of poor quality, or that the space was disorganised.

**Table 14\_ Participant comments on the CSC counter:**

| <b>Participant</b> | <b>Qualifying statement</b>   | <b>Body language</b>                 | <b>Inferred interpretation</b>              |
|--------------------|---|--------------------------------------|---|
| Participant Two    | “And when you report, there were these cubicles; not cubicles as such, it’s a long desk divided into little panels... These men sitting across, it wasn’t too welcoming.” | uses hand gestures to show a barrier | the CSC desk is a barrier                   |
| Participant Four   | “It would be the width of the room, less a little space for them to walk from the front to the back of the counter.”  | Not documented                       | the desk is a physical divider of the space |

All the participants described furniture that was broken, or old. Often there were not enough seats and people had to sit on the floor or stand for long periods. The CSC counter was a prominent feature of the station that took up a lot of space and divided the station into two sections, the officers’ side and the clients’ side, and this created a physical and psychological divide. The lack of furniture also reinforced the notion that the participant did not feel welcomed into the SAPS station. The poor opinion of the appearance of the station and of the furniture is further emphasised by the adjectives that were used throughout all interviews by the participants. These adjectives are as follows:

|             |        |             |
|-------------|--------|-------------|
| Dull        | Grimy  | Torn        |
| Not healthy | Old    | Dilapidated |
| Sick        | Unkept | Dirty       |
| Dodgy       | Cold   | Run-down    |
| Kak         | Dark   |             |

Furthermore, table 15 is a compilation of the participants comments on the general appearance of the stations that the participants had visited.

**Table 15\_Participants comments on general SAPS station appearance:**

| <b>Participant</b> | <b>Qualifying statement</b>   | <b>Body language</b>     |
|--------------------|---|--------------------------|
| Participant One    | "Yes, it's not a good thing, that's why I'm saying if a vulnerable somebody comes in here, before opening his or her mouth, he would look around and conclude that I'm not going to get help here, because of the environment."   | face of disgust          |
| Participant Eight  | "Then there is always some sort of awareness poster, always torn, always torn! Never new crisp clean one - with old Prestik, you can even see the oil marks coming through."<br><br>"...They are showing you a broken-down neon light. It's just sad and old. And then you see these old tannies who go there for the nostalgia, but the truth of the matter is, there is nothing there. That's what I think of the current police stations." | Hands as exclamation aid |

Table 15 shows that the participants did not like the general appearance of the SAPS stations that they visited and as a result, the appearance formed a poor opinion of the SAPS officers.

#### **4.3.2 Theme 2: Affordance and Territoriality**

Norman (1998) explains affordances as using an object according to how we perceive its use. This principle according to Maier, Fadel and Battisto (2009) can be directly translated into interiors due to the nature of buildings and objects. We use them as how we see them. Within the police station interior, the layout of the

space needs to consider the affordance of it. Territoriality for people, as explained by Hall (1959), is the space which they interact in. And part of this interaction, which is dependent on culture, is the taking possession of it for use and for its defence. It is the emotional relationship of space where affordances are the physical relationship of space. This would be the consolidation of the sub-themes of:

- SAPS station comparisons with other familiar environments
- Perceptions of safety and security
- Perceptions of privacy and confidentiality
- Experience of size and layout

#### ***4.3.2 A. Sub-theme 1: SAPS station comparisons with other familiar environments***

Participants compared the police station to their home environment or to a space that was familiar to them or to close relationships. This was to emphasise that the station was not a familiar space, that the station lacked qualities that made them feel emotionally comfortable, psychologically safe or provided a sense of privacy. The station represented the space belonging to the police officers and not the participants. This in essence meant that the police station was the territory of the police and represented an 'us versus them' power struggle. The qualifying statements are presented in table 16, together with inferred interpretation is offered.

**Table 16\_ Participants comments on comparisons with other familiar environments.**

| <b>Participant</b> | <b>Qualifying statement</b>  | <b>Body language</b>                         | <b>Inferred interpretation</b>  |
|--------------------|--|--|---|
| Participant Two    | "but when you get into <b>my office</b> it's big, you know?"                                     | pointed up and slightly around               | In comparison to the police station. That is, it's light, airy and private  |
| Participant Three  | "We just went there to sit. Like you came here to <b>my house</b> and you didn't open a window." | sat with hands in lap, looking slightly down | Respect for boundaries of the police station as it is their space not the participants to do as they wish.                                  |
| Participant Eight  | "Maybe my uncle and my mom"  | Not documented                               | In reference to feeling safe, these relationships are what made the participant feel safe. Not the station, very adamant with the statement |

#### **4.3.2 B. Sub-theme 2: Perceptions of safety and security**

All the participants were asked if they had felt safe at the SAPS station. This sub-theme is based on those answers. In addition to this, anything that the participant describes as making them anxious was considered a threat to their sense of safety. Seven participants directly said that they do not feel safe in a police station. When talking with the participants the experience of the crime was very much part of the experience of the station and it was difficult to separate the two. The following comments are in relation to the environment increasing the sense of anxiety in the participant, which is considered to be a threat to safety. The qualifying statements are presented in table 17, together with inferred interpretation is offered.

**Table 17\_Participants comments on perceptions of safety and security**

| <b>Participant</b> | <b>Qualifying statement</b>   | <b>Body language</b>      | <b>Inferred interpretation</b>  |
|--------------------|---|---------------------------|---|
| Participant Two    | “While I was sitting there, I was thinking, what if people barge in and start shooting? That came through my mind because I couldn’t see any features of safety.” When asked: “Did those thoughts of people barging in, shooting and attacking the police, was that related to your experience?” The participant replied, “It was! It was!” | Not documented            | Feeling unsafe in the station environment was part of the anxiety and stress that was felt during the crime.            |
|                    | “And like I said there was this door that all the officials kept coming in and it was opened.”  | used moving hang gesture  | The movement increased the participant’s anxiety  |
| Participant Five   | “It was such a weird, it was almost not a room, it was almost open... that environment didn’t seem welcoming and contained”   | reflective and looking up | the expansive feeling of the station was too large and chaotic to control, this created anxiety                         |
| Participant Six    | “There is a door now that you just walk in through and you walk quite far, well I mean relatively far for that kind of distance and then you have the parking, so it just doesn’t feel safe”  | Not documented            | the participant felt exposed from the walk to the station entrance, being exposed in an open area created more anxiety. |



|                   |   |  |   |
|-------------------|---|--|---|
| Participant Seven | “I do think that maybe the door to the right that you can kind of see when you are at the table, probably is a bit distracting, and probably makes you feel a bit conscious of people coming in and out and not knowing why they are there.”  | used hand gestures in explaining the layout and movement | The uncertainty of who was there, and general movement made the participant feel anxious. |
| Participant Eight | “I was scared about the area... I just thought that something was going to go down at any point. Like for real for real.”   | <u>Not document</u>                                      | this is a similar experience to the crime   |
|                   | “What I didn’t like was that, because of how anxious I was, the police there kept on coming in and out. It was so busy because of them coming in and out. There was so many of them and it was part of this whole thing of, was there something going on? Is there something I don’t know? Because they are yielding guns and then my mind was gone, it was like, duck, hit the wall or something.” | big hand gestures  | The uncertainty of who was there, and general movement made the participant feel anxious. |

Table 17 shows that the participants felt anxious by the general movement of people, which created uncertainty within the situation that they found themselves in, together with the feeling of being exposed either threatened the sense of security that the participant felt or added to the already threatened sense of security.

#### **4.3.2 C. Sub-theme 3: Perceptions of privacy and confidentiality**

All participants were asked if they had privacy or confidentiality. The following comments are the response to this question. The issue of privacy in a space speaks

to the psychological and physical aspects of an interior, as Caan (2011) describes when referring to well-designed spaces that create trust and dignity for the person using them. The issue of privacy for participants created many volatile reactions and was a point of pain. Eight of the Nine participants did not have their privacy concerns met when reporting a crime; the only exception was Participant Three, who gave their statement in the Victim Friendly room. In addition to not receiving privacy for themselves, the participants heard the private matters of other clients. All participants wanted complete and authentic privacy to discuss their matters. Authentic privacy was considered to be a separate room. Participant comments are compiled into table 18.

**Table 18\_Participants comments with regards to privacy and confidentiality.**

| <b>Participant</b> | <b>Qualifying statement</b>   | <b>Body language</b>  |
|--------------------|---|---|
| Participant Two    | “It made me feel very sad, very angry because remember, some of these people came to report domestic violence and they wouldn’t want any other person, it’s confidential. It’s something between you and the person that you are reporting it to. Now for me sitting on the bench to be able to hear this, it’s so intruding and it’s so, degrading. If I can put it that way. So even when I reported my case, I felt that there was no privacy, everybody could hear and moreover I have a big voice and because of the anger that was in me you know.” | face of disgust.<br><br>face of frustration,<br>sitting forward,<br>with hands on table |

|                          |   |                             |
|--------------------------|---|-----------------------------|
| Participant Six          | "I think I might be able to speak softly but I don't think I would be very comfortable. I wouldn't like to just air what I'm saying. If I had to think about it and if I had to go on my own, I would ask if I could sit down in a private, in another part of the police station. Because if I had to report something that was serious, I would not want many witnesses." | completely shrunk into self |
| <u>Participant Seven</u> | "Ah no, I wouldn't say so. You're pretty much staggered between people and you would have a foot or so between the two of you, so no. If it had been a more private matter, it wouldn't have been."   | Not documented              |
| <u>Participant Eight</u> | "No, there was no privacy for anyone, because we all heard of the case of the poor foreign couple whose items were stolen; I could tell you the whole story. And then there was another, the person with the strong armpits, who was a foreign national, had a complaint, then there was us."   | Not documented              |

Table 18 shows that the lack of privacy and confidentiality created negative emotions for the participant thereby creating a poor opinion of the SAPS officers.

#### **4.3.2 D. Sub-theme 4: Perception of station size and layout**

Size was brought up by the participant when asked what their impression of the station was when they walked into it for the first time. Size of a space is based on the haptic sense and is a perception. In general, the participants felt that the police station size was too small, as in the haptic sense of body perception; that it was too small and in some cases the station was physically too small. This made the participants feel cramped and uncomfortable and that the boundaries of personal space were being violated. Table 19 is a compilation of the participants comments and my interpretation of their meaning.

**Table 19\_Participants' perception of station size and layout**

| Participant       | Qualifying statement   | Inferred interpretation  |
|-------------------|--|--|
| Participant Four  | "And in the front, it's really small.<br>And if you have more than three people in there, there is only space for two to sit." | there is always one person standing because there is not enough room for more chairs |
| Participant Six   | "It just felt small, at least it felt small at the time, but I don't remember what it looks like."                             | haptic sensory perception of space   |
| Participant Eight | "I felt like that place was too small and because it was crowded it felt even smaller."  | haptic sensory perception of space   |

Table 19 shows that in general there is never enough space for all to sit and move as the SAPS station is too small.

#### **4.3.3 Theme 3: Visibility**

Visibility is where the 'natural signals' as Norman (ibid) calls them are visible clues that give indication and direction, such as the direction of affordances, or the provision of wayfinding. Wayfinding is a system of navigating complex environments with the use of signage, landmarks and clear directional paths. An absence of clear visibility leads to additional stress or confusion, especially in a time of trauma. Table 20 is a compilation of participants comments on the signage, clear sense of direction and visibility within the SAPS stations and their feelings towards the provision or lack of provision of these 'natural signals'.

**Table 20\_ Participant comments on wayfinding systems and clear direction**

| <b>Participant</b> | <b>Qualifying statement</b>  | <b>Inferred interpretation</b>  |
|--------------------|--|---|
| Participant One    | "I couldn't even see if there's a door there ...because you have your sense, if you not, you don't know, you don't know anything."   | that is not thinking or sensing clearly. Participant One is an example of a confused client in emotional distress. In such a state, openings and directions have to be clear to see   |
| Participant Five   | "It was, it was a bit <b>confusing</b> where to go in, because there is like... a driveway and a walking entrance and a driveway, but ja, it was a bit <b>confusing</b> ... It was very <b>chaotic</b> , and nobody could really tell us where to go." | Participant Five is an example of a client not being able to be directed through the space or through the process of reporting a crime by the use of signs, landmarks or clear room distinctions. Nothing about the layout to the entrance was directionally clear. |
| Participant Seven  | "I know where it is, but if I didn't know where it is, I would find it hard to find. It's not clearly signposted, it looks like a house."  | The façade did not look like a SAPS station and this created confusion in a suburb.   |
| Participant Eight  | There isn't even any signage inside, like you just told me there is a trauma room, and in my life, I have never walked in and saw a sign that says this way to the trauma room...<br>The reception doesn't even say reception."                        | The SAPS station has no signage at all according to the participant.  |

Most of the participants did not see any signage or found that the layout or entrance was confusing. The only exceptions were the clients who had been to the police

station before and knew where to go from previous experience. This only added to the stress of those participants that were confused, or disoriented due to the trauma, such as Participant One.

#### **4.4. Conclusion: The general perception of the interior of the police station**

The participants' general perceptions of the SAPS were based on their impression of what the space was perceived as, mainly through visual cues, which the participants interpreted in the following comments. Three of the participants stated that the environment looked unprofessional and that this directly reflected the officers themselves.

##### Participant One:

"Yes, it's not a good thing, that's why I'm saying if vulnerable somebody comes in here, before opening his or her mouth, he would look around and conclude that I'm not going to get help here, because of the environment." (face of disgust)

##### Participant Seven:

"The appearance doesn't look professional; it looks a bit dirty... I feel like walking into that space, I really don't get a sense that they are on top of things. It (the station) just feels a bit disorderly." (dismissive hand gesture)

##### Participant Eight:

"Then there is always some sort of awareness poster, always torn, always torn! Never new crisp clean one with old Prestik, you can even see the oil marks coming through." (hands as exclamation aid) and later, "...They are showing you a broken-down neon light. It's just sad and old. And then you see these old tannies who go there for the nostalgia, but the truth of the matter is, there is nothing there. That's what I think of the current police stations."

The visual cues used to make these judgements were: Prestik and Sellotape to stick up signs, peeling paint, scuff marks on walls and floors. Furthermore, participants used the word “dirty” to describe the interior of the station. This was to show that the condition was ingrained into the station and gave the overall sense of a lack of care and maintenance. The second biggest visual indicator was the amount of paper on desks and the poor state of basic stationery. This left the participants feeling like the officers were disorganised and that nothing would get done. In conclusion, the participants’ perception of the SAPS station is that it is unprofessional, unwelcoming, unfriendly and not reflecting of care. The participants also believed that the environment was reflective of the SAPS officers.

In addition to this the issue of safety and privacy were at the core of the experience of the SAPS station. Seven participants did not feel safe in the police station, while one participant felt distinctly safe (due to having privacy), and two participants were indifferent to the feeling of safety. Of those that did not feel safe in the police station, four of them felt like a criminal and three of the participants had strong urges to leave and not engage with the space or people. Two participants felt like criminals because of the association of the functions of the station, and the third participant spoke of the media priming them into believing that the police were not safe. Although these were underlying factors of these three participants, on the whole, all of the participants’ feelings of safety can be attributed to the following factors:

1. The type of crime that was committed against the participant in terms of causing the participant to be hypervigilant and hyper aroused at the time of reporting the crime to the station in keeping with Acute Stress Disorder and Post Traumatic Stress signs and symptoms.
2. The anxiety of the participant made them aware of the feeling of openness, awareness of open doors and windows and attributed to the feeling of being watched.

3. The movement of people and officers within the space further made the participants feel anxious.
4. Loud noise contributed to feelings of overwhelm and anxiety.
5. On the issue of privacy, how the statement was taken was a strong determiner of how private and in turn how safe the participant felt.
6. The participants felt directly threatened when they encountered suspects - whether those suspects were handcuffed or not. Alarmingly there were several incidents of suspects being led through the space or made to sit in the CSC. There was one incident where a suspect who was not handcuffed was made to sit in the CSC with the participant. This obviously made the participants feel vulnerable to attack.

As per the previous points the feelings of hypervigilance, high arousal and anxiety induced movement, openness and being watched contributed to the overall police station experience remarkably. In many of the participants' cases they had been to a number of stations and the worst experience then tainted the other later experiences of the police station. The worst experience often being the occasion they had to report a crime. When talking with the participants it was very difficult to separate the crime from the experience of the station, as it was an integral part of experiencing the station. Chapter five will discuss the analysis of the data in greater detail.



## **5. Findings and Discussion**

### **5.1 Introduction**

Chapter five is a discussion on the analysis and findings of chapter four. The application of User Centred Design in the SAPS station built environment is to ensure that the client has a positive experience of the station. This would require the SAPS station to communicate a sense of safety and inspires confidence and trust in the SAPS station officer's abilities, as this is the goal of the SAPS. To understand if the participants' experience of the SAPS station environment and if the SAPS message of safety, confidence and trust was experienced, interviews were conducted with nine participants. Eight of the nine participants were at the SAPS station to report a crime, whereas the ninth participant initially went to report a crime but through a set of circumstances, was falsely accused and then arrested. To further understand the participants' experience in context, an element of User Centre Design, a contextual analysis was conducted using the hermeneutic circle. The participant was further understood in a participant analysis that utilised the hermeneutic circle. Furthermore, the participant analysis was reflexively brought together with the context analysis by utilising the double hermeneutic, through the use of themes. The outline of themes and the data analysis was conducted and detailed in chapter four. This chapter five now considers the data analysis from chapter four and offers considerations, comments on and contemplates implications of User Centre Design application to the SAPS station.

### **5.2 The disconnection between reality and expectations**

The analysis of the data in chapter four found that the essence of the police station for a traumatised client portrays itself as a space that does not care. That is, the SAPS station has qualities that can be perceived as emotionally distant; in the sense that the police station environment is not warm, friendly, or welcoming. There were

particular elements of the SAPS station environment that were considered to be unprofessional and were direct reflections onto the SAPS officers themselves.

Prestik and Sellotape to stick up signs, peeling paint, scuff marks on walls and floors, and messy desks and poor filing were visual cues to the participants that the SAPS officers were unprofessional themselves. The Community Service Centre (CSC) counter is perceived as a barrier that reinforces the view that the station belongs to the police. The SAPS station is not a safe space because the clients have no sense of place. The SAPS station is cold and hard, seen in the colour blue and material choices used. The lack of chairs or the provision of hard benches only reinforces this view. The broken lighting or lack of lighting creates an atmosphere of sadness or fear depending on how little light there is. The smell of the station is unpleasant due to lack of ventilation and overcrowding, the most common smell was the smell of body odour. Officers are often moving about because of poor layout decisions, because the SAPS station was once a home or had outgrown its capacity, resulting in inefficient use of space. The SAPS station was often described as too small and when described as open or large, this made the participants feel exposed. The walls and floors are clean but stained with dirt, to the extent that it was considered a colour. The audible sounds remarked on were the loud, shouting of officers and loud two-way radio. The SAPS station does not afford privacy; therefore, it does not inspire psychological feelings of safety.

It was clear from the interviews with the participants that their expectations of the SAPS stations were that the station needed to fit their needs, including emotional needs. They needed a safe, professional looking space, that provides privacy and enough seats to sit on. Consequently, before the police are able to help the participant in need, the SAPS officer is being judged by the condition of the interior, the furniture and the fixtures. Participant Two said it best: "...they know the kind of environment that they are working in." There is an assumption on Participant Two's part that every police officer should be responding to their trauma, without realising

that not every officer knows what is going on in their office space or that they may not necessarily be able to provide what is needed. This is where the disconnect between police officer and the client of the SAPS station occurs. Clearly the perception of the SAPS station is one that is negative. This negative perception is not in keeping with the mandate of the SAPS and the Frontline Service Delivery, as the very mandate is to create a positive experience for the client. Instead, this perception of the station only reinforces the past perception of mistrust. This may be a case of appearance is not the fact of reality, as it is not up to the officers themselves to paint, fix lighting and provide signage. This begs the question: does the appearance truly reflect the attitudes of the police officers towards their work? The reality is that one of the factors of the SAPS station environment is that it is dependent on the socio-economic status of the area, if the examples of Station, One, Two and Three are to be used. Well maintained SAPS stations with facilities that are properly working are often due to the donations and support of the local community, refer to section 4.1.5. In addition to this there are strict rules that the SAPS station officer has to abide by in relation to the maintenance of the station, refer to section 4.1.4 A. Table 5\_Tabulation of SAPS officer interviews, question 15.

The participant's perception of the environment is not necessarily the reality of the situation, therefore there is a disconnect with what is being communicated to the client through the medium of the SAPS station environment. This study is based on understanding the perceptions of the client and perception is not only based on sensory inputs but on projected meaning. The projected meaning does have a strong connection to the recent traumatic events that have happened in the lives of the clients. Therefore, my interpretation would be to say that these visual cues in the SAPS station interior, such as torn posters and peeling paint and a large barrier-like desk, are instead seen as symbols that the clients have projected to mean that they are not going to be helped, because a state of helplessness is the common reaction to trauma.

### **5.2.1 Building trust between client and SAPS officer**

The ability to trust the SAPS officers is part of the SAPS station experience. All three SAPS stations' officers believe that the SAPS are slowly gaining the trust of the public. They are very aware of the public's opinion of them. A few officers remarked that sometimes it is hard to be in uniform in public as the comments have been harsh, and others have commented that it upsets them when they hear parents disciplining their children with the threat of sending them to the SAPS officer. A few SAPS officers admitted that it is hard working at the CSC because of the verbal and physical abuse that the officers can receive, especially on a busy day.

Station One and Two believe that the trust in the police is seen by the fact that the public report crime to them. Station One and Two also trust the system of complaints and compliments given to them from the public through the complaint box in the station CSC or through email or phone calls. Station One also sees the help of volunteers as an important sign that the public are supporting them and believe in the good work that they are doing. Station Three remarks on the personal relationships that have been formed with clients over the years as a sign of trust.

Yet, the station building itself can be used as a tool to further reinforce this sense of trust in the police. Trust can be gained by understanding the perspective of the client the client requires a safe space to report a crime, in this case safe also means private. The Frontline Service Delivery (FSD) eight Key Performance Areas do not include the provision of privacy for clients, and this was the biggest concern for all participants in this study. The clients' perspective includes seeing the SAPS station interior as emotionally distant and a place of disconnect between the police officer and client. The following themes are the commonalities found from participants' narratives which further explain the emotionally distant qualities of the interior of the police station and the disconnect between the client and the officer. These themes found in the analysis correspond to the concepts of User Centred Design, thereby

enabling the police station to be able to create a sense of trust, and ultimately a positive experience of the police station in a traumatic time. Additionally, this then answers the questions, “In what ways are SAPS stations user-centred or not user-centred?” and “How can the design of police stations be improved upon to become user-centred?”

## **5.2 Atmosphere**

“Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses (Pallasmaa: 2012: 76).” The station was perceived by the participants to be uncaring, unwelcoming, and unfriendly, which in essence are all emotionally distant qualities felt through the senses. The emotionally distant qualities of the interior of the SAPS station were due to the clients experiencing the atmosphere of the station created by the physical environment. Atmosphere, as Zumthor (2006) describes it, is the emotional quality of the space that is felt through the senses. Atmosphere is a key component of the experience of the space. In addition to this, Schreuder *et al.* (2016) found that our emotional response to sensory stimuli only intensifies the response. This is seen as true in the interior of the police station, where the emotional state of the participants was of emotional coldness, distance and other responses to trauma; therefore, the space reflected their emotional state.

### **5.2.1 Lighting**

Lighting has a direct impact on the sensory perception of the environment (Malnar and Vodvarka: 2004). The interpretation of the light on the effect of the environment is due to the state of mind the participant was in, which was trauma. The broken lighting or the type of lighting that was used within the station created a dull or sombre atmosphere and likewise, made the space unwelcoming or “dark and dingy” as Participant Eight put it. This is in keeping with Malnar and Vodvarka’s (2004) position that the correct and good lighting is crucial to the success of creating an

interior that is received well by the user. Light in interiors alters the perception of the space, as it creates a mood, thereby altering the reality of the perceived space. In the case of the station interiors, it aided in creating an atmosphere that was either frightening or depressing. In contrast to this, all participants preferred bright white light, that is suitable for task lighting. The “yellow lighting or tube lighting” as some participants called it, is the unacceptable type of light. The type of light colour also has an impact on the mood and emotions of a user as it can either have a negative or calming effect.

In my experience of going to Stations One and Two, there were no lights working in certain areas such as in front of lifts in the lobby or in detective offices and in some toilet facilities. In one particular case in Station One, this meant going down a corridor to get to the office where I needed to be. Instead of going down the corridor, which looked dangerous, I took a longer route. In my mind I did not trust who would be wondering about in the dark, even in the police station. The Victim Friendly (VF) rooms in both of these stations had broken lighting as well. The lack of lighting was clarified by an officer who explained that load shedding put stress on the lighting fixtures and all the ballasts broke.

Perhaps SAPS stations should rely on natural light with the addition of carefully placed windows or skylights within the CSC and Victim Friendly (VF) room, where the most vulnerable users would be, or to reposition the VF to a room with the best natural light. In addition to this the current SAPS stations need to take care in choosing the type of light bulb that is specified in particular areas, especially the colour of the light and its temperature. Part of the success of Station Three was the bright lighting found throughout the station in every area, with the use of large windows or making sure there were no broken bulbs. Task lighting was placed over key areas and ambient lighting was placed in non-key areas.

### **5.2.3 Materials**

The SAPS station is a complex environment as the station needs to cater for many types of situations. The SAPS station is also a high traffic area, therefore the material choices favoured robust, and hardwearing materials, that needed to be able to fit the health and safety requirements of the SAPS.

#### **5.2.3. A. Touch**

The participants, however, described material choices that were cold and hard, which then directly translated into feelings of uncaring, unfriendly and unwelcoming. These may be practical choices on the part of the police officers due to their robustness; however, atmosphere is a key component of the experience of the space. In addition to this, Schreuder *et al.* (2016) found that our emotional response to sensory stimuli only intensifies the response. This is seen as true in the interior of the police station, where the emotional state of the participants were responses to trauma; therefore, the space reflected their emotional state. Both Participant Four and Nine described the CSC as feeling like a jail. Participant Four had the perceived idea of what a jail would look like; whereas in the case of Participant Nine this perception was due to experience, as they had been locked in the holding cell for part of the police station experience. An imagined prison space feels cold, looks dark, confined, oppressed and is a restrictive environment. Furthermore, the emotionally distant station qualities were further emphasised by sensory descriptions such as cold, hard, unhealthy or dodgy. These descriptions were confirmed by Participant Nine's description of the holding cell, as this participant used a similar description. However, it can also be surmised that it is not just the emotional state of the participant that influences their perception of a space. In a study that was conducted about the physical perception and the subsequent association of warmth in timber, it was found that the more natural or unvarnished experience of timber created the sensation of physical and emotional warmth (Bhatta *et al.*: 2017). To clarify further, a study conducted on the perception of warmth in a product determined on both sight and touch found that it was dependent on both

senses (Fenko, Schifferstein and Hekkert: 2010), therefore the faux wood grain, or melamine timber that was present in the SAPS station did not translate into emotional feelings of warmth because it did not physically feel warm, even though it may have looked warm. Therefore, the choice of the materials used within the SAPS station only amplified the emotional state of the participants. Therefore, if the general SAPS station built environment were to take its cue from Station Three, a variety of materials in each area would solve this problem. The correct material choices would be able to create an inviting atmosphere. This is especially important in an environment that caters to the needs of the traumatised as they tend to try and avoid touch, so the touch stimuli that is experienced needs to be warm (Engel-Yeger and Dunn: 2011).

### **5.2.3. B. Sight and colour**

The SAPS station colour blue was not well-liked by the participants. According to Malnar and Vodvarka (2004) colour is a sensory experience affected by light, prior association and emotion. In the situation of the police station interior, the colour blue has a prior association and evokes an emotional response. The prior association is with the past context of the police station, invoking memories of Apartheid; and the emotional response, the feeling of coldness which was then enforced by the sense of touch (Bhatta *et al.*: 2017). Schreuder *et al.* (2016) found that people responded differently to colour depending on emotional response and the context of the situation. Therefore, the specific blue used within the interior of the police station would need to be considered carefully according to cultural preferences and in light of trauma. The community would need to be involved in the decision to change the colour blue. Participants suggested that the use of brighter colours would be more beneficial and pleasing, and this notion is reinforced in Station Three which used a bright blue in the VF room. However, if changing the blue to a more well received blue is not possible, then the other colours of the SAPS branding, such as the gold or yellow, may also need to be emphasised more within the interior and the SAPS brand blue should be used sparingly instead.



The condition of the police station building appearance also had a direct impact on the participants' opinion of the police's service and therefore expectation of the police in general. The Gensler Research Institute (2017) paper the '*Experience Index*' makes a point that we see value in things we have spent money on to beautify; that is, beauty and good design shows the quality of a brand. On the surface level, this can be said for the police station as well, as all of the participants believed that the condition of the police station reflected the work ethic of the police. Their judgement of the state of the station was due to visual cues. Minor visual cues were peeling paint, scuff marks on walls and floors, litter, and a general sense that everything within the building had not been maintained.

However, the biggest visual cue of unprofessionalism was the use of Prestik and the use of sticky tape to stick up posters and signage. Four participants considered this to look tacky; that it gave the overall impression that the officers did not care and that it would reflect the attitude of the officers towards their work and the legal system. As Participant Four explains the appearance: "Dodgy! Like they had been stuck up with Prestik and you know when they start to drift down or tear, it was very tacky." The preferred way to display posters or signage would be to use frames or to have professional signage done. Even the type of frame that is used needs to be more contemporary or a departure from the current style in use, as many of the participants felt that the police station's style in general was outdated. If frames or professional signage cannot be used, then the use of a notice board, such as at Station Three, that has posters pinned on it neatly is a better alternative to the current situation. It also must be noted that posters and paper were not torn in Station Three and litter was not found. However, directional signage needs to be made out of robust materials and rectification needs to be prioritised. This is discussed further in section 5.3.

### **5.2.3. C. Smell and sound**

Smell and sound give the background information, the context on an unconscious level. The information we gather from the scent of a place filters our perception of it, and in turn, it can create either a good or bad impression (Malnar and Vodvarka: 2004). In general, the smell and sound within the SAPS station can be described as unpleasant therefore it can be argued that it creates an unpleasant environment.

Some of the participants felt that the SAPS station was too noisy and that they would have preferred a quieter environment. In Participant Two's situation, this participant acknowledged that the discomfort was due to the state of stress that they were in. In general, loud noise at the SAPS station contributed to feelings of anxiety and being overwhelmed for the participants that experienced it. This is reflective of the literature on the role of sound in a stressful environment. In a hospital environment the daily activities and the conversation of the nurses, measured at 80 decibels and above, and equivalent to a busy restaurant, adversely affected the patients to the extent that it hampered their recovery (Huisman *et al.*: 2012). Salonen *et al.* (2013) suggests that using specific materials, such as ceiling tiles manufactured to reduce noise, is a necessity in stressful environments; and that noise control can reduce stress in general (Huisman *et al.*: 2012; Salonen *et al.*: 2013; Andrade and Devlin: 2015). Also, using more soft furnishings and plants in the CSC can also help absorb noise levels by absorbing and reflecting sound (Petermans and Pohlmeier: 2014). Station Three used a variety of materials which would explain the reduction of noise, as opposed to Station One and Two which just used hard materials that reflect sound waves. It must be remembered that the responses to stimulation, especially to sound, of PTS people are exaggerated and loud sounds cause a startle response (Engel-Yeger and Dunn: 2011). To create a good experience, the issue of sound needs to be a priority in the design of the interior of the SAPS station.

In terms of the smell described in the SAPS stations by clients, each smell stimulation would need to be addressed individually. Smells such as food is an issue of conduct, as there are rules against SAPS officers eating within the CSC. The issue of the SAPS station smelling like urine can be dealt with in this section, however. The smell of urine in a station could be caused by faulty plumbing in the bathrooms. There could be an incorrect waste pipe gradient or there may be no water within the 'p traps' or 'bottle traps'. A plumber would need to assess these problems. Until such time, the smell could be masked by air fresheners made up of a solution of vinegar, water and lemon slices. The smell of body odour within the CSC itself could be dealt with by leaving a bowl of baking soda, dry oats, coffee grounds or tea leaves in the room to absorb the smell and freshen the room (Kawale: 2020). Similarly, making sure there is adequate ventilation with a through draft will do the same. Station Three did not have a distinctive smell; therefore, I would surmise that airflow from their ceiling fans dealt with the issue of odour.

#### **5.2.3 D. size and movement**

Kinaesthesia or the sense of movement, helps us to determine how far away items are from each other and one's position in space (Malnar and Vodvarka: 2004). The movement of people, open doors and wide spaces further increased feelings of anxiety for the participants. The participants observed that people moving about constantly made them feel uneasy or scared; and open doors, windows and spaces made them feel vulnerable. The participant's made them aware of the feeling of openness, heightened awareness of open doors and windows and contributed to the feeling of being watched. The movement of people and officers within the space further made the participants feel anxious. An example of creating psychological safety within the literature was to understand the context of the SAPS station, and this was explored in section 4.1. The contemporary school of thinking, discussed within the literature and explored in section 2.4.1, is that the creation of open and transparent police stations creates a sense of safety, as seen with the Vaal Police station; the Hollenbeck police station in the suburb of Boyle Heights in East Los

Angeles; and within the New York Design and Construction Excellence 2.0 Guiding Principles (2016). However, the semi opaque and clear glass panelling may not be the best design solution for the South African police station. The use of glass panelling will allow the anxious client to see a great deal of movement and the result could be a fight or flight response as described by the participants in their interviews. If it was to be used it would need to be carefully balanced with more solid walls or used in very specific areas. The issues of affordances and layout that contribute to movement and size are dealt with in the section 5.3.

### **5.3 Usability: Affordance and Visibility**

Affordances are the objects or architectural artefacts that we perceive the use of (Norman: 1998). The Community Service Centre (CSC) counter was an affordance that was seen as a barrier, therefore reinforcing the idea that the station is a fortress. The provision of smaller rooms, and a desk with comfortable chairs would be a solution that would offer a friendlier approach. The CSC counter could be used for more mundane tasks such as certifying documents and would be in its own area, away from the clients who report crimes; or perhaps an information counter situation, where it is used to provide direction. In general, there needs to be more available seating options. This can also be provided by creating opportunities for clients to sit on objects that are comfortable but not necessarily seating, for when the space is crowded. An example of this seating type of affordance is extending the sill of low windows wide enough to sit on, or to provide seating cubes that are stackable, or to widen the rim of potted plants so that they could be used to sit on. A study by Beetge (2013) on the sitting postures of waiting people in a bus station gives a good example of the use of ledges to sit and lean on. In that way there will not be a surplus of seating that is in the way when the station is quiet. The participants saw the lack of places to sit as a reinforcement of the unwelcoming aspect of the police station environment.

Within the SAPS station interior, the layout of the space needs to consider the affordance of it; perhaps using the affordance of the counters and furniture to direct clients to where they need to go. As seen with the participants' interviews, confusion is a response to trauma. When a person was unfamiliar with a place, and there was no clear direction the participants became overwhelmed, anxious and felt threatened. Therefore, visibility is a tool that goes hand in hand with affordances. If the space is not clear in its direction, then the navigation method or, wayfinding will not be successful. The need for clear directional space, where it is also easy to understand and use is an aspect of psychological safety as Waxman (2004) explains. This would also relieve the clients' feelings of confusion when entering the space and trying to understand the process of reporting the crime. According to Waxman (2004) people also prefer environments that are easily understood and that they are able to make sense of. Waxman (ibid) clarifies that the behaviour of a person and the person's attachment to a place is dependent on the person's ability to cope with it. The SAPS station needs to have wayfinding, which is a form of navigation for the clients to understand where they are and where they need to go using visual clues, such as landmarks, and signage. The type of user of the space needs to be considered to provide a successful wayfinding system (Foltz: 1998; International Health Facility Guidelines: 2016; Harper *et al.*: 2018).

Wayfinding includes making sure there are clear and distinct differences between rooms and paths. Each different room within the SAPS station that deals with the public would need to have its own identity. In addition to this clear, distinct identity would be the use of landmarks in order for a client to orientate themselves within the SAPS grounds or floor. Creating well-structured paths means that the direction of the path is clear, that there is a clear start, middle and end, and that the direction is confirmed throughout travel along the path (Foltz: 1998). Another principle of wayfinding would be limiting the decisions that the client would need to make. Foltz (ibid) asserts that if there is a story to tell, then the path or room should tell it. The story the SAPS station paths of direction should tell the is story of receiving help,

which ideally should provide a sense of security. This sense of security should persist even if the client misses the destination, because the rest of the route should be able to convey the main points of receiving help in order to report a crime (Foltz: *ibid*).

If we are to apply the principle of visibility to each of the SAPS stations, I reflect on in section 4.1.2, and compare the experience of the participants, it would show that regardless of the presence or absence of signage, the SAPS stations were generally uniform in appearance. Five participants described the SAPS stations' general appearance as looking the same as the other stations that they had visited or that nothing about any of the stations stands out to them. This makes for a strong SAPS brand. Millie (2012) states that the coherent image of the police brand makes for a reassured public. The common item throughout all stations is the large CSC desk, which makes for the perfect landmark in a SAPS station according to Foltz (1998). The CSC desk is needs to be used in conjunction with other landmarks and wayfinding principles, as it is inadequate on its' own. While the CSC desk is the main point in the narrative of help, participants and I were all confused at some point with where to go. This indicates that the paths that guide clients to the point of help are not clear and direct. There need to be indications such as an arrow, path line, footprints or symbols on the floor and walls to confirm that the direction taken is the correct one, so that the absence of signs is not a problem.

Only one participant out of all nine participants knew and experienced the Victim Friendly (VF) room, so there is not enough of their experience, and only my own experience, to draw on. In order to get to the VF room at any of the three stations one would need to be escorted by a SAPS officer, as it was difficult to find. Even if it is protocol for a SAPS officer to escort a client to the VF room, it should be easy to find regardless. Only the VF room in Station Three had distinctive bright blue walls to indicate that it was not an office. If the door was painted the same blue, this would

help the person finding their way there with directions from an officer to look out for something distinctive. This same principle can apply to the other two SAPS stations.

## **5.4 Territoriality**

The clients' trust in the SAPS's abilities would be gained by the SAPS providing authentic privacy and psychological safety; an aspect of User Centred Design called territoriality. The issue of privacy was strong and very visceral with the participants. It is important that the participants be given the space for authentic privacy. Participant Three did not feel that the SAPS station was a negative experience. They were the only participant who felt that they had privacy, confidentiality and distinct feelings of safety, even though this participant did admit to feeling scared, nervous and anxious because it was the participant's first time going to report a crime at the police station. The difference in the experience was that this participant was taken directly to the VF room to have their statement taken. Every other participant was made to give their statement openly, in a public room in front of other clients. Privacy is achieved through the provision of private rooms that are located close to the entrance and away from the mundane tasks of the CSC. There is a clear disconnect between client and police officer as privacy is an affordance in the case of the police station (Gibson: 1986). The police officers believed that the provision of the panels attached to the desks gave privacy while the participants did not see this as the case. Privacy from the clients' perspective is the provision of a separate room with solid doors and walls, where no one is able to hear them. This provision of a temporary room would probably offer a space where clients can calm down before the police officers are able to see them, thereby relieving tensions between officers and clients. The provision of a room would be, as Caan (2011) recommends, a place of refuge.

To further increase trust between the officer and client, and in addition to privacy, the police station needs to create a sense of place, which is the foundation to

psychological safety. Although the SAPS are active within the community, there are no community-based activities taking place within any of the police stations that I observed, or where officers were interviewed, that would create a sense of place or place identity. So, within the SAPS station, a sense of place can be created by providing a common area for both the officers and the public to enjoy. The examples of the Studio Gang (2015) Polis Station Project and the Oscar Newman (1996) housing projects in New York and Ohio, show that it is of vital importance to engage with the local community in order to create a sense of place within the police station interior.

In my reflections of the stations and in my understanding of the system through the interviews with the officers and the handout of a document from a SAPS officer showing a queue management system, it is not up to the clients to rate their trauma as serious, but it is up to the officers. The seriousness of the complaint is determined by the type of crime or classification of the crime that was committed. The Batho Pele principles posted on the walls of the station also emphasise the seriousness of some crimes over another. For instance, rape, sexual assault, anything relating to children, gender-based violence and domestic violence, should be treated with sensitivity and statements should be taken in the Victim Friendly room. In contrast to the previously mentioned crimes, other crimes are viewed as less serious. Because of this view, a victim who is traumatised by an intruder who steals from and threatens to hurt them is not treated with the same level of sensitivity. While threatened but not physically hurt, the client may have experienced emotions of intense fear, helplessness and horror which are all precursor symptoms of Post-Traumatic Stress. The practicality of ranking complaints in order of their severity is to enable officers to prioritise and deal with matters in an orderly fashion, and not be overwhelmed by the sheer number of clients they need to deal with. However, the danger of this method is that clients then become retraumatised by the experience of going to the police station.



Therefore, the police station layout needs to consider both the affordances of space and the cultural context of space, such as territoriality. The CSC needs to be divided into separate spaces for the main functions it has: the first function is the mundane tasks; the second function is the reporting of minor road accidents and the third is the reporting of crimes. The reporting of crimes is a sensitive matter; therefore, it needs to be done privately. This space needs to have its own entrance closer to the car park and streets and away from any busy activity within the SAPS station. The SAPS station environment is based on the social construction of space, as discussed by Hillier and Hanson (1984), where the relationships between the users need to be taken into account. The clients are strangers to each other; therefore, the sharing of personal details needs to be done in a separate room away from the main CSC and this should be done regardless of the crime that is to be reported. This can be done through the efficient allocation of areas; using affordances to guide clients to the correct areas and strategically placing specific rooms.

## **5.6 Conclusion**

This chapter has focused on the interpretation of the data from the interviews of participants, police officers and the reflections of the SAPS station interior with regard to User Centred Design. The themes that emerged through this data were atmosphere, affordance and visibility, and territoriality, which dealt with the perceptions of the client that had a traumatic experience. The perspective of the client is that the SAPS station environment is unwelcoming, uncaring and unfriendly as the participant projected their meaning onto it. The police station is a tool used by the client to get a first impression of the police conduct and work ethic. Therefore, there is a disconnect between the client and the police officer. The police station can, however, be a means to create trust between the public and the SAPS by creating a station that responds to the needs of the client. These needs are clear direction, privacy, psychological security, a well-maintained building and furniture and a general atmosphere that is warm and inviting.

Further comparisons and even further inferred interpretations of the reflections on SAPS Station One and Two to the interpreted documented literature only reinforces the idea that the current SAPS station interior represents unmet client expectations. These clients' expectations are of a fully functioning SAPS station. A fully functioning station has working lights, clear direction, and is psychologically secure, as opposed to being intimidating and lacking in resources.

## **6. Conclusion**

Chapter six is the general impression of the study, where I offer my reflections and outline the answered objectives of the study. I make future recommendations and state the knowledge that has contributed to the field of interior design.

### **6.1 Motivation**

Whether individuals realise it or not, the interior design of a space affects them, as the perception of an environment determines the experience of it. The exploration of how to design for the experience of the user within a space is dealt with in the concept of User Centred Design. The application of User Centred Design in the SAPS station has been the main focus of this study, in particular the client's perspective and experience of the interior design of the SAPS station.

The motivation of this study was first fuelled by a personal experience of observing a woman who had no alternative but to report a very personal matter in full view and within earshot of other individuals at a Community Service Centre (CSC). The second incident that further motivated the continuation of this study was my own personal experience assisting my mother while she reported a crime to our local police station where we experienced the same circumstances as the one I had previously witnessed.

### **6.2 Context**

The personal experiences described above further highlighted the importance of the police station in society and how the SAPS station can be used as a means to convey the SAPS organisation's ethos, culture and mandate. Their mandate according to the South African Constitution Section 205 is to:

- Prevent, combat and investigate crime.
- Maintain public order
- Protect and secure the inhabitants of South Africa and their property
- Uphold and enforce the law.

This translates to the SAPS commitment to make sure all South Africans are and feel safe and to further inspire confidence and trust in the SAPS's abilities. Furthermore, victims' desires are to be treated with fairness, respect, dignity, and to see justice served. The SAPS station environment is an opportunity to directly show the public a place of physical and psychological safety and security, as well as to be a place that inspires confidence and trust.

This study is placed in a unique South African context. This context is based on the past South African Police Force and the police station as an Apartheid symbol of fear and oppression that encouraged distrust in communities. The current symbol of the South African Police Service station, anecdotally in the media, is corrupt and under-resourced. In addition, the SAPS is undertaking a transformation to become professionalised, which means that programs such as the FSD are in place to change the current perceptions of the SAPS organisation into a positive symbol within South African society.

The local and cultural context is therefore a prime aspect of the users' experience of buildings because interior spaces are reflective of social, economic and political influences of the period of their time throughout history. Those influences on the interiors of buildings would have offered a different experience to those that occupied them in the past, than to those who would occupy them in the present.

### **6.3 Interior design and User Centred Design relevance in the SAPS station**

Interior design is a profession that is concerned for the functional and aesthetic aspect of a space, by using experience gained from practice and education. The quality of space is based on safety and the health and welfare of the user. User Centred Design is an approach to problem solving for a design solution that focuses on the user's needs, wants, and goals. Accordingly, it is concerned with the overall experience of the user in an environment. I decided to use the concept of User Centred Design within the context of interior design because of its clear focus on the user, because this notion is not an automatic assumption in interior design. The basic principles of understanding the context and deeply understanding the user connected well with the type of environment the SAPS station is.

### **6.4 Creating an experience in the SAPS station.**

The idea of a good experience that is created in a built environment is first explored through understanding the usability of space. Usability is a notion that is composed of affordances and visibility. Affordances are the environmental perceived cues that encourage certain behaviour between artefact and user; whereas visibility is the actual given signal or direction of use such as wayfinding. Both principles are based primarily within the physical aspect of the environment and the perceived use of the physical environment.

The experience of space is further explored through the relationship of physical aspects of a building having an influence on the psychological experience of a user. This exploration was conducted by looking at how a space is communicated, how it is engaged, and its occupation. These concepts are further understood and based on tangible (texture and volume) and intangible criteria (trust and respect).

The literature that was reviewed through exploring the experience of space, showed that the perception of space is the meaning we have created and attached this meaning to the affordances we see. This is the connection of the physical aspects of a space influencing the psychological experience of the user. It was understood within this study that we first experience space through our senses, we internalise this experience then attach meaning. Meaning is created by our emotions, feelings, cultural background, and preunderstandings influencing our present understanding. Furthermore, cultural cues determine how we interact with space; and as such culture determines how we conduct our relationships, and our relationships determine the layout and functions of rooms and the element of territoriality. Attached meaning - to the places and spaces we occupy - can also create the innate need of psychological and physical security. When a user feels that they belong to a place the attached meaning of place identity - which is determined by the length of time a user spends in a place and the ability to familiarise and understand their environment - creates the innate sense of security whether they actually are physically safe or not.

The literature also indicated that sensory perception is a foundation to the experience of the user in a built environment. Architects call this sensory perception atmosphere, the emotional experience a user has while perceiving a space through the senses. Sensory perception is a social and cultural construction, where the value that is placed on a particular sense modality is emphasised differently from society to society. Mood is another factor in sensory perception that determines the perception of the environment.

In conclusion, the literature has shown that experience in an environment is based on the interaction of user and artefact and then furthermore the attached meaning placed on the affordance. Within the SAPS environment, it is important to

understand the persona of the client as this would then determine the attached meaning the client would put onto the environment, which directly affects the experience the client would have of the SAPS station.

## **6.5 Understanding the user of the SAPS station.**

As previously mentioned, an integral part of User Centred Design is understanding the user. I decided to focus on the user that reports a crime to the SAPS. This would be the primary persona, and this concept was important to establish as the assumption of this study is that the design of a station that considers the most vulnerable would benefit the other users of the SAPS station.

The persona of the client that is at a SAPS station to report a crime was found through literature to be going through various degrees of trauma. The most extreme degree of trauma was classified at the time of reporting a crime as Acute Stress Disorder (ASD). The sensory profile of the client was best understood by studies which explored the sensory profile of Post-Traumatic Stress (PTS), where the link between these two anxiety conditions was due to time, and intrusive memories. Although it cannot be stated that a person who has ASD will definitely be diagnosed later with PTS, for the sake of understanding the sensory profile of the client in a SAPS station, it was taken that the client had the sensory profile of PTS. This idea was also supported in the literature; that PTS was a common symptom of a reaction to trauma, notably when a person experiences fear, helplessness and horror, emotions that are often linked with experiencing a crime. Literature shows that it is common for those with PTS to have extreme responses to environmental stimulation; which in turn affects their mood, emotions, behaviour and their ability to adjust to their environmental stimulation. Therefore, the traumatised person or person with PTS experiences the environment around them negatively. Understanding this concept was important as this allowed for the SAPS station to be

viewed through the lens of the most vulnerable, which determined the most important considerations for the interior design of a SAPS station.

The approach of this study was to use hermeneutic phenomenology as a framework to collect and analyse data, as the lived experience of reporting a crime to a police station is part of understanding the user of the SAPS station. Hermeneutic phenomenology is concerned with understanding the essence of an experience through narrative and text. The insight gained through this approach of investigation of the client's perspective and experience is used to inform User Centred Design considerations that are relevant to this study. The interviews with participants, who went to a SAPS station to report a crime or who were traumatised prior to the station visit, is a method of data collection that is appropriate for hermeneutic phenomenology. Part of understanding the participant's experience is to understand the context of the situation; understanding the context links directly to a principle of User Centred Design. The method of the double hermeneutic was used to reflect on the participant's experience against the background of the context of the situation. The two halves of the double hermeneutic were brought together by reflecting on themes that are relevant to User Centred Design.

## **6.6 The client perception of the SAPS station**

The main perception the clients had of the SAPS station was that it portrays itself as a space that does not care. That is, it has qualities that can be perceived as emotionally distant; in the sense that the police station environment is not warm, friendly, or welcoming. In addition to this, the clients felt that the SAPS station is not a professional looking environment due to visual cues such as torn posters, Prestik and poor maintenance of the environment.



This perception was based on the nine interviews of clients that had been to a combined total of 15 SAPS stations. Eight of the nine participants were at the SAPS station to report a crime, whereas the ninth participant initially went to report a crime but through a set of circumstances, was falsely accused and then arrested. That is, all nine participants had experienced trauma directly before going to the SAPS station. Re-traumatization can occur during interviews because talking about the situation and the sensory inputs could cause the reliving of the trauma. Therefore, I ensured that a counsellor was present during every interview with participants. The counsellor watched out for signs of distress and agitation and, at their discretion, could end the interview. I ensured that all participants and officers were treated with dignity and respect. Further detail on this is in section 3.2.8.

## **6.7 The current SAPS station User Centred Design interior**

The SAPS station needs to provide a safe space to project meaning onto it without it being internalised as a negative response. The current SAPS Station Three, has a good balance of hard and soft materials, great lighting, clear direction and plenty of seating. However, the main concern for every participant was the lack of privacy when dealing with the SAPS officer. On reflection I found that all three stations that I had been to, were lacking in this aspect. Even though there was a Victim Friendly (VF) room, there was only one and this was dedicated to the most serious matters, and this also meant that only one client or case can use this at a time. Privacy was an issue with every SAPS station that eight participants went to, the only exception being Participant Three that was using the VF at the time of reporting the crime. Therefore, a SAPS station that is considered to be user-centred needs to have authentic privacy for those that report a crime. The FSD eight Key Performance Areas do not include the provision of privacy for clients; clearly a matter that needs careful consideration, as this was the biggest concern for all participants in this study. Therefore, I would propose that the provision of privacy will increase support and trust in the SAPS's abilities.

## **6.8 Improving current stations to be user-centred.**

The biggest impact to creating a user-centred designed SAPS station would be to reorganise the layouts of the Community Service Centre (CSC) and entrance areas. The CSC needs to be divided into separate spaces for the main functions it has: the first function is the certifying of documents; the second function is the reporting of minor road accidents and the third is the reporting of crimes. The reporting of crimes is a sensitive matter; therefore, it needs to be done privately. This space needs to have its own entrance closer to the car park and streets and away from any busy activity within the police station. Smaller offices need to be provided for individual SAPS officers that are stationed in the CSC to deal with the reporting of crimes, regardless of the crime that is to be reported. These smaller offices need to be furnished with materials that are warm and welcoming, and provide soft comfortable seating, all in neutral warm tones, that do not clash with each other. Pictures and notices need to be framed or put on pinboards and there needs to be two types of lighting, ambient and general task lighting. Paper and documents need to be filed and on shelves. There must not be any presence of Prestick or sticky tape on any wall or furniture surface.

## **6.9 Recommendations**

Due to User Centred Design being a very wide-ranging topic - and the intricacies of understanding the sensory responses to the environment are even wider and more complex - not everything can be known about sensory design within the police station interior. There does need to be more research into the specific materials that a traumatised person would positively respond to within a SAPS station as many sensory responses are based on the current emotions and the local cultural context. The layout of the current SAPS stations needs to be individually re-evaluated to respond to the issues of privacy and confusion. In addition to this, wayfinding techniques need to be explored specifically for the emotionally distraught. The

branding colours of the SAPS have historic and present associations of negativity and it would be best to re-consider these perceptually primed associations and contemplate a different shade of blue or a completely different colour. This colour blue would be seen under a spectrum of different lighting and this would need to be considered when choosing the colour. Passive forms of lighting would also need to be added to the SAPS station interior, so that there is less reliance on sporadically available electricity and funds.

To this end, the SAPS should not be responsible for the design of the interior of the police station. It is not the mandate of the SAPS to decorate, maintain or refurbish the SAPS station. In the same way, the SAPS is not equipped to understand sensory profiles, cultural context of space, territoriality or lighting design or any other User Centred Design issue. Thus, the police station should be designed by a third-party liaison; that is, an interior designer that knows User Centred Design and is equipped with the tools to investigate the perspective of the client. Currently the police are responsible for the design, refurbishment, and maintenance of their stations and this has resulted in a disconnect between client and officer. The disconnect is a result of the officers seeing their station through their eyes, as upholders of the law, rather than from the perspective of vulnerable clients. This perspective results in a spatial design that is skewed towards the police and their function and that is unsympathetic towards the traumatised client. It is the job of the SAPS to focus on the matters of upholding the law and serving and protecting the South African citizens, and not to be interior designers.

The interior design of the station can address this disconnect and be a tool to create trust between client and police. Within the wider context of South African society, it would be beneficial to implement User Centred Design strategies within all public government buildings such as the SAPS station. There are universal aspects of

interior User Centred Design that can be applied to public government buildings. But the context needs to be considered.

### **6.9.1 Limitations**

The limitations of the application of User Centred Design need to be station or building specific. In addition, the SAPS is a complex organisation, and the interior design of the station was never meant to solve staff problems or conduct, procedure and government policies. The limitations of interior design are always specific to addressing the physical design of the building interior. Design can anticipate human interaction with it, but it can never concretely predict human interaction with it and the responses thereafter. It would be beneficial to refurbish a small to medium sized police station and use it as a case study to explore the responses of the clients before and after the refurbishment to see if these findings can be concretely implemented across the board in all SAPS stations within South Africa; paying particular attention to the provision of privacy to all clients regardless of what they are reporting.

Furthermore, the interior design of SAPS stations is limited by budget control and budget allocation of resources. Well maintained SAPS stations with facilities that are properly working are often due to the donations and support of the local community, as reflected upon with Station Three, in section 4.1.5. In addition to this the expectation of the station's levels of maintenance is also dependent on the socio-economic status of the area the station was in, as it was found in the literature that the more affluent the area, the higher the client's expectation of the SAPS station; refer to section 4.1.1. Moreover, there are strict rules that the SAPS station officer has to abide by in relation to the maintenance of the station; refer to section 4.1.4 A. Table 5\_Tabulation of SAPS officer interviews, question 15.

## 6.10 Reflections

With regard to conducting interviews for this study, in hindsight I should have allowed for the participants to just tell their story uninterrupted, so that they were fully heard. I would have listened more and asked less questions, as most questions were based on what the space looked like instead of how it made them feel. Furthermore, I would have insisted on an interpreter regardless of the skill level of English, because it would have allowed the participant to have a freer sense of expression, without the concern for my full understanding of the intended meaning. It may have led to surprising discoveries of the SAPS station and the participant's experience.

However, having the double hermeneutic as a framework or a situational understanding gave a deeper insight to data analysis as it allowed the context to be understood with greater detail. The context allowed for looking past the superficial answers to get to the essence of the experience which then informed User Centred Design principles. Making use of reflection did allow me to stand back, and with each reflection understand the situation in better detail, because it enabled me to stop being so personally involved and caught up with the injustice of the participants' experience; to see things more objectively; to see the sum of the parts clearly; and with each writing, came a deeper understanding.

When I embarked on this journey of studying this topic, I was surprisingly met with quite a bit of negativity, and often the question that I was asked was: "what is the point?" My motivation was a factor in answering the question, but when I started to fully understand the connection that people have to their environments and how the environments shape us as we shape them, this understanding became the real point of this research. Specifically, when dealing with a person who has been through trauma, it becomes an issue of dignity, respect, and trust for the person, because crime threatens that. The question that arises from this recognition is: how does one design for the intangible qualities within a space? Dignity, respect and trust are

intangible; they are very subjective and depend heavily on the perspective and experience of each person. It would therefore be very easy to project my own opinion onto the design of a station based on my preunderstandings and my own lifeworld experiences. Consequently, shifting my focus onto the user, the context and being reflective about how these two main aspects of User Centred Design interplay, makes the intangible and abstract notions of dignity, respect and trust tangible and pragmatic. The SAPS station is unlike any other interior environment or typical office environment. It is fraught with its own history, associations, and specific functions that all contribute to the client experience. To ignore this would be to ignore that intangible attribute of trust that needs to be established between officer and client. Trust is provided in the interior space by ensuring privacy. Failure to understand the role that trauma plays with regard to the sensory experience of the client is to ignore the aspect of providing dignity and respect within an interior. Dignity and respect are provided by the professional appearance of the station built environment. The point of designing the public areas of a SAPS station is not for the officers but for the comfort of the most vulnerable. When the most vulnerable are taken care of, the rest of the users of the space benefit. The efficient use of space, clear direction and allocation of specific tasks, proper lighting, fresh smelling air, reduced noise and a warmer touch can only benefit the SAPS officers by reducing the environmental stress and anxiety that is felt, thereby creating a calmer more secure workplace.

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# Appendix A: Participant Letter of Information



## LETTER OF INFORMATION

### Title of the Research Study:

Understanding the interior design of selected police stations in Durban with specific reference to user-centred design

### Principal Investigator researcher:

Shelly Kenny, BTech Intd.  
Student number: 20801062

### Supervisors:

Supervisor:  
Mrs. Lyndall Kemm-Stols, Med (HEd)  
Work: 031 3736101

Co-supervisor:  
Professor Sandiso Ngcobo PhD  
Linguistics,  
Work: 0319077406

Greetings,

Thank you for your time and interest into my study. Please find herewith an outline of what this study entails, and if you choose to do so, how you will be a part of it,

### Brief Introduction and Purpose of the Study:

I am a student at Durban University and I am currently doing my masters in interior design. I am interested in how a person who has reported a crime perceives the interior of a police station in Durban so that it can be improved to make it an environment suitable for visitors who have recently experienced a traumatic event. By understanding this perspective, I hope to gain insight into the practical functioning of a police station so that my knowledge is not completely theory based but also based on reality. I hope your experience of working daily in a police station can shed some light in this regard. I would like your consent to participate in an interview. The insight in how you experience a police station when working with people who have encountered crime is a different experience from those whom are at the station to do menial tasks, such as copy Identity Books. Your unique perspective can give myself a deeper understanding of the requirements needed of a station and perhaps shed some light on sensory information that have been overlooked or misunderstood. This sensory information is what you saw, smelt, touched and heard, during your time at a police station.

### Outline of the Procedures:

We can arrange a time that is mutually beneficial. You are not required to answer questions that you do not want to and I hope during the interviewing process you are treated with dignity and respect to your privacy and emotions. As part of this interview I would have prepared a few questions on what you saw, smelt, heard and touched while working in a police station. This interview will be voice recorded, and transcribed by a professional who has signed a confidentiality form. Information on your name, sex, age and address is not collected or required. Please note that this interview is based on your voluntary participation. I hope to do about three volunteer interviews with Station

Commanders. The interview should take roughly 1 hour. The interview will be voice recorded.

**Risks or Discomforts to the Participant:**

There are no risks or discomfort to you as there will be no tests of any nature done.

**Benefits:** The only benefit is an indirect non-financial benefit, as the study will make recommendations on how the interior design of police stations can be improved.

**Reasons why the Participant May Be Withdrawn from the Study:** At any point you are able to leave the interview with no reason necessary, should you choose to withdraw.

**Remuneration:** There is no remuneration.

**Costs of the Study:** There will be no costs for you to pay.

**Confidentiality:**

A reference code or pseudonym will be assigned to you so that information collected from the interview will be stored against this code instead of your name.

Please note:

- The interview will be voice recorded.
- All information gathered from this interview will be transcribed by a professional transcriber who has signed a confidentiality form.
- All information gathered in a non-electronic format will be kept in locked storage.
- All information gathered in electronic format will be stored in password-protected files.
- Only the researcher, co-supervisor and supervisor will have access to all materials and confidential information obtained.

**Research-related Injury:** Costs will be covered by Durban University of Technology.

If you wish to see the completed and final paper a copy can be emailed to you. Your email address will be kept private

**Persons to Contact in the Event of Any Problems or Queries:**

Supervisor:

Mrs. Lyndall Kemm-Stols

Work: 031 3736101

Email: [lyndllk@dut.ac.za](mailto:lyndllk@dut.ac.za)

Co-supervisor:

Professor Sandiso Ngcobo PHD,

Work: 031 9077406

Email: [SandisoN@dut.ac.za](mailto:SandisoN@dut.ac.za)

Institutional Research Ethics administrator on 031 373 2375. Complaints can be reported to

Acting Director: Research and Post graduate Support Prof C E Napier, contact number 031 373 2577 or [carinen@dut.ac.za](mailto:carinen@dut.ac.za).

## Appendix B: Consent form



### CONSENT

#### Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Shelly Kenny, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: \_\_\_\_\_.
- I have also received, read and understood the Information letter regarding the study.
- I am aware that the results of the study, including personal details regarding my name be anonymously processed into a study report. My sex, age, date of birth, and initials will not be collected
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me. If I allow the completed paper to be emailed to me, I understand that my email address will be kept private.

---

**Full Name of Participant**

**Date**

**Time**

**Do you allow the paper to be emailed to you?** \_\_\_\_\_

**Email address:** \_\_\_\_\_

I, Shelly Kenny, herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

---

**Full Name of Researcher**

---

**Date**

**Signature**

---

**Full Name of Participant**

---

**Date**

**Signature**



## Appendix C: SAPS conditions for research

Please note: this is a redacted copy.



Privaatsak/Private Bag X 94

Verwysing/Reference: 3/34/2

Navrae/Enquiries:

Telefoon/Telephone:

THE HEAD: RESEARCH  
SOUTH AFRICAN POLICE SERVICE  
PRETORIA  
0001

The Provincial Commissioner  
KWAZULU-NATAL

**PERMISSION TO CONDUCT RESEARCH IN SAPS: UNDERSTANDING THE INTERIOR DESIGN OF SELECTED POLICE STATIONS IN DURBAN WITH SPECIFIC REFERENCE TO USER-CENTRED DESIGN: DURBAN UNIVERSITY OF TECHNOLOGY: BACHELOR DEGREE: RESEARCHER: S KENNY**

1. The above subject matter refers.
2. The researcher, Ms S Kenny, is conducting a study with the aim ***to establish if the built environment is reflective of the ethos of the South African Police Service (SAPS).***
3. The researcher is requesting permission to observe the design and interview the Station Commanders of three (3) Police Stations in Durban, [REDACTED]. The researcher will also interview approximately ten (10) members of the public visiting the mentioned stations. This office recommend that the researcher should obtain information on the layout of the police station buildings via the Department of Public Works.
4. The proposal was perused according to National Instruction 1 of 2006. This office recommends that permission be granted for the research study, subject to the final approval and further arrangements by the office of the Provincial Commissioner: KwaZulu-Natal.
5. We hereby request the final approval by your office if you concur with our recommendation. Your office is also at liberty to set terms and conditions to the researcher to ensure that compliance standards are adhered to during the research process and that research has impact to the organisation.
6. If approval is granted by your office, this office will obtain a signed undertaking from researcher prior to the commencement of the research which will include your terms and conditions if there are any and the following:

**PERMISSION TO CONDUCT RESEARCH IN SAPS: UNDERSTANDING THE  
INTERIOR DESIGN OF SELECTED POLICE STATIONS IN DURBAN WITH  
SPECIFIC REFERENCE TO USER-CENTRED DESIGN: DURBAN UNIVERSITY OF  
TECHNOLOGY: BACHELOR DEGREE: RESEARCHER: S KENNY**

- 6.1. The research will be conducted at his/her exclusive cost.
- 6.2. The researcher will conduct the research without the disruption of the duties of members of the Service and where it is necessary for the research goals, research procedures or research instruments to disrupt the duties of a member, prior arrangements must be made with the commander of such member.
- 6.3. The researcher should bear in mind that participation in the interviews must be on a voluntary basis.
- 6.4. The information will at all times be treated as strictly confidential.
- 6.5. The researcher will provide an annotated copy of the research work to the Service.
- 6.6. The researcher will ensure that research report / publication complies with all conditions for the approval of research.
7. If approval is granted by your office, for smooth coordination of research process between your office and the researcher, the following information is kindly requested to be forwarded to our office:
  - **Contact person:** Rank, Initials and Surname.
  - **Contact details:** Office telephone number and email address.
8. A copy of the approval (if granted) and signed undertaking as per paragraph 6 supra to be provided to this office within 21 days after receipt of this letter.
9. Your cooperation will be highly appreciated.

**MAJOR GENERAL**  
**THE HEAD: RESEARCH**  
**DR PR VUMA**

**DATE:** 2019-05-13

## Appendix D: SAPS gatekeeper permission

Please note this is a copy of the original

|                                     |               |                                     |                |
|-------------------------------------|---------------|-------------------------------------|----------------|
| <i>South African Police Service</i> |               | <i>South African Police Service</i> |                |
| Private Bag X94                     | Pretoria 0001 | Faks No. / Fax No.                  | (012) 334 3518 |
| Your reference/My verwysing:        |               | THE HEAD: RESEARCH                  |                |
| My reference/My verwysing: 3/34/2   |               | SOUTH AFRICAN POLICE SERVICE        |                |
| Enquiries/Navrae:                   |               | PRETORIA 0001                       |                |
| Tel:                                |               | Lt Col Joubert                      |                |
| Email:                              |               | AC Thenga                           |                |
|                                     |               | (012) 393 3118                      |                |
|                                     |               | JoubertG@saps.gov.za                |                |

Ms S Kenny  
DURBAN UNIVERSITY OF TECHNOLOGY

**RE: PERMISSION TO CONDUCT RESEARCH IN SAPS: UNDERSTANDING THE INTERIOR DESIGN OF SELECTED POLICE STATIONS IN DURBAN WITH SPECIFIC REFERENCE TO USER-CENTRED DESIGN: DURBAN UNIVERSITY OF TECHNOLOGY: BACHELOR DEGREE: RESEARCHER: S KENNY**

The above subject matter refers.

You are hereby granted approval for your research study on the above mentioned topic in terms of National Instruction 1 of 2006.

Further arrangements regarding the research study may be made with the following office:

The Provincial Commissioner: KwaZulu-Natal:

- **Contact Person:** Brigadier MM Buthelezi
- **Contact Details:** (031) 325 4946/ 4925
- **Email Address:** ButheleziPN@saps.gov.za

The Provincial Commissioner: KwaZulu-Natal has stressed that participation in interviews will be on a voluntary basis and respondents may refuse to answer questions implying sensitive information.

Kindly adhere to paragraph 6 of our attached letter signed on the **2019-05-13** with the same above reference number.

**MAJOR GENERAL**  
**THE HEAD: RESEARCH**  
**DR PR VUMA**

**DATE:** 2019-09-12

## **Appendix E: Data Analysis Table**

Appendix E is a compilation of the transcripts of the participants into a table. In addition to this, a few direct quotes of the participants were used as well as some of my interpretation of the participants meanings. The vertical columns were based on User Centred Design themes. Please see the next page.

| Participant | Station | trauma   | descriptive words of police station building  | lighting condition                           | furniture description  | colour and materials  |
|-------------|---------|--|---|--|--|---|
| one         | A       | crying, shock, disoriented, hear only heart beat | <p>"I hate even the name (of station)", "you feel it's a police station", "not healthy" "Scary", not welcoming, "they all look the same, that is how the government prepares them".</p>               | not mentioned                                | not mentioned  | not mentioned   |
|             | B       | not mentioned                                    |   | had lights                                   | just a chair, a table and two visitor chairs   | this a police thing, even the colours, its rare to go to someone's house and find this colour, you can only find this colour here, it disturbs you... bright colours to the participant means its welcoming                         |
|             | C       | not mentioned                                    |   | broken lighting, VF is in complete darkness. | old chairs and broken furniture, that's the police station. I can have pictures but not just anything. Missing key items of furniture.   |   |
| two         |         |  | <p>"dimish", "makes you more depressed", "not welcoming", chaotic, overwhelming. It wasn't clean, old, the walls weren't too bright, it needed a touch up. Unwelcoming, unfriendly, traumatising.</p> |  | the barrier (CSC desk) was unwelcoming. No one ever came to my side of the desk. None of them came to us and had personal contact with us, it was this barrier between us, like us and them. Reporting at "cubicles" was depressing. | not bright even though the lights were on. Dull and depressing. Dirty and old is a colour. Shiny counter tops equals professional. Bright walls equals welcoming, makes a huge difference. Remembered materials are wood and glass. |
|             | D       | "a bit stressed"                                 |   | Dimish. Not too bright.                      |  |   |
| three       | E       | yes. Felt nervous and scared                     | contradictory. At first it looked good then bad.  | Bright in the VF and CSC                     | there was adequate furniture in VF.  | looked, recommended the walls to be painted in a familiar gentle colour (pale yellow). The walls of the building inside look sick and ugly. Red brick outside, inside was scuffed, dirty and peeling paint. No posters.             |

| Participant | Station | trauma                         | descriptive words of police station building  | lighting condition               | furniture description   | colour and materials   |
|-------------|---------|--------------------------------|---|----------------------------------|---|--|
| Four        | F       | felt like a criminal           | small, poky, not accessible, hot, dodgy, run down, broken, kuk, authoritarian, cold, not welcoming, not user friendly, like going to jail, nothing appealing,   | not the best, dingy, broken      | wooden counter, that fills the length of the room. Little bench   | gates, blue walls, prefab container, wood, peeling posters were on the walls with prestick   |
|             | G       | yes, disbelief and devastation | confusing, chaotic, wasn't clear, dirty, grimy, noisey, not a smooth experience, didn't feel safe, run down, grubby, very dark, scruffy, dodgy, disorganised, old and run down, not contained, not welcoming, typical government building | CSC was dim, Detectives was dark | CSC had long counter across the room, a desk with chairs. People were sitting on the floor.   | grimy, piles of paper, scruffy book  |
| SIX         | H       | yes                            | descriptive words were the same for both stations. Didn't feel welcomed, didn't like the space, felt dirty, people don't look happy, uncomfortable, unkept, cramped, small, participant on display,                                       | bright but some were broken      | long row of wooden cubicles, notice board   | the images of the station seem to blur into: dirty (as a colour), brown and white. The chipwood in glenwood is a prominent memory. |
|             | G       | angry                          | unpleasant, crowded, old, tom, out dated, don't care, grimy, secretive, dilapidated   | good but it could be windows     | wood type of chipboard, center sitting place but not able to sit down, chipwood table reminds of office structures, but participant says it may be the atmosphere |  |

| Participant | Station | trauma                    | descriptive words of police station building   | lighting condition  | furniture description  | colour and materials   |
|-------------|---------|---------------------------|--|---|--|--|
| Seven       | I       | hopeless                  | not maintained, not well, run down, unprofessional, dirty, disorderly, small, a lot going on, government building, not clean, gross smell, inefficient, decrepit, disorganised, messy, not inspiring or not hopeful, | bright lighting, fluorescents, yellow light but environment looked dark.                      | The station can only be reached from a long flight of stairs. Long help desk that divides the room. Very narrow space where the participant waited to be served. Bench to sit on. The officers were in a cramped space as well. Partition dividing up desk for privacy while reporting | melamine desks (plasticy woody vibe) dual tone, white top and dark bottom walls. Yellow light.   |
|             | C       | anxious and hypervigilant | really dark, dingy, confusing, crowded, unpleasant.  | half the lights were not working, the amount of people also added to the feeling of darkness. | crowded, filing, reception desk, a door that doesn't look like a door, there wasn't enough seating.  | red brick, grey slate and off blue, the police station suffers from bad materials selection, clean but looked dirty and old. Little bit of timber used |
| Eight       | B       | not mentioned             | dark, dingy  | Lots of light   | linear reception desk. The officers do have access to the participant.   | slate, concrete, grainite, you can see metal bars, dirty was a colour, yellow old paper as signage, blue, gold and brown frames of ministers           |
|             | J       | felt a heavy weight       | very dull, old, typical south african furniture, very lifeless, hopeless, nightmare, horrible, the worse, not organised,   | Dull and sombre   | counter, typical south african office furniture, very lifeless.  | metal square thing, dirty and dark   |
| Nine        | B       | felt a heavy weight       | more of a nightmare  |   | slept on floor with thin mattress and a blanket  | grey old, grey colour, high ceiling.   |
|             | K       | retraumatised             | compared it to the first experience  |   | not mentioned  | had posters stuck up with prestidigitator randomly   |



| Participant | touch and feel                                       | noise levels and sound   | Smell and ventilation   | layout and size   | Privacy and confidentiality  | feelings of safety and security  |
|-------------|--|--|---|---|--|--|
| one         | not mentioned  | "When you are in shock, you can hear the smell", didn't notice other noises except for her heart beat  | "you can smell the dead people", "you can smell that something is wrong ... it's a bad smell, you don't want to say it's a dead smell."   | "it's a big police station"   | went straight to the mortuary and never went to a counselling room   | didn't feel safe, as she was anxious   |
|             | not mentioned  | noisy, from the officers   | station smell, fresh air? Not really  | congested, always full.   | went to the detectives office  | felt safe in detectives office   |
|             | not mentioned  | very noisy, from the officers  | smells of urine   | not mentioned   | no privacy, everyone is listening  | people feel scared... I don't need a scary place, but she has never noticed if she has felt safe.  |
| two         | hard wooden bench, the most uncomfortable bench ever | the officers were loud and shouting at each other but the clients felt they could only whisper, participant was anxious over their shouting. Hearing the other client report was upsetting. Her voice was loud and that upset her. | "at first there was enough ventilation, the open door was the source of ventilation. "A funny smell... the kind of smell that talks to depressed people, that talks to people that have been victimised... like when you're in a hospital, there is that smell of pain." In the police station it's not a clean smell, I can't explain it. smell= depressing and negative. wanted an airfreshener to give the place a different smell, a welcoming smell that helps you open up to "disclose" | multiple building, separate entrances for suspects and clients. Seeing officers move in and out made her anxious, thoughts of robbers/ while looking at direction to cells. | no privacy. Heard other people talking about abuse, made participant feel sad and angry. When participant reported case, felt intruding, degraded, couldn't express self, made to feel angrier and violated. | the appearance of the station added to the retraumatisation. Felt if had privacy then able to feel secure. No features of safety,  |
| three       | not mentioned  | felt that the officer could hear her during taking a statement   | no proper air flow, as the windows to VF were closed and it smelt of sweat.   | lots of people waiting in queue at CSC but taken to VF  | was taken to the VF to take the statement  | felt safe and calm in the VF. The child felt secure because she was with an adult. But trusted the police because she felt safe. There were bars over the windows at the VF. Participant believed that there was very good safety measures |



| Participant | touch and feel            | noise levels and sound  | Smell and ventilation   | layout and size   | Privacy and confidentiality   | feelings of safety and security  |
|-------------|---------------------------|---|---|---|---|--|
| Four        | cold and hard.            | according to participant there were not many sounds because it was 6am but could hear hand radio. | hot. Only the back has an aircon according to the participant. Smelt like sweat/ body odor, but compared to pinetown (urine) not that bad.  | "small and poky". Cant have more than three clients in the front of CSC. Noticed the doorway behind counter keeps on referring to it. | no privacy at all. Everyone including the other clients heard what had happened to the participant. No attempt on the SAPS part to create privacy. The participant heard the client infronts story. Did not get taken to the VF | once over the feeling of being a criminal, participant felt safe. No burglar bars on windows   |
| five        | not mentioned             | lot of noise, officers talking and shouting and telephones ringing. No one talking to the clients | the doors were open but on a hot day it would be hot and vise verse. Body odor and stuffy. Smell reminded the participant of typical government buildings.  | there was no clear signage and the participant was confused the entire time there as to where to go and what to do.                   | no privacy. At one point the officer took the participant to the side but within the room as others. Felt the entire time was spent in a open room  | did not feel safe at all. suspects were walking around but handcuffed, also the arrested suspect sat and stared at participant. Lots of walking in and out. The participant needed to feel 'contained and welcomed' but participant kept on thinking that wanted to get out of there.                        |
| Six         | felt dirty, uncomfortable | no sounds were remembered. it wasn't a busy day so participant felt heard                         | participant didn't remember a smell but wanted to give a smell because of the experience, a dustbin smell, as associated memories to that smell related to the experience. The doors were open but it felt stuffy | felt small but participant is not sure  | no privacy. Heard an incident of another client.  | the participant wasn't engaged, all they wanted to do was to leave. Did not feel safe. The amount of homeless outside made participant feel unsafe, felt like could be attacked. Remembers the only security is the turnstiles that are moot. Long way to walk to office from entrance, this enforced unease |
|             |                           |   | participant didn't remember a smell but wanted to give a smell because of the experience, a turpentine smell, as associated memories to that smell related to the experience. It was hot in general.              | small and crowded   | no privacy, all the cops knew of incident. Participant believed that the only solution was to talk softly and to take a friend.   | did not feel safe. Short distance to office from entrance, but felt like a back door, and secrete  |

| Participant | touch and feel  | noise levels and sound   | Smell and ventilation  | layout and size   | Privacy and confidentiality   | feelings of safety and security  |
|-------------|---|--|--|---|---|--|
| Seven       | hard bench to sit on  | not mentioned  | couldn't remember what the place smelt like but compared it to a gross oily meat pie smell. The door was open but presumed that it gets hot (clammy) | very small and narrow. From the participants description it seemed that there was no traffic flow and very cluttered. | did not have privacy at all. The entire line sitting on the bench heard your complaint  | participant did not feel threatened but movement in and out of room and the open door made the participant nervous as if there were to be a fight at the back then the participant would have been involved/   |
|             | felt cold, hard materials   | loud as officers were all shouting at each other.                        | stuffy, no air flow. Smelt of people, sweat and armpits  | a corner counter which the police can go to FOH. Was too small and because it was crowded it felt smaller.            | there was no privacy for anyone. With the shift change there were two different officers who took the statement. The participant hear the stories of two other clients which were upsetting | because it was small and crowded it didn't feel safe. The participant feel safe in the area, this could be because area the incident took place. Afraid that people off the street would walk in and start a fight. had the feeling of just wanting to get out. there were officers constantly moving in and out of the station, which made the participant anxious. |
| Eight       | the space felt hard   | loud as officers were all shouting at each other.                        | not uncomfortable and didn't have a smell.   | small and confined  | The participant hear the stories of two other clients which were upsetting  | two suspects were walked in after participant heard the stories of other clients this added to the feeling of being threatened and the feeling of unfairness. Wanted to get out as it was dark and dingy. It was a confined space and it made the participant feel like a criminal   |
|             | the participant was unsure what the temperature was like but says its cold  | was able to listen to every story of other clients                       | cant remember smell as the client had a spinning head  | not in a good condition, not looked after, participant describes being in a big room looked at, feeling watched.      | no privacy or confidentiality   | didn't feel safe at all during the whole experience. felt very vulnerable.   |
| Nine        | cold  | very loud toilet, caused retraumatisation when heard outside of station. | not mentioned  | cell was tiny   | no privacy or confidentiality   | didn't feel safe at all during the whole experience. felt very vulnerable.   |
|             | when the participant went to certify documents the officer touch the participants hand, it was uncomfortable and retraumatising | noisy, people and officers   | typical office smell   | wasnt too small but may cause claustrophobia in others  | no privacy or confidentiality   | was retraumatised going back to the station, all the same feelings came back   |

| Participant | clients ability to control their environment   | the impression of professionalism through the building   | symbols   | thoughts to take note of  |
|-------------|--|--|---|---|
| one         | <p>Did not go to VF</p> <p>Did not go to VF</p> <p>can open windows and it wherever, but no tea or coffee or ability to change the tv or do another activity other than watch tv.</p>  | <p>she doesn't remember SAPS station 1 and she says that SAPS station 2 is professional and clean (her brother worked there / bias?) but then she says that all stations look the same that is not professional. A station must not have Prestik, peeling posters, they should be in frames, and desks should be organised with no paper or files everywhere. If everything is dirty, then positive opinion changes to negative.</p> | <p>"he's not a bad person to end up here", government building, symbol of pride (negative)</p>  | <p>All the police stations experiences whether good or bad affected each other. "They changed their faces and I started panicking". This participant didn't notice her surroundings only visual cues that might alert "danger", i.e. faces "they all look the same". If I look around , I'm going to conclude that I'm not going to get help here, because of the environment. The way police stations are made are made for criminals, they don't think about me as an innocent person,... they all look the same, that's how they prepare them.</p> |
| two         | <p>Did not go to VF</p>  | <p>it wasn't clean. The floors needed a scrub, the walls looked old and the station needed a touch up. Happy to see awareness posters.</p>   | <p>the barrier of the CSC desk seen as reinforcing their authority, thereby creating an emotional and literal divide. "I needed to feel safe because this is the safest place but to me it was not. The station is a symbol of authority and secondary trauma</p> | <p>wished that the station could be more calm and not overwhelming. It was my right for them to help me. The participant remembered the posters because they related to job.</p>  |
| three       | <p>the participant felt that they did not have the liberty to touch anything including the window without the permission of the officer. Did not notice if there was a TV. There was nothing to do. There was only water to drink.</p> | <p>not mentioned.</p>  | <p>scared to be in a police station as it was first time, but felt that participant could trust the SAPS.</p>   | <p>the participant was escorted to the station by the SAPS. She was put into the VF almost immediately. First time at the station. The participant felt safe.</p>   |



| Participant | clients ability to control their environment | the impression of professionalism through the building   | symbols   | thoughts to take note of  |
|-------------|--|--|---|---|
| Four        | not able to control environment              | saw members doing work behind counter but did not feel that the participant was interrupting. Peeling and prestick posters made the place look tacky. "[SAPS} taky as the image portrays.                                | blue light outside. The participant felt like the criminal. "I still feel like ive done something wrong because Im going to a police station". Listening to the other client made participant feel like complaint was "petty". View point didn't come from the officers. the run down condition represented the run down state of the country.          | There were two clients infront who were more traumatised and to the participant had a more serious/ worse crime experience than the participant. The posters were noticed and remembered because they related to a friend. Remeberd the pictures of the ministers. the participant felt like a criminal because of the function/ association of the station |
| five        | none   | things and piles of paper everywhere, that there wasn't a clear space on the desk for the officer to write and no clear physical direction.  | the building was a symbol of a response to when things have gone wrong. Not authority. Felt that it was designed to intimidate. Scruffy book was a symbol of the whole station experience. The station was a symbol of a typical government building  | it felt chaotic, all kinds of things going on. The police paraded the suspect infront of them a few times. The wanted poster of the suspect on the wall. Participant chose not to stare and wanted to forget being at station.  |
| Six         | none   | posters were torn and old, as if nothing had been updated. it gave the participant the impression that the police don't care, which reinforced frustrations. The over all aesthetics make participant want to stay away. | the wood colour and texture is something that stands out and the participant associates all stations now with this, as participant is "holding onto memories it". Its a symbol of trauma. In glenwood felt like participant was in the SAPS territory. The state of the station was a sign of broken promises and indicative of how little they can do. | didn't feel welomed. Tried hard not to look anywhere. Wanted to leave. The participant was primed by the media and the first experience informed the second one. Felt like cattle in ranch.   |
|             | none   | we cant make the space look good for you, we don't have the funds, or the time and we don't really care.   |   |   |

| Participant | clients ability to control their environment | the impression of professionalism through the building  | symbols   | thoughts to take note of  |
|-------------|--|---|---|---|
| Seven       | none   | the overall space was run down and dirty, the finishes of the furniture looked unprofessional in the viewpoint of the participant. The appearance looked disorganised and messy and outdated which reinforced the participant frustrations of police.                               | the station was a symbol itself. Its appearance was not inspiring of confidence or hope. The station is a sign of the government, and what a typical government building looked like and therefore expectations were along those lines. The participant believed that all stations looked the same. remembered the ministers and president on the walls as its a typical government building. | there was a suspect sitting in the office unconfined and which escaped, which reinforced the participants view points on the police.  |
|             | none   | there was paper everywhere and they were shouting at each other for stationary. Seemed like there was no filing system, as the pigeon holes that were provided were not used. This all gave the impression that the police are sloppy, especially when the participant sees a mess. | signage at façade of station was broken. The participant had blurred memories of police stations, as they all looked alike.   | its really difficult to differentiate the two stations as in the mind of the participant its one big experience therefore station. The participant talks about the stations as such referring to the one when meaning the other, only when going through the interview that this was picked up, this researcher at the time understood differently.     |
|             | none   | the station had put up signage with prestick and it made the participant think that all police stations do the same. Its unprofessional. The lack of caring about the environment is unprofessional   | the state of the station was reflected in the attitude of the police. The architecture is always horrid. Old used buildings, compared to a broken neon sign. Dark and dingy and scary   |   |
| Nine        | none   | the SAPS were not organised, it didnt look like it  | the participant felt that the look "you might not get what you want out of the place, the outcomes might look different and how you feel may be worse.  | participant felt hopeless, says the building contributed to that. I need to feel dignified as a person when im taken to that place, im not a criminal and I havent been charged before or proven guilty. going to the police station again was like going back in time for the participant, the participant still felt the same emotions and experience |
|             | none   | not mentioned   |   |   |
|             | none   | space looked unprofessional, prestick is an indicator.  |   |   |

## **Appendix F: Participant question guide**

1. Do you remember the weather that day?
2. How did you get to the police station?
3. Was the station easily accessible?
4. Was the station clearly marked with where you needed to go and what you needed to do?
5. What did you feel when entering into the police station?
6. Do you believe that the appearance of the station contributed to feeling this feeling?
7. Could you describe what the community service centre looked like?
  - Tell me about the sound/ lighting/ air temperature / smell/ cleanliness?
8. Were the offices/ where they do paperwork separate to the place where you spoke to the officer about the crime? In your opinion does this type of layout matter to someone in your position?
9. Did you have any suspects/ people with handcuffs on walk past you? How did this make you feel?
10. What are your thoughts on the wanted posters on the walls?
11. What are your thoughts on the information posters of your rights on the walls?
12. Does the design/ appearance of the community service centre affect your opinion of the police and your outlook of your traumatic experience?
  - Did you have enough privacy?
  - Did you feel secure and safe? What building/ furniture features made you feel this way?
  - Did you feel like the officers could hear you properly?

13. Are you able to talk to me about your experience of being in the trauma and counselling room at the station?

- Was it clean / comfortable/ secure/ pleasing to look at?
- Did you have anything to watch/ read/ do while waiting there?
- Tell me about the lighting and how this made you feel?
- Did you have control over the environment at all?
- Did you have a choice of where to sit and what to do?
- Were there any odors? What did this make you think? Did it give you any memories?

14. If you took away the actual service of the police officer, would you go back to the building to report the crime again? Why?

15. The police station is a symbol of society, what kind of symbol is this police station to you?