FACULTY OF SCIENCE AND TECHNOLOGY

MASTER THESIS

Study programme / specialisation:

MSc Risk Analysis and Governance

The spring semester, 2022

Open

Authors:
Kristian Gjestrum &
Melissa Bamrungkho Thomassen

Kristian Gjestrum Melissa Thomas
(signature authors)

Course coordinator:
Eirik B. Abrahamsen

Supervisor:
Kenneth Arne Pettersen Gould

Thesis title:
The Effect of Near-Misses on Psychiatric Healthcare Workers' Risk Perception:
An Exploratory Study of the Awareness of Successful and Unsuccessful Responses of Violent Incidences

Credits (ECTS):
30 ECTS

Keywords:

Risk perception, trust, coincidences, control, near-miss, vulnerable near-miss, resilient near-miss, psychiatric healthcare, violence, verbal threats, availability bias

Pages: 88 pages

+ appendix: 118 pages

Stavanger, June 15, 2022

University of Stavanger

Master thesis in

MSc Risk Analysis and Governance

The Effects of Near-Misses on Psychiatric Healthcare Workers' Risk Perception

An Exploratory Study of the Awareness of Successful and Unsuccessful Responses of Violent Incidences

by Kristian Gjestrum & Melissa Bamrungkho Thomassen

Spring 2022

Preface

This thesis marks the end of a consecutive five-year run of university studies for both of us. Our different backgrounds in nursing and tourism management have brought two contrasting perspectives into one thesis, and we have learned much from each other during this process.

We want to give special thanks to our supervisor Kenneth Arne Pettersen Gould, for good discussions and for helping us shape our research. You have been of great assistance in motivating us when we have been unsure and hesitant and in making us trust our ideas.

Thank you to our families, partners, and good classmates for understanding the time and pressure it takes when writing a thesis, giving us motivation, and for showing interest in what we have done over the last six months. We would also like to show our gratitude to Linn, Mathilde, and Ida, who provided us with valuable feedback.

We want to thank all the individuals in the healthcare sector who have given us feedback that shaped our thesis and assisted us. A special thanks to the leaders in the different wards and departments who took the time to meet with us and provided a setting where we could interview their employees. Last but not least, we are grateful for all the participants willing to participate in our project, who gave us lots of interesting knowledge and unique perspectives.

Kristian & Melissa,

June 2022

Abstract

The Norwegian psychiatric healthcare sector has seen a restructuring in the last couple of decades. As the focus has been on treating more patients in the outpatient facilities, fewer beds are available for longer hospitalization. With this change, new trends are emerging that can affect the psychiatric healthcare workers' perception. There is, however, limited risk research within the health sector. This thesis' objective is to shed new light on healthcare workers' perceptions when considering near-misses. More specifically, near-misses involving a successful or an unsuccessful response. The thesis problem statement is *"How does awareness of successful or unsuccessful responses to incidents of violence or threats directed towards employees affect psychiatric healthcare workers' perceived risk of violent incidents?"*.

A mixed research method is utilized to answer our thesis, which consists of a questionnaire and focus group interviews. We developed three scenarios for our participants, a vulnerable near-miss, a resilient near-miss, and a control scenario. Forty participants within ten focus groups were asked to review two of the developed scenarios. The participants would always receive the control scenario while alternating between the two near-misses. This review consists of individual questionnaires before an open discussion session within the focus groups.

Our thesis indicates that near-misses influence healthcare workers' perception of risk. We observed that the vulnerable scenario was consistently ranked more poorly compared to the other two scenarios. Furthermore, we found strong indications that trust and perceived control are two important factors influencing risk perception among psychiatric healthcare workers. Lastly, we argue that using the term unsuccessful response is unsuitable in the context of psychiatric healthcare as most responses could prove successful under the right circumstances.

Acronyms

DPC	District psychiatric centers
HCR-20^{V3}	Historical-Clinical-Risk Manaagement-20, Version 3
MAP	Management of Aggression Problems
NHD	The Norwegian Health Directorate
NLIA	The Norwegian Labour and Inspection Authority
NMA	The Norwegian Medical Association
NSD	The Norwegian Center for Research Data
OUH	Oslo University Hospital
phca	The Psychiatric Healthcare Act
SIFER	Centre for Research and Education in Forensic Psychiatry
SRA	Society of Risk Analysis

List of Tables & Figures

Table of Contents

1 Introduction

The psychiatric healthcare sector has undergone some significant changes in the past decades. A significant portion of the responsibility for psychiatric healthcare patients shifted through a restructuring from hospitals and institutions to the municipalities and home care. With this restructuring, the number of psychiatric hospital beds has gradually decreased, and concerns are increasing if the patients receive proper care. In recent years, Norway has seen an increase in the number of individuals sentenced to compulsory psychiatric care. In 2012 professor and doctor Jan Øystein Berle expressed concerns that some psychiatric patients would most likely be sentenced to compulsory care in psychiatric security facilities due to not receiving proper care at an earlier stage (Myhrvold et al., 2018; Sollien, 2020). Furthermore, compared to the Norwegian workforce in general, it is recognized that workers within psychiatric healthcare and the overall healthcare sector are to a higher degree exposed to violence and verbal threats (NLIA, 2022; Spector et al., 2014; STAMI, n.d.). Therefore, based on this background, we wish to explore perceptions and beliefs regarding violence and verbal threats among psychiatric healthcare workers.

1.1 Problem Statement

This exploration has narrowed down to the problem statement:

How does awareness of *successful* and *unsuccessful* responses to incidents of violence or threats directed towards employees affect psychiatric healthcare workers' perceived risk of violent incidents?

With this problem statement, we will explore if psychiatric healthcare workers' perceptions of risk are influenced by the knowledge of previous incidents that almost had an unfortunate outcome. We further divide this experience into incidents with a response that could be perceived as either successful or unsuccessful. We examine if these two types of responses lead to different reactions and perceptions of risk. The incidents we examine are related to verbal threats and violence within psychiatric healthcare.

We have developed two research questions to explore the overall problem statement further. These are:

1. Does the nature of the near-miss affect how psychiatric healthcare workers perceive their own level of threat and safety, and how they assess an incident's response?
2. What are the general variables that affect psychiatric healthcare workers perception of near-misses?

1.2 Demarcations

We will not explore successful and unsuccessful responses in events where the outcome results in severe consequences. Instead, we will explore the perceptions of psychiatric healthcare workers in the context of near-misses. Furthermore, the project does not seek to identify the optimal response to violent incidents. Instead, explore the workers' risk perception when considering near-misses. The near-misses will consist of self-designed scenario descriptions of a vulnerable and a resilient near-miss.

The project narrows the volume of potential participants down to psychiatric healthcare workers within two Health Trusts' care, not municipalities' care. The workers must be in regular contact with patients.

1.3 Relevance to the Field

Our thesis will explore concepts related to risk perception among psychiatric healthcare workers. Risk perception has received significant attention in the last decade (Siegrist & Árvai, 2020, p. 2192; Slovic, 2000, p. 220), but limited research has been done within the healthcare sector and on psychiatric healthcare workers. This study will examine if variables such as heuristics, control, and trust influence how psychiatric healthcare workers perceive risk and if these variables impact the workers' feeling of threat and safety. Furthermore, we will explore if the time psychiatric healthcare workers spend in an environment that could be prone to challenging behavior and incidents involving violence and verbal threats affects their perception of risk.

Previous research has tied individuals' experience of near-misses to how they perceive risk and how these experiences either can motivate mitigating measures or lead to a decreased perception of risk (Dillon & Tinsley, 2008, pp. 1436–1438). Near-misses can be perceived differently depending on how close to a bad outcome they are perceived to be. This has led researchers to categorize them further into resilient and vulnerable near-misses (Tinsley et al.,

2012, pp. 1609–1610). We will use the existing near-miss literature to explore how healthcare workers' risk perceptions are affected by previous experience.

1.4 Structure of the Thesis

This thesis is divided into seven chapters. The first chapter introduces the overall theme of our thesis. The second chapter gives a contextual description of the psychiatric healthcare sector in Norway. Furthermore, it describes the changes it has been undergoing in the last decades, what violent incidents are considered in the Norwegian labor context, and what tools are used to mitigate them in psychiatric healthcare. In the subsequent chapter, we will present the current literature on risk perception and near-misses in the scientific field of risk research.

The fourth chapter presents the chosen research method of this thesis, which is a mixed research method. It consists of a questionnaire and focus groups. Furthermore, presenting a self-designed scenario description based on the context chapter and current literature. Lastly, discussing the projects' quality of data.

In the fifth chapter, we will present the findings collected from the focus groups and questionnaire, followed by the discussion in chapter six, which compares the different findings in the light of our problem statement and the two research questions to the current literature. Lastly, finishing the thesis in chapter seven with a conclusion on what our exploratory study has brought to the risk field and recommendations for future research in the sector.

2 Context Description

The objective of this chapter is to describe the current Norwegian psychiatric healthcare sector. The structure of this chapter will present the change the sector has and is undergoing, followed by the current situation and the act related to psychiatric care. We will present what the field defines as violence and threats and the prevalence of violent incidents in the sector. Finishing off with an introduction of standard tools used in the field.

2.1 The Restructuring of the Psychiatric Healthcare in Norway

There is a rising challenge for patients to receive qualified help, and psychiatric healthcare is one of Norway's major health and societal challenges. This is not a new or unknown challenge and has been on the Norwegian government's agenda for over 20 years. In 1997 the politician Torbjørn Jagland and his government proposed that no individuals should stay in institutions long-term, influencing their predecessor's government. The government, led by Kjell Magne Bondevik, created an Escalation Plan to ensure that more patients should receive treatment in outpatient facilities. This means that patients could live at home while they simultaneously received care. Its essence is still present in today's politics; however, there is still a way to go (Sollien, 2020). This restructuring of the psychiatric healthcare sector was at the time and is still supported and pushed forward by both politicians and experts within the field (Myhrvold et al., 2018).

As a result, from the Bondevik government, district psychiatric centers (DPC) were created to support municipalities, so they could offer a broader range of treatment and follow-ups for substance abuse and mental health patients (Myhrvold et al., 2018). In the span of 20 years, the number of beds in psychiatric healthcare has seen a significant reduction. This reduction has continued until the present day, with the Erna Solberg government, which sat until 2021, promising to continue the agenda Jagland and Bondevik (Myhrvold et al., 2018; Sollien, 2020). When the Solberg government was elected in 2013, one of its central policies was *the golden rule*. Its objective was to ensure that the funds for psychiatry and substance abuse treatment should increase more than hospital treatments within somatic healthcare. However, the rule was not followed through (Sollien, 2020). In four years, 2013-2017, the funds for psychiatric healthcare increased by only two percent, while somatic healthcare saw an increase of 10 percent (Myhrvold et al., 2018).

The restructuring of psychiatric healthcare has led to some opposition. The Norwegian Medical Association (NMA) has stated that the focus on moving patients from institutions to the municipalities and reducing the time patients stay in institutions prevents patients from receiving proper examination and treatment and hinders a good interdisciplinary collaboration for further follow-up. Many patients barely meet a doctor or psychiatrist while being admitted (Lien & Bergem, 2021). The same argument is reflected at a political level, where the opposition questions if the reduction of hospitalization beds and the reorganization have gone too far. Furthermore, there is a fear that the reorganization loses its focus on what the patients with severe mental health disorders require. Thus, calling for strengthened psychiatric healthcare and to stop the downsizing of hospital beds, its wards, and DPCs (Myhrvold et al., 2018).

2.1.1 Current Situation

From 1998 to 2017, the number of beds within psychiatric healthcare was reduced by approximately 2 500 beds, from 6 276 to 3 746, and 800 of those beds were eliminated after 2013 (Myhrvold et al., 2018; Sollien, 2020). There has been a 50 percent reduction in the number of hospitalization days in the last 18 years (Myhrvold et al., 2018). Since 2009, the average length of stay in psychiatric healthcare has decreased from 27 to 18 hospitalization days, a reduction equivalent of more than 30 percent (ssb, 2019), a trend that is still continuing (Lien & Bergem, 2021). This reduction in the length of hospitalization and the increase in discharges has amplified the need for more outpatient facilities and treatment from municipalities (Myhrvold et al., 2018).

The high number of estimated individuals with mental health issues leads to the increasing challenge of receiving qualified help, also in outsourcing, which was supposed to be the answer to creating more beds (Myhrvold et al., 2018). Due to the short duration of hospitalization and lack of resources, patients and relatives often have to ensure the integration of their own services. A crucial element in clinical pathways is that the patient pathway is supposed to be coordinated better. Now the evaluation of clinical pathways shows almost 70 percent of the managers are not prioritizing pathway coordination. The intensive arrangement, especially effort-based financing (EBF), favors short outpatient consultations and the development of outpatient services, which in turn entails more paperwork and production requirements for staff (Lien & Bergem, 2021).

With the steady decrease of beds, an emerging trend is that more individuals are sentenced to psychiatric care. From 2014 to 2020, the number of sentenced individuals has increased by 64 percent, from 141 individuals to 231. That is 90 new patients compared to the existing 3 359 beds available in the entire country, taking away spots from other patients that need them as well. In fact, some voice their concern that the mental health patients that require a need for long-term stay could later end up in the prison system if the number of beds continues to decrease (Sollien, 2020).

2.2 The Psychiatric Healthcare Act

The purpose of the psychiatric healthcare act (phca) is to ensure the establishment and execution of psychiatric healthcare is done in a sound matter that coincides with human rights and basic rule-of-law principles. The purpose of the rules is to prevent and limit the use of force. Within the act, there is a section about the establishment and dissolution of compulsory psychiatric healthcare. Step by step describing the ways and what conditions must be fulfilled for an individual to be admitted under compulsory psychiatric healthcare. No admittance can be done without a written medical examination deeming it necessary. Nevertheless, if the individual in question refuses the examination, the municipal doctor grounded under their own measures, or under the petition from another public authority, or from the next of kin of the person in question can overrule and enforce such an examination to be conducted (Psychiatric healthcare act, 2021, § 1 & § 3).

Based on the information from the medical examination, the healthcare professional responsible will make an assessment based on a plethora of conditions for mandated observation whether compulsory psychiatric healthcare fulfilled, § 3-2 of the phca. The observation cannot last longer than ten days from the examination's start without the patient’s permission. Nevertheless, if the patient’s state indicates that a longer stay is severely needed, an extension can be granted. Transfer to compulsory psychiatric healthcare can be done before or by the end of the deadline if the conditions for this type of care are present. After the transfer is completed, the healthcare professional responsible will assess if the condition for compulsory psychiatric care is fulfilled, and if the conditions are fulfilled, a resolution will be made. The patient has up to three months after the observation or care is finished to appeal (Psychiatric healthcare act, 2021, § 3).

§ 3-5 of the phca states that *"compulsory observation or compulsory psychiatric healthcare can be granted at a 24-hour stay in an institution which is approved for those purposes. The patient can be held back against their will and retrieved in case of avoidance, if necessary, with force."* (Psychiatric healthcare act, 2021, § 3-5) (translated by authors). However, no one can be confined to what is stated in § 3-5 without fulfilling the conditions presented earlier in Chapter 3 of the phca. If the patient no longer fulfills the requirements needed, they cannot be held back under compulsory observation and compulsory psychiatric healthcare. The responsible professional makes the decision of termination of care if the requirements are no longer present (Psychiatric healthcare act, 2021, §3).

Patients under compulsory psychiatric care can be examined and treated without consent, but only if the patient is judged to be incompetent to consent according to requirements set in § 4-3. However, these requirements are not necessary for treatment if there is an imminent and severe danger to the patient's own life or others' lives or health. Coercion measures can be used on the patient only if it is unavoidable, to prevent them from hurting themselves or others, or to avert substantial damages to material things. Coercion measures are only to be used when other means are shown to be in vain or insufficient. § 4-8 presents a list of what measures is determined as coercion measures. Patients that are subjected to coercion measures shall receive continuous supervision from nursing staff. With more psychical restraints, the nursing staff must stay in the room unless the patient object to this (Psychiatric healthcare act, 2021, § 4).

2.3 Defining Violence and Verbal Threats

The Society of Risk Analysis (SRA) has defined a risk source as *"an element (action, sub-activity, component, system, event, etc.) which alone or in combination with other elements has the potential to give rise to some specified consequences (typically undesirable consequences)"* (Aven et al., 2018, p. 7). Furthermore, a threat is a type of risk source that typically applied in a security context. The SRA proposes a definition for threat, is goes as followed *"a stated or inferred intention to initiate an attack with the intention to inflict harm, fear, pain or misery,"* but it can also be used in other types of contexts, such as discussing the threat of an earthquake. (Aven et al., 2018, p. 7).

The Norwegian Labor Inspection Authority (NLIA) provides definitions for both violence and verbal threats as individual terms but also as one and the same. Violence and verbal threats are *"incidents in which the employee is physically or verbally attacked in situations that are*

related to their work, and that involve an overt or implied threat against their safety, health, or well-being". Threats are *"verbal attacks or actions that aim to hurt or intimidate an individual"*, with additional two more definitions for violence provided by the NLIA. The first being that violence is *"any act that is intended to cause physical or mental harm to an individual."*, with the second definition of other incidents can be *"when employees experience aggravated acts which result in major damage on furniture or inventory"* (NLIA, 2022).

The NLIA recognizes that violence and verbal threats can cause physical consequences to the individual, such as injury, but that it can also cause mental strain such as problems sleeping, depression, isolation, and a general feeling of being unsecure. Violent acts can also lead to consequences for the organization in the form of reduced productivity, high levels of employee absence, and high turnover (NLIA, 2022). Another definition of violence is provided by the Norwegian Health Directorate (NHD). Violence is defined as "*actual attempts at or threats, about inflicting physical harm or bodily violations on another person"*. Preconditioned that it is done with intention and no consent (NHD, 2018).

We will use the definitions provided by the NLIA to describe violence, and verbal threats in our research as these definitions can function as specified risk sources within the more general risk source definition provided by the SRA. The NLIA's definitions of violence and verbal threats can be seen as an action, as described by the SRA, that potentially can cause specific consequences. Our thesis will use violence and verbal threats towards employees within Norwegian psychiatric healthcare as the primary risk source as it fits well within the selected definition for risk source, and this thesis is limited to examining the perceptions of healthcare workers working in psychiatric healthcare.

2.3.1 Violent Events in the Psychiatric Ward

Individuals with a mental illness do not pose a higher risk of violence compared to the general population. However, there is a heightened risk for violent behavior in an individual who has a psychiatric disease combined with drug abuse (Lein, 2018; Ose et al., 2017, pp. 558–559). This, combined with the fact that the prevalence of drug abuse among individuals with a severe psychiatric disorder is significantly higher than the drug abuse in the general population. It is important to note that there are other major social factors influencing a heightened risk of violence and a higher prevalence of drug abuse, such as low income, little education, societal status, and more (Lein, 2018). While less than two percent of the patients in specialist

healthcare services have a high risk of violent behavior, 32 percent of the psychiatric inpatients showed a risk of violence (Ose et al., 2017, pp. 558–559). Research has also shown that some types of psychosis diagnoses increase the risk of violence (Douglas et al., 2009; Hartvig, 2012).

The NLIA recognizes health-related professions as some of the most likely to experience violence and verbal threats. Work situations that can result in a heightened risk for violence are working alone, a low amount of staff per shift, a lack of training, and the employees working with vulnerable individuals. The consequences for individuals and the workplace when an employee is exposed to verbal threats and violence could be grave. Not only could the affected employee experience severe physical, social, and psychological consequences, but the unit could also see an increase in worker absence, reduced productivity, a higher turnover rate, and difficulties with recruiting new personnel (NLIA, 2022).

In 2019, 34 percent of the workers working in a care institution and 18 percent of the workers within the hospital service had an incident of violence or verbal threats directed towards them at the workplace in the last year. The professions that reported the highest percentage were social workers, and care workers were 27 percent of the workforce had one experience in the last year. Nurses were the fifth-highest, with 25 percent of the workforce reporting experiencing violence or verbal threats. This is in stark contrast to the national average of seven percent. If one only accounts for the violent incidents that left visible marks, the number of social workers, care workers, and nurses that reported an incident is at nine, twelve, and nine percent, respectively, compared to the national average of two percent (STAMI, n.d.).

During an 18-month period spanning from July 2012 to December 2013, the "*Meldeordningen*" received reports about 385 incidents involving violence or verbal threats in the specialist healthcare in Norway. The ones on the receiving end of the violence could be other patients, relatives, personnel, inventory, and the patient causing harm to themselves. One hundred fifty-five incidents described violence against workers, where the workers either got caught in the crossfire trying to prevent violence between patients or incidents where the worker was the target of the violence. The reports show a large gap between the number of incidents occurring in somatic units compared to units providing psychiatric care. Units providing psychiatric care reported 260 incidents of verbal threats and violence compared to 50 incidents within somatic units (Krogstad et al., 2015, pp. 11–12). The notion that workers within psychiatric healthcare

are more exposed than in the regular somatic unit has also received support in the scientific literature (Spector et al., 2014).

2.4 Violence Risk Assessment for Severe Mental Illness

The prevention of violence is a topic that has garnered significant interest from clinicians and researchers. This has resulted in various tools to assess and mitigate the risk of violence (Hurducas et al., 2016, p. 76; Nag et al., 2021). In the following sub-chapters, various tools of violence and verbal threats used in Norwegian psychiatric healthcare will be presented.

2.4.1 Historical-Clinical-Risk Management, Version 3

The NHD provides a violence risk assessment for practitioners in psychiatric healthcare. The violence risk assessment consists of a risk assessment and risk management. The goal is to early identify risks for violence in patients and early prevention of violent acts. It is for leaders and the workers within mental healthcare and interdisciplinary specialized drug treatment. It is also relevant for health personnel in municipal health- and care services when it comes to risk management (NHD, 2018).

The violence risk assessment tool is based on Douglas et al.'s (2014) model of Historical-Clinical-Risk Management-20, Version 3 (HCR-20^{V3}). The HCR-20^{v3} is among the recommended and the most recent tools for conducting comprehensive assessments of the risk of violence. (Douglas et al., 2014; NHD, 2018). The HCR-20^{V3} can be used for both legal and clinical reasons to evaluate the level of risk for violence. The tool is applicable for use in various settings within and outside an institution. There is no requirement for the individual being evaluated to have a psychiatric or substance-related disorder; however, it is recognized that the majority of the targeted individuals could have such disorders. It can be used to assist in admissions to institutions, transitions between different security levels, and upholding a correct level of risk management. While there are no training requirements for using the HCR-20^{V3}, it is recommended that individuals using the tool have a high level of professional skill and judgment in the field of violence, psychiatric disorders, and evaluations to properly conduct an assessment using the tool (Douglas et al., 2014).

After a violence risk assessment is conducted, the assessor will provide a conclusion that provides a basis for future measures. The conclusion should contain the risk for future violence, how immediate the risk of violence is, the risk of serious physical harm, and the risk of other

behavior that can cause damage. It is recommended that this conclusion is described in ratings of low, moderate, or high and that each previously mentioned aspect of risk is given an individual rating. A *low* rating means that the assessor concludes that no measures are needed to handle the individual's risk of violence. A *moderate* rating means that the assessor sees the need for some measures to handle the individual's risk of violence. A *high* rating means that the assessor concludes that there is an immediate need to implement measures to handle the individual's risk of violence (Douglas et al., 2013, pp. 62–66, 2014, pp. 104–105).

2.4.2 MAP – Management of Aggression Problems

Management of Aggression Problems (MAP) is an educational program that focuses on the prevention and handling of aggression and violence within the healthcare and societal sector. It was created through a cooperative project between the four regional health trusts in Norway and was led by the Centre for Research and Education in Forensic Psychiatry (SIFER). The program's goal is to give standardized, quality-assured, and evidence-based education to employees in Norway and has been implemented in most of the health trusts responsible for psychiatric health care. MAP aims to prevent aggression on three different levels, primary-, secondary-, and tertiary prevention. Primary prevention is the measures that focus on preventing aggression or violence occurs at all. Secondary prevention focuses on the early discovery of escalating conflict and is the measures implemented to reduce aggression and deescalate the situation. Tertiary prevention is the measures implemented to reduce the consequences of violence and minimize the potential for damage against other patients or coworkers (Nag et al., 2021).

Characteristics of a ward where the employees use MAP are how the personnel prioritize building relations with the patients and focus on the factors and causes of a patient's violence and anger. This means that the ward's personnel should choose preventive measures that are proportional to the patient's shown aggression and that the personnel should behave respectfully and therapeutic towards patients in incidents of physical conflict. Furthermore, the ward should conduct follow-ups for the involved personnel and patients after an incident of aggression and if the incident resulted in the use of coercion. MAP is meant to evolve through coordination between the health trusts continuously. It is also stated that the prevention of aggression and violence is complex and is dependent on multiple factors such as culture, personnel competence, and other organizational factors (Nag et al., 2021).

2.4.3 Use of Alarm

An alarm is used in multiple psychiatric wards and departments as a safety measure and is prevalent in wards and DPCs where there exists a risk of violence. There exists no national procedure for the use of alarm devices to quickly ask for assistance in psychiatric wards. This thesis will describe an alarm routine from Oslo University Hospital (OUH) but acknowledges that the usage of alarm devices and alarm routines may vary between wards and locations. The routine mandates that an employee must wear the alarm throughout the workday. The alarm should be activated if the employee feels threatened by a patient or if immediate assistance from colleagues to control a situation. It is up to each employee to decide whether they feel threatened or not. When an alarm is activated, every employee must immediately go to the room where the alarm was activated. An individual shall be appointed as responsible for deciding the amount of personnel needed to maintain control and if other actors should be notified (OUS, n.d.-a).

2.4.4 Protocols for Reporting Deviances

According to the NLIA, every organization is responsible for creating routines to identify, correct, and prevent deviations in health-, environment- and safety according to Norwegian law. Deviance describes everything that diverges from the normal operation in the organization. These deviations include essential routines and procedures being broken and if an employee is hurt at work. As the organization is responsible for these deviations, they are also responsible for having a procedure for recording and handling deviances that occur. The NLIA recommends working towards creating an organizational culture for reporting deviances and near-misses and using the recorded deviances in the organization's overall risk assessment (NLIA, n.d.).

Different hospitals and health trusts use different procedures for reporting deviances (Helse Nord, 2021; Helse Vest, 2019, p. 20; OUS, n.d.-c). We will use the procedure described by OUH in *eHåndboka*, eManual, and acknowledge that this procedure may differ from the procedures used by our participants. However, we believe that it will give an adequate description of how this procedure could work within the Norwegian healthcare system.

3 Theory

3.1 The Concept of Risk

In the scientific field of risk research, there have been multiple attempts to come up with a singular term for the definition of risk. Yet, it has proved difficult to achieve an agreed-upon definition, and scholars have argued that no single definition could properly define risk (Aven & Flage, 2020, pp. 2131–2132). As an answer to this problem, the SRA created a glossary containing different definitions of risk based on fundamental risk concepts and other criteria. The main features of the risk concept in the glossary are *uncertainty* and *values*. Values, also called consequences, is a feature that describes what are at stake, for example, human lives, wildlife, or economic assets, if a risk event were to occur. One cannot provide an absolute prediction of the consequences of a future event, which is why the second feature of risk is uncertainty. This feature is often described using some form of probabilities combined with a knowledge base (Aven, 2018, pp. 883–884, 2020, pp. 69–74). While there still exist multiple definitions and meanings of risk, it is argued that it is acceptable as long as it is possible to make distinct interpretations of the term (Aven & Flage, 2020, p. 2132). For this thesis, we have chosen to use one of the definitions from the SRA glossary that defines risk as "*the possibility of an unfortunate occurrence"* (Aven et al., 2018, p. 4).

3.2 Risk Perception

In the last decades, a common view in the field of risk science has been that intuitive risk judgments are used by humans to evaluate different threats and hazards. The results of these risk judgments are usually described as an actor's risk perception (Slovic, 2000, p. 220). The perception of risk has garnered significant and lasting interest as it is a broad consensus that perception plays a prominent role in how people behave and what is deemed as an acceptable risk. Furthermore, the interest is kept up by observations that show how there is a gap between the perceived risk and the scientifically estimated risk of a behavior (Nordgren et al., 2007, p. 534; Siegrist & Árvai, 2020, pp. 2192–2195).

The early focus of risk perception studies was on why the public risk perception differed from the risk assessments conducted by experts, why people believed they faced more risks today than in the past, and to try and understand the underlying processes that influence people's perception of risks (Slovic, 2000, p. 221). It has been argued that there are two main judgments influencing risk perception, which are the *probability for an outcome* to occur and the *severity*

of this outcome's consequences, and that the public had a wrong judgment on what the experts deemed to be the correct level of risk for various hazards (Nordgren et al., 2007, p. 534; Siegrist & Árvai, 2020, pp. 2192–2193; Slovic, 2000, pp. 220–221). However, theories arguing that this view is too narrow, that there is an influence from other factors on risk perception, and that there are no true or right perceptions of risk have garnered notable traction in more recent years (Aven, 2020, pp. 138–139; Nordgren et al., 2007, p. 534). One such theory argues that risk perception is a subjective judgment and can be influenced by cultural, social, and psychological factors. This means that the risk perception for a specific hazard or threat can vary among different groups and individuals (Aven, 2020, pp. 138–139; Siegrist & Árvai, 2020, p. 2195).

While this thesis will primarily focus on psychological factors influencing risk perception, it is essential to recognize the effect social and cultural factors can have. Social factors have been shown to affect how individuals perceive a risk and at what level they accept that the risk exists in their lives (Siegrist & Árvai, 2020, pp. 2196–2197; Slovic, 2000, p. 221). One reason why social factors play a prominent role in influencing risk perception is due to the limited personal experience individuals have with various threats and hazards they face in the contemporary world. This lack of personal experience means that actors must rely on data passed on from information channels, such as the mass media, previous victims of the hazards, and internet sources (Renn, 2008, p. 99). Furthermore, individuals can also amplify or attenuate specific risks in an attempt to maintain or control a social group (Slovic, 2000, p. 221). Cultural factors could influence how individuals see risk, something that has been observed with significant variations in risk rating when comparing multiple countries' populations' perceptions of risks. These variations could stem from differences in cultural factors such as beliefs, norms, and morals. However, there is currently no directly proven relationship between specific cultural factors and risk perceptions, but they are still believed to play a role in risk perception, and these factors are used as an important argument for the necessity for a broader view than just focusing on probabilities and consequences (Renn, 2008, pp. 118–145; Siegrist & Árvai, 2020, pp. 2196–2197).

3.2.1 Heuristics

Another factor that influences risk perception is different mental strategies, often called heuristics, which are used to interpret uncertainties that exist in the world. These heuristics have been shown as helpful in certain situations, and they can also have a significant impact on how actors assess risks by creating various biases toward a risk. These biases can influence

the perception of risk for an individual of the public and of an expert alike (Slovic, 2000, pp. 221–222). In the following paragraphs, we will present five different heuristics; [1] availability bias, [2] representation bias, [3] anchoring effect, [4] avoidance of cognitive dissonance, and [5] optimism bias.

Some of the most recognized heuristics affect how an actor interprets probabilities related to risk (Renn, 2008, p. 103). An example of such a bias is the *availability bias*, which describes how risk events that are more easily recollected from an actor's mind will be perceived as more probable to occur compared to other risk events not as readily available. Several studies have examined availability bias in relation to natural hazards, and have found indications that individuals who have experienced a hazard, such as a flood would remember events more easily and perceive the risk as higher. However, there is still uncertainty connected to the exact influence availability bias has on risk perception (Siegrist & Árvai, 2020, pp. 2197–2198). The *representation bias* is another heuristic that influences perceived probabilities by a distorted importance given to a singular event or group of events by an actor instead of putting weight on available probabilistic information. A third heuristic bias is the *anchoring effect*, which describes how an actor might have a flawed view of the probability of an event due to being influenced by a related but independent reference point (Renn, 2008, p. 103).

These heuristics could lead to disagreements on the risk between various actors, which might not dissipate even with concrete evidence. The *avoidance of cognitive dissonance bias* could cause evidence that contradicts the initial view of the actor to be dismissed as unreliable or downplayed, while evidence in support of the original view is seen as reliable (Renn, 2008, p. 103; Slovic, 2000, pp. 221–222). How evidence is presented can also alter actors' risk perceptions, a medical risk presented by a mortality rate might be viewed as less favorable than if the same procedure instead was presented with its survival rate (Slovic, 2000, pp. 221–222). Humans also tend to overestimate their own capabilities and assume that good events are more likely to occur compared to more bad outcomes. This is called the *optimism bias* and is believed to be one of the most significant biases for affecting the perception of risk (Martin, 2019, pp. 127–129; Siegrist & Árvai, 2020).

3.2.2 Control

Another factor that can influence risk perception is the characteristics of the risk in question. Some identified risk characteristics are voluntariness, control, familiarity, knowledge level, and

the potential for catastrophic consequences (Slovic, 2000, pp. 223–224). Control has been viewed as one of the more notable risk characteristics, and it plays a vital role in how risk is perceived. Perceived controllability over a risk usually makes the risk more preferrable than the less controllable risk, and this preference can remain even if the less controllable risk is assessed to be less of a threat. This preference can be explained by the observation that risks that are perceived as more controllable are perceived as safer than less controllable risks (Nordgren et al., 2007, p. 534). Furthermore, control seems to be an important indicator when individuals judge themselves to be less at risk than others (Sjöberg, 2000, pp. 2–3). The effect of the control characteristic has been observed in multiple studies across various types of threats and hazards (Hooks et al., 2019, p. 1751).

While the influence of the control characteristic on risk perception has received a lot of scientific attention and has been observed in several studies, some researchers have argued that too little attention has been given to is meant by control. They state that two distinct aspects of control have been identified, the ability to *control the exposure* to risk and the ability to *control the outcome* of a risk, and that this distinction is needed to properly assess control's influence over perception (Nordgren et al., 2007, pp. 534–535). Another observation by Nordgren et al. (2007, p 542) is that a judged ability to control exposure heightened the risk perception, while a judged ability to control the outcome lowered the risk perception. This is in stark contrast to previous research that has observed that perceived voluntariness to the exposure of a risk led to higher acceptability of the risk (Slovic, 2000, pp. 223–226). However, Nordgren et al. (2007, p. 453) argue that this discrepancy could be caused by them examining personal risks, which individuals could have higher perceived control of outcome over, compared to the previous research examining societal risks that could be deemed as less controllable in regard to their outcome. This thesis will not focus on the distinction between control over exposure and outcome but will instead examine if the perceived control on outcome has an impact on how healthcare workers perceive a near-miss incident. However, the distinction between the two types of control will affect how the methodology is developed with regard to the phrasing of questions in the questionnaire and interview.

3.2.3 Trust

It is believed to be a connection between the level of trust in a field's managers and the level of concern the public feel against hazards within that field. The connection between trust and perceived risk has received significant attention, with several articles focusing on the topic each

year for the past decades (Earle et al., 2010, pp. 1–2). While there are still topics within trust requiring further examination, there is a consensus among some of the core issues about trust. A significant amount of researchers focusing on trust agree with Rousseau et al.'s (1998) definition of the term, which describes trust as the *"psychological state compromising the intention to accept vulnerability based upon a positive expectation of the intentions or behavior of another"* (Earle, 2010; Rousseau et al., 1998, p. 395). In essence, trust is the expectancy that others are in control over our situation and want us well (Lindøe, 2018, pp. 46–47). The definition by Rousseau et al. has been used to argue for either a two- or three-dimensional concept of trust. The two-dimensional concept identifies two types of trust, [1] relational trust and [2] calculative trust. *Relational trust* draws its basis from the trust between two persons or actors and mainly focuses on the intentions. In addition, it has been observed to be more critical to the overall feeling of trust. *Calculative trust* is founded on prior behavior and how future behavior is impacted by various constraints (Earle, 2010, p. 542).

The three-dimensional concept of trust argues that trust is rooted in the dimension's [1] ability, [2] benevolence, and [3] integrity. *Ability* describes if an actor has the skills and knowledge required to complete specific tasks and the more general ability to succeed within a field or organization. *Benevolence* describes the degree to which someone is believed to have good intentions towards the trustee, with a focus on themes such as loyalty, support, and care. The dimension of *integrity* describes how someone is believed to act according to principles that are ethically and morally sound, such as fairness, keeping of promises, and consistency (Colquitt et al., 2007, pp. 909–910, 2011, pp. 1000–1001). It is the dimensions of benevolence and integrity that are a cause of discussion between the two concepts, as there is uncertainty if both have a unique effect on the levels of trust (Colquitt et al., 2007, pp. 909–910; Earle, 2010, p. 541). However, a study by Colquitt et al. (2007, pp. 917-919) suggests that all three dimensions have a unique and significant impact on behavioral outcomes regarding trust. This thesis will discuss the three-dimensional concept of trust and how it may affect perception related to near-misses.

Trust is regarded as an important attribute for cooperation by reducing the complexity of the present (Earle, 2010, p. 542). Furthermore, trust has been shown to have a positive impact on job performance as someone who trusts their coworkers and leaders by reducing the energy required for monitoring and instead focusing on the required tasks (Colquitt et al., 2007, pp. 910–922; Lindøe, 2018, pp. 46–50). Additionally, trust has a role in predicting risk-taking, as

a more trusting person is inclined to be put in a more vulnerable position and therefore accept a higher degree of risk (Colquitt et al., 2007, pp. 910, 918–922). Lastly, while the definition of trust highlights that someone puts themselves in a risky situation by trusting another individual but not trusting someone can also lead to heightened risk as one might not capitalize on available opportunities (Siegrist, 2019, p. 482).

There exists a widespread belief that trust takes time to build but that trust can easily be destroyed, often referred to as trust asymmetry (Slovic, 2000, pp. 281–282). This belief, however, has little support in the scientific literature. Several studies have shown that the level of trust remained stable despite accidents or other incidents that could reduce trust (Earle, 2010, p. 569; Siegrist, 2019, pp. 485–486). However, trust can be reduced after incidents, such as after the nuclear accident in Fukushima, but it is not as fragile and easily destroyed as previously thought (Siegrist, 2019, pp. 485–486). Furthermore, some researchers have indicated that relational trust is relatively resilient against trust asymmetry, while calculative trust is more sensitive to negative impact after an incident (Earle, 2010, p. 569).

Most of the published research on risk perception and trust is correlational, and one cannot conclude the causal relationship between trust and perception. There have been conducted numerous studies that indicate a strong correlation between risk perception and trust; however, trust may not be universally relevant for risk perception in all types of situations. This has caused researchers to discuss if trust has a direct or an indirect influence over perception, with others arguing that trust has no influence at all (Siegrist, 2019, pp. 484–487).

3.2.3.1 Trust among workers

The importance of trust among colleagues has been noted as necessary for an employee to focus on the task they have at hand. Lack of trust can lead to self-protective behaviors and monitoring of their coworkers, which in turn lead to an increased workload. Trust in coworkers can have significant implications on performance and especially in a high-reliability context. Two elements that are viewed as essential for a context to be classified as high reliability is unpredictable conditions and situations that can be viewed as inherently dangerous. One field that is recognized as working in a high-reliability context is firefighters during emergency response (Colquitt et al., 2011, pp. 999–1000). One can argue that healthcare workers also can fit into this category as patients provide an uncertain work context while healthcare can involve the risk of loss of life.

A study by Colquitt et al. (2011) examines how the trust dimension's ability, benevolence, and integrity impact trust among firefighters in high-reliability contexts. It found that the benevolence-based dimension failed to explain why, during an emergency response, firefighters would or would not trust their colleagues. The dimension of ability was also not related to trust in high-reliability contexts. The main explanatory factor identified in the study was the dimension of integrity. This is explained by the study as coworkers' consistent actions and following through on promised actions can be viewed as critical attributes when firefighters are in situations where they face potential trouble. The study also found that trust regarding more typical work tasks was reliant on the benevolence-based dimension, as well as the integrity dimension (Colquitt et al., 2011, p. 999-1012).

There has been conducted research related to risk perception, trust, and healthcare workers, such as the patient-healthcare worker relationship, healthcare workers' views on emerging medicine, and their role within the larger healthcare system (Achat et al., 2022; Aci et al., 2022; Gjerstad et al., 2020; Hawley, 2015; Petrocchi et al., 2019; Revue et al., 2021; Rutherford, 2014). A study by Sutherland et al. (2021) examined how trust forms between healthcare workers, which highlighted that trust takes time to form, that proximity and working together built trust, and that good patient reports and shared successes had a positive impact on the level of trust. Another study argued that trust is an essential part of good cooperation between healthcare workers and that this could lead to better patient outcomes (Fiscella et al., 2017).

3.2.4 Trust and Perception

The role of trust in risk perception has received regular scientific attention in recent years, and it has been argued that the public relies on their trust in industries and governments to assess the risks and benefits relevant to a hazard. The topic is somewhat contested as it exists research showing both strong and weak correlations between trust and the perception of risk. However, while there exist gaps in the literature to adequately explain all the aspects of the relationship between trust and risk perception, it is clear that there exist situations where trust plays a role in how the risk of a hazard is perceived (Siegrist, 2019, pp. 480–488).

3.2.5 Reduction of Perceived Risk through Exposure.

While there exist pitfalls that can create a skewed perception of risk, research has shown that there is a connection between how someone perceives the risk of a hazard and the level of mitigating measures they decide to put in place. This connection has been tested frequently in

relation to natural hazards. Prior experience with a hazard could increase the number of safety measures an individual puts in place, especially if the previous event caused significant damage. However, less severe consequences after an event muddle how one would react to its newfound experience. Researchers have observed that the longer an individual is living in an area that is prone to hurricanes, the less likely are they to evacuate when hurricane warnings are issued. Furthermore, individuals without hurricane experience are observed to evacuate at an earlier point in time compared to individuals with previous experience with hurricanes. This reduced willingness to evacuate has been linked with the observation that the perceived risk for hurricanes is reduced as the length of stay in a hurricane-prone area increases (Dillon et al., 2014, p. 1907-1909).

3.3 Near-Miss

In the early definitions of near-misses, scientists focused mainly on the *almost* vs. *could have* aspect of the term. The distinction is that there is a cognitive difference in what they trigger within an individual. Arguments being that a *could have* event would trigger differently from an *almost* event, as the latter is more likely to trigger counterfactual thinking within the individual, thus, making them more likely to learn from its experience. As the former *could have* event is more likely to awaken a sense of success from failure in near-misses, lowering their perceived risk and increasing their comfort level even though they still would be making a particularly large statistical risky decision. (Dillon & Tinsley, 2008, pp. 1426–1427). The definition we will use for near-misses defines them as an "event where a negative outcome could have happened because of hazardous conditions but did not" (Dillon et al., 2014, p. 1908).

Near-misses do not only affect an individual's cognitive processes, but they can also affect how these individuals behave. Research shows that even though a large group of individuals receives the same objective facts of costs and statistical risk, they do not necessarily accept the hazard uniformly. This could be due to them having previous near-miss experiences that affect their evaluation of the hazard. Near-miss experiences can make decision-makers engage in mindful reflection and put processes in place to improve safety in the future, but it could also result in no new actions to improve safety (Tinsley et al., 2012, p. 1610).

Some near-misses can be avoided through the correct mitigating actions taken by the actor. These types of actions can be the result of proper training and procedures by the actor or

organization, or they can be spontaneous decisions taken in the heat of the moment. In these types of near-misses, the actor has some sort of control and is able to make a decision where one of the answers proves correct and prevents the incident from happening. While it still could be a coincidence that the actor chose a particular action, this action will lead to a successful near-miss (Dillon et al., 2010, p. 442).

Another study by Dillon and Tinsley (2008) wanted to examine if the existence of previous near-misses would influence the decisions of an individual. In this study, participants were tasked with operating a space rover with limited battery life. The participants were informed that it was a 40 percent chance that the rover would break down during a severe storm if it was not left idle but operated through the storm. The participants were divided into two groups that both received control of the rover on day four. However, one group received information that the rover had driven through a storm the day before without breaking down, while the control group received no such information. When a new storm was forecasted, the group sitting on the near-miss information was more likely to operate the rover through the storm than the control group. This decision was not made because the participants had reassessed the probability of rover failure during a storm, but rather because they were influenced by the previous successful rover operation through a storm. This indicates that actions can be influenced by near-misses even if the probability assessment remains the same.

Near-misses can also influence how an individual view the competence of an actor. It has been shown that an incident resulting in success due to a coincidence can be viewed in a significantly more favorable light compared to an incident that resulted in a failure due to a coincidence. This means that an actor that performs specific actions that succeed due to coincidences could be perceived as more competent than an actor who conducts the same actions but does not have the coincidences on their side. This could, in turn, lead to a higher risk down the road, as successful actors that are perceived as competent, even if they owe their success to coincidences, to be handed more responsibility. This increased responsibility, combined with the potential riskier behavior of an individual that has experienced success due to good fortune, could result in the ones in charge carrying out actions that may have severe consequences (Dillon & Tinsley, 2008).

3.3.1 Resilient and Vulnerable Near-Misses

While it is recognized that individuals could perceive near-misses differently depending on whether they are viewed as *could have happened* or *almost happened*, a further specialization of these observations has been proposed. The proposal argues that events that *almost happened* highlight vulnerable aspects in a system, while events that *could have happened* highlight aspects that are resilient within a system and that they, therefore, could provoke different reactions in an individual. Research on the two distinctions of near-misses has shown that they influence the perceived risk of a hazardous situation and the decisions to implement mitigating measures or not. These two types of proposed near-misses are called resilient near-misses and vulnerable near misses (Tinsley et al., 2012, pp. 1597–1599).

Resilient near-misses are perceived as an event where a negative outcome is *successfully avoided,* which in turn can impact the view of affected individuals and lead them to underestimate the risk of future situations involving the hazard. Some studies have shown significant indications that when an individual experience a resilient near-miss, they are less likely to implement mitigating measures and are more likely to ignore warnings of a hazard. It is argued that the lack of mitigating measures after a resilient near-miss is due to the event being perceived as having a lower level of risk. Vulnerable near-misses, on the other hand, are viewed as a negative outcome *almost happening* and could therefore encourage future mitigating behavior. It is argued that the increase in mitigating measures is due to heightened perceived risk and because it brings up more negative associations in individuals compared to that of resilient near-misses (Tinsley et al., 2012, pp. 1603–1610).

Near-misses can result in a reduction of the threat's perceived risk. It can also lead to riskier behavior even though the actor's assessment of the probability of failure remains the same. This has been indicated by studies conducted by Tinsley et al. (2012), where participants were tasked with operating a hypothetical drilling platform and would receive an increased prize if they finished the drilling operation early. However, the participants' prize would revert back to zero if they operated during a heavy storm and the well was damaged. The participant would receive a weather forecast with a (95%) accuracy and would have to decide whether to drill or not. The ones that decided to drill during a forecasted storm were split into two groups that received different descriptions of the events. None of the groups experienced a drilling failure; however, one group received a description that was designed to be perceived as a vulnerable near-miss, while the other group received a description that was meant to indicate a resilient

near-miss. When a new storm was forecasted, the group that had received the more vulnerable description was less likely to drill than the group that had received the resilient. This shows that the distinction between resilient and vulnerable near-misses could influence how individuals conduct future actions and if they adopt a more mitigating behavior (Tinsley et al., 2012, pp. 1607–1609).

One example of how resilient near-misses can cause an underestimation of the danger of a hazardous situation is the case of false alarms. If a hurricane forecast results in little to no severe damage, the incident could be interpreted as a false alarm and, in turn, as a resilient near-miss. This type of interpretation could, in turn, cause a reduction in future actions taken to mitigate the risk. The opposite effect occurs if a near-miss is identified as vulnerable, then the perceived risk for similar future events increases (Dillon et al., 2014, pp. 1908–1915; Tinsley et al., 2012, p. 1610).

4 Methodology

4.1 Research Method, Design, and Approach

There are different kinds of research methods as there are different kinds of scientific fields. The research methods act as a guideline for researchers on how they should conduct their research and ensures their work match up to an academic standard (Grønmo, 2004, pp. 27–30). One of the methods is to conduct an explorative study. It is in the name itself that an explorative study aims to seek out new insights into a phenomenon by asking questions and assessing the phenomenon in a new light (Saunders et al., 2012, p. 670). We are doing an explorative study in the scientific field of risk perception among healthcare workers. We have created scenarios of successful and unsuccessful incidents and compared those ratings to what participants are saying. For the purpose of mapping how a psychiatric healthcare worker perceives violent incidents and if the awareness of vulnerable and resilient near-misses plays a role in future perception.

Research design provides a justification for all the decisions related to the research process. The design ensures control by anticipating different aspects related to the research and integrating them to be presented at an appropriate time within the research project. Some of the crucial elements within the research design are the research question, the literature review, data collection, data analysis, and evaluation of the research with particular attention to strengths and weaknesses (Blaikie, 2010, pp. 15–26). We have chosen to follow a similar structure for our thesis' methodology chapter.

4.1.1 Mixed Research Methods

At the two ends of the methodological research spectrum, we find quantitative and qualitative methods, respectively. The sharp distinction between the two methods can be problematic to identify, as many research designs are likely to combine elements from both the qualitative and quantitative research methods (Saunders et al., 2012, p. 161). This combination, when qualitative and quantitative data is collected, analyzed, and mixed within a single study, is called mixed methods (Blaikie, 2010, p. 218; Saunders et al., 2012, p. 166). The use of mixed methods can provide more extensive evidence, and weaknesses within one method can be mitigated through the strengths of another. This thesis will use triangulation as its primary method and, more precisely, a convergence model. A convergence model gives equal weight to the qualitative and quantitative data and compares them within the same time frame (Blaikie,

2010, pp. 218–224). A convergence model was chosen as it could gather more comprehensive data regarding the participants' opinions regarding near-misses and safeguard against the omission of essential elements within healthcare workers' perceptions. The data gathering methods chosen for our thesis are the utilization of a questionnaire and focus group interviews.

4.2 Data Collection

4.2.1 Questionnaire

The questionnaire is one of the data collection methods that are most commonly used, and there exists an array of definitions for the term questionnaire commonly used in research. This thesis adopted a definition that describes a questionnaire as *"a general term to include all methods of data collection in which a person is asked to respond to the same set of questions in a predetermined order"* (deVause, 2002, presented in Saunders et al., 2012, p. 416). One can use questionnaires with other methods to better understand the data collected from the questionnaires or to examine findings more in-depth (Saunders et al., 2012, pp. 416–420), which we did by combining it with focus group interviews. To obtain a high level of quality on the questionnaire, we used pilot testing, a clear layout for the questionnaire, careful planning of each question's design, and how to execute the delivery and collection of the questionnaire. Our questionnaire was self-completed by the participants, but we were present in the room while the participants filled it out. We decided on this method based on efficiency as we then could have multiple participants answer the questionnaire at the same time during the focus interview.

We chose two main variables to gather in the questionnaire. The first is opinion variables, which record participants' feelings or beliefs on a topic, and the second attribute variables, which record the characteristics of the participants, such as age, education, occupation, and gender (Saunders et al., 2012, p. 425). The questionnaire was handed out in specific periods during the focus group interviews. This was done to provide background information on the participants without spending time questioning each participant verbally during the interview. The questionnaire was also administered to collect data on opinion variables before participants discussed to prevent the discussion from influencing the participants' initial thoughts. We used a combination of open-ended questions to gather data on participants' backgrounds and used closed-ended questions with ratings to examine participants' opinions towards the presented scenarios.

4.2.2 Focus Groups

Participants in our study exist within spheres of focus groups. A focus group is a group interview that focuses its attention on a certain topic through a discussion between participants in an open and non-judging environment. The participants are encouraged to share their views and discuss them among themselves without the goal of reaching a consensus. The selection process for focus groups is done by selecting participants with the same characteristics regarding the topic of interest, and the interviews are conducted multiple times with new but similar individuals so that one can identify trends or patterns (Saunders et al., 2012, p. 403). Our study consists of smaller groups with three to five participants in each. We decided on smaller groups as we believed the participants would have an easier time opening up and because we were aware that our topic could be experienced as somewhat sensitive. Furthermore, the moderator had no previous experience with conducting focus group interviews which also spoke for smaller groups to ensure the quality of the interviews.

4.2.3 The Scenarios

We have chosen to construct two different near-misses and a control scenario. To answer the problem statement of successful and unsuccessful responses to violent incidents, the near-miss scenarios were developed to portray either a vulnerable near-miss or a resilient near-miss. A third scenario was developed as well, with the aim of being a static variable for comparison to the near-misses.

Each scenario presents a patient under compulsory psychiatric care with a known history of violence who has already been assessed as moderate on the risk of violence assessment on a day unit. Furthermore, the patient has either one or two episodes of challenging behavior in the scenarios, and only one employee responds to their behavior, as presented in *table 1*. For the purpose of this thesis', we base the term 'challenging behavior' on the Norwegian word *utagering,* as there is no direct translation to English. Store Norske Leksikon defines the term as *"a tendency to live out inner conflicts, impulses and moods without care to the situation and the consequences of such behavior has on others"* (Malt, 2019) (translated by authors).

The surroundings of the incident are identical in all the scenario descriptions, with some nuances regarding the response from the employee, but they still contain the same elements. The events in the near-miss scenarios occur over two days, while the events in the control scenario occur only on one day. This is due to the vulnerable and resilient element of the

scenario occurring on day one, described as *yesterday's events*, and on the second day, described as *today's event*.

The employee's behavior during the scenarios was based on a procedure from OUH's electronic manual called "Håndtering av uakseptabel atferd i avdelingen" which in English translates to *Management of unacceptable behavior in the ward* (translated by authors). The procedure described that unacceptable behavior could be threats, yelling, acting out, or violent behavior. There were multiple alternatives for how the personnel could intervene, but the measures chosen for the scenarios were [1] asking the patient to stop their behavior, [2] that the patient's behavior is making others uncomfortable, and [3] asking why the patient is acting in this way (OUS, n.d.-b). The exact scenarios were developed and executed in Norwegian since the participants are in the Norwegian healthcare sector. *Table 1* presents the translated version of the scenario description; see *appendix 5* for the Norwegian version.

4.2.3.1 Development of the scenarios

In the initial phase of the development of the scenarios, the context descriptions differed across five scenarios. This was due to the focus groups having various backgrounds, and we developed the scenarios to either occur in a DPC, a security facility, or an open bed unit. The common factor across the scenarios was there was a patient with challenging behavior, and there was no further description of an employee in the room and/or of the patient's surroundings.

After meeting with a professional in psychiatric health care research, and to stay true to our problem statement, we expanded the scenarios' description and narrowed the initial five scenarios down to three – a vulnerable near-miss, a resilient near-miss, and the control scenario. These scenarios occurred in the same psychiatric ward – a security facility. The description of the patient's challenging behavior was more descriptive, and the elements of the patient's behavior were based on the feedback we got from professionals with a connection to psychiatric healthcare and from written accounts of challenging behavior in the trade magazine *Sykepleien*. In each scenario, the patient was assessed as high on the HCR-20^{V3} scale. The description of the employee response was based on OUH's procedure of *Management of unacceptable behavior in the ward.*

More input from academics in health care was sought out to increase the validity of the scenarios and to create scenarios the participants would view as recognizable independently of

where they worked. Common factors across the three scenarios were a better description of the surroundings, the challenging behavior occurs in the common room of a day unit, the patient is assessed to have a moderate risk of violence, the patients challenging behavior, and the employee's response. The events in the vulnerable and resilient near-misses occurred over two days. After restructuring the scenarios and adding the questionnaire, we ran a test run with healthcare professionals, more about it in *chapter 4.2.6.* Based on the test runs, the last changes were made to the scenarios and presented to the focus groups and participants.

4.2.3.2 Set 2 of the scenarios

During the execution of the interviews, we noticed that the description of the employee's response in the scenarios caused a bigger reaction from the participants than expected. We did not anticipate this reaction and made changes to the scenarios, more specifically, the employee's response to the challenging behavior. This was done by replacing the near-misses description of the response with the control scenarios response. The second version of the scenarios was presented to the latter half of the focus groups.

Table 1 Scenario description

	SET 1 SCENARIOS	SET 2 SCENARIOS
THE VULNERABLE NEAR-MISS SCENARIO	"A patient is admitted under compulsory psychiatric care at a day unit. The patient has a previously known history with incidents of violence. They were risk assessed at admittance and this was put as moderate. On yesterday's shift there was an episode were the patient acted out. An employee sat down and reached out to the patient to try to calm down the situation, but the patient had then struck hard towards the employee. The other employees in the ward managed to separate the employee and patient before anyone got hurt, and the patient gradually calmed down and no similar incidents of acting out occurred for the rest of the shift. Today the patient is sitting by themselves in the common room after breakfast. After sitting by themselves for some time, the patient starts to become restless and starts hitting the chair. The patient continues to hit the chair and begins to yell loudly. An employee that is in the common room walks towards the patient to try to calm them down and deescalate the situation. The employee does this by asking the patient to stop yelling and hitting, and that the behavior of the patient is experienced as unpleasant by the other patients. Further, the employee asks the patient why they are yelling."	"A patient is sitting by themselves in the common room at a day unit and is admitted under compulsory psychiatric care. The patient has a known history of violence and is assessed to have a moderate risk of violence. On yesterday's shift there was an episode were the patient acted out. An employee sat down and reached out to the patient to try to calm down the situation, but the patient had then struck hard towards the employee. The other employees in the ward managed to separate the employee and patient before anyone got hurt, and the patient gradually calmed down and no similar incidents of acting out occurred for the rest of the shift. Today, after sitting in the common room for a while the patient starts to yell loudly, curse and hit the table. The employee at work tries to deescalate the situation by sitting down by the table to calm down the patient. This is done by the employee by asking why the patient is screaming, explaining that the others in the ward are becoming uncomfortable and asks the patient to stop screaming and hitting."
THE RESILIENT NEAR-MISS SCENARIO	"A patient is admitted under compulsory psychiatric care at a day unit. The patient has a previously known history with incidents of violence. They were risk assessed at admittance and this was put as moderate. During yesterday's dayshift there was an episode were the patient acted out. An employee on the ward had sat down in an attempt to contact the patient and tried calming down the situation. The employee managed to gradually calm the patient down and the patient had no further incidents of acting out for the rest of the day. Today the patient is sitting by themselves in the common room after breakfast. After sitting by themselves for some time, the patient starts to become restless and starts hitting the chair. The patient continues to hit the chair and begins to yell loudly. An employee that is in the common room walks towards the patient to try to calm them down and deescalate the situation. The employee does this by asking the patient to stop yelling and hitting, and that the behavior of the patient is experienced as unpleasant by the other patients. Further, the employee asks the patient why they are yelling."	"A patient is sitting by themselves in the common room at a day unit and is admitted under compulsory psychiatric care. The patient has a known history of violence and is assessed to have a moderate risk of violence. During yesterday's dayshift there was an episode were the patient acted out. An employee on the ward had sat down in an attempt to contact the patient and tried calming down the situation. The employee managed to gradually calm the patient down and the patient had no further incidents of acting out for the rest of the day. Today, after sitting in the common room for a while the patient starts to yell loudly, curse and hit the table. The employee at work tries to deescalate the situation by sitting down by the table to calm down the patient. This is done by the employee by asking why the patient is screaming, explaining that the others in the ward are becoming uncomfortable and asks the patient to stop screaming and hitting."
THE CONTROL SCENARIO	"A patient is sitting by themselves in the common room at a day unit and is admitted under compulsory psychiatric care. The patient has a known history of violence and is assessed to have a moderate risk of violence. Today the patient has been calm, and there has not been anything to note about their behavior throughout the shift. After sitting in the common room for a while the patient starts to yell loudly, curse and hit the table. The employee at work tries to deescalate the situation by sitting down by the table to calm down the patient. This is done by the employee by asking why the patient is screaming, explaining that the others in the ward are becoming uncomfortable and asks the patient to stop screaming and hitting."	"A patient is admitted under compulsory psychiatric care at a day unit. The patient has a previously known history with incidents of violence. They were risk assessed at admittance and this was put as moderate. Today the patient has been calm, and there has not been anything to note about their behavior throughout the shift. The patient is sitting by themselves in the common room after lunch. After sitting by themselves for some time, the patient starts to become restless and starts hitting the chair. The patient continues to hit the chair and begins to yell loudly. An employee that is in the common room walks towards the patient to try to calm them down and deescalate the situation. The employee does this by asking the patient to stop yelling and hitting, and that the behavior of the patient is experienced as unpleasant by the other patients. Further, the employee asks the patient why they are yelling."

4.2.3.3 Switching the scenarios between the focus groups

To test our problem statement related to whether a vulnerable or resilient near-miss affects one's perception and response to later incidents or not, we decided to switch up the scenarios' order of appearance. All groups received the control scenario. There was a plan behind the order in which scenarios were presented as we wanted to ensure that groups within the same category, see *chapter 4.3.4,* would get an even mixture of vulnerable and resilient near-misses among themselves. *Table 2* provides an overview of the distribution of scenarios. S_1 represents the scenario that appears first, and S_2 represents the scenario when it appears second. The letters stand for the type of scenario, with V being the vulnerable near-miss, R being the resilient near-miss, and C being the control scenario. For a more in-depth description of the execution process, see *chapter 4.2.7.* A majority of the focus groups received the control scenario as their second scenario

Table 2 Distribution of scenarios

	SET 1					SET 2				
	GROUP 1	**GROUP 2**	**GROUP 3**	**GROUP 4**	**GROUP 5**	**GROUP 6**	**GROUP 7**	**GROUP 8**	**GROUP 9**	**GROUP 10**
S_1	V	R	V	C	C	V	R	R	C	C
S_2	C	C	C	R	V	C	C	C	R	V

4.2.4 The Selection of Participants

The selection of the participants was made through a combination of quota sampling and self-selection sampling. Quota sampling is a method that creates specific categories and selecting a specified number of units within each category. The selection of units can be strategic but can also be based on the availability of the units (Grønmo, 2004, pp. 99–100). There was not a specific limit on the number of units within the categories, as they were chosen based on availability. However, the selection aimed toward a relatively balanced number of units within each category. Our thesis will present three types of categories of psychiatric wards and departments; see *chapter 4.2.4.1*. For the rest of the thesis, it will be referred to as wards independently of the type of department.

While for the latter, self-selection sampling is a type of volunteer sampling technique where actors are given information about the study and an invitation to partake. (Grønmo, 2004, pp.

101–102). The sampling through self-selection was used by reaching out to wards based on the categories created in the quota sampling and asking if they were interested in partaking in the study. The contact person for the psychiatric ward or department, usually the unit leader, was then responsible for selecting and asking their employees if they could be interested in partaking and whose absence would not impact the ward significantly during the interview hour.

We reached out to two different Health Trusts to gather participants. As the goal was to increase the number of participants and not to conduct a comparative study between the Trusts, no consideration was taken during the selection process to balance the number of participating wards from either Trusts. Within the Health Trusts, approximately 30 different psychiatric wards and departments were contacted.

Criteria for the wards were, [1] they must belong to one of the Health Trusts, [2] they must treat psychiatric patients, [3] their patients are not underage, and [4] there is a risk for some form of violence or verbal threats towards personnel by patients. After establishing contact with the different wards, we invited the leaders of the wards to individual meetings to introduce ourselves and the project, and answer any questions they might have. Criterions for the focus groups and their participants were [1] each group must be between three to five participants, and [2] the participants must be in frequent contact with psychiatric patients and respond to challenging behavior. There was no requirement for the participants to have a healthcare-specific education.

Before conducting the interviews, there was originally an eleventh group that was supposed be take part in our study. Unfortunately, they had to cancel as unforeseen events prevented them from partaking on the scheduled day, and it was not possible to schedule a new appointment. We also lost a couple of individual participants before and during the interviews for various reasons.

4.2.4.1 Overview of the participants

Participants in the study consisted of 40 personnel from the two Health Trusts. Within the Health Trusts' the personnel was divided into ten different groups, each fulfilling the criteria set by our thesis. The ten groups are categorized into three types of psychiatric wards, [1] psychiatric security facilities, [2] DPCs, and [3] open psychiatric wards. In the last category, we merged acute departments and mood disorders and psychosis departments under the same

umbrella. To get a better picture of the focus groups, two groups are in category one, four groups are in category two, and the remaining four groups are in category two.

Among the participants, there is a somewhat higher female to male ratio. There is a substantial overweight of health-educated professionals, $36/40$ participants had a health-related education, either on a vocational level or on a bachelor's level and higher. In the pool of participants, $10/40$ have either a master's degree or completed a specialization while $5/40$ are vocationally trained. The age span of participants spans from 22 years of age to 64 years of age, where the average age is 42,3. Grouping the ages in intervals of 10 years; [1] age 22-32, [2] age 33-43, [3] age 44-54, and [4] age 55 and older. The largest age group was group one, with 12 participants. Shortly followed by group two with 10 participants, and the last two groups had nine participants each.

For the purpose of our thesis, we also wanted to map the participants' seniority in the healthcare sector, in psychiatric care, and in their current workplace. All of the participants have four or more years of experience within the healthcare sector, with the highest time being 42 years. However, we did have one participant that failed to fill out this question of the questionnaire. This participant did have more than four years within the field of psychiatric healthcare, so we can assume that they have been in the healthcare sector for at least four years. Nevertheless, based on the 39 others, the average years of service in healthcare was 17,8 years.

The rest of the numbers presented are based on all 40 individuals. Everyone has at least one year under their belt within psychiatric care, where the longest time is 42 years as well. Yet, the calculated average spent in psychiatric healthcare is approximately four years shorter than the total time spent in healthcare, where the average seniority is 13,4 years. The last category of experience is their current workplace. Some participants did not have a whole year of experience at their current workplace, ranging from one to five months of experience to 19 years. The calculated average of seniority is 8,3 years.

4.2.5 The Interview Guide

The same factors that affected our development of the scenarios in *chapter 4.2.3.1* affected the process for the interview guide. The interview guide consists of the scenarios, individual questionnaires, and open group questions. We structured our interview guide into six parts; [1] an individual background questionnaire, [2] S_1 and its subsequent questions, [3] S_2 and its

subsequent questions, [4] open questions for discussion, [5] an individual questionnaire on previous experience, and [6] final remarks, see *appendixes 3 and 4* for the Norwegian and English versions. The structure of the interview guide makes it possible to catch individual opinions of the presented scenarios before the open discussion.

The first part of the questionnaire consists of four questions, all related to the participant's background. The second and third parts are identical and consist of a questionnaire with four questions regarding [1] the employee's response, [2] the level of threat, [3] the level of safety, and [4] the element of coincidence. The participants were asked to answer these questions on a five-point scale; see *figures 1-4*. Within these parts, the questionnaire is followed by two questions directed at the group to discuss.

Part 4 facilitates an open discussion between the participants, with the two presented scenarios as a baseline. In the following part, participants filled out a final questionnaire. Part 5 asks the participants to rank on a scale of how many times they have experienced violence, threats, near-misses, and the overhanging feeling of risk at their current workplace. We used the definition provided by the NLIA about *violence* and *verbal threats.* Closing the interview with an open question for the participants to give any final remarks.

4.2.6 Pilot Testing of the Interview Guide

Pilot testing is done to refine a questionnaire to prevent the participants from having problems answering the questionnaire in the actual interview. A pilot test should examine if any questions are unclear or make the participant uneasy about responding, how long it took to complete, opinions on the layout, and other comments such as significant omissions from the topic. (Saunders et al., 2012, pp. 451–452).

Two pilot tests were conducted in early April with personnel from two different care homes. We acknowledge that the personnel was not the target group for the final questionnaire and focus groups. Nevertheless, they were still healthcare personnel and could provide helpful input on weaknesses in clarity and presentation of the questions, as well as providing practice for the moderator to conduct the interviews. The test rounds were conducted primarily to establish a baseline for our time management, presentation of the questionnaires parts, and to detect wording that could seem misleading.

The first group consisted of two participants from a rehabilitation and treatment center. The group pointed out the need for rewording of questions and scenarios, the need to introduce definitions of threats and violence, and include a more descriptive scale for the rating questions. Furthermore, the pilot test provided helpful input on practical changes for conducting the interview. The second pilot test consisted of three personnel from a care home facility. Similar input was given in the second round. Positive feedback was given on the implemented changes. Both tests provided useful experience for the moderator and showed that prepared modifiable follow-up questions and encouraging questions were needed to ensure that the moderator had some support and prevented him from influencing the participants.

4.2.7 Execution of the Interview

Time and place were agreed upon in advance with the unit leaders. All the leaders were informed about and agreed that the interview process could take up to 75 minutes. The ten interviews occurred over a three-week period between the end of April and the middle of May. For the most part, the process went as scheduled, but some wards were delayed due to internal challenges, which we had expected could occur. Therefore, in some groups, we experienced less preparation time before the interviews started. Nevertheless, we don't believe this affected our findings as we had scheduled up to 75 minutes for the interviews.

We sent a copy of the Letter of Information and Consent Form in advance; see *appendix 1*. This contained the project description, what participation encompassed and participants' rights, and a declaration of consent. Since all of the communication had only been with the participants' ward leaders, we brought physical copies of the emailed information. When all the participants arrived, we started by introducing ourselves and went through the letter of information, thanked the participants for their contribution, and informed them of their rights. As they had been selected by their leaders, we specified that their participation was entirely voluntary and that they could withdraw from the study at any point during or after the interview until the thesis deadline. Lastly, we collected the signed forms of consent.

All participants received their own unique number for the entire study. The purpose for individual numbers was both for the participants' sake if they wished to withdraw after the interview and to properly store the data they provided. The latter part is especially important for our process as the interview guide consisted of multiple separate paper parts. The interview was conducted according to the structure of the interview guide.

4.2.8 Data Protection Officials

Since we would be processing participants' personal data, such as names and sound recordings of the participants' voices, we had to apply to the Norwegian Centre for Research Data (NSD) (NSD, n.d.). When we received the approval from the NSD, we could proceed with seeking approval from the Health Trusts. Due to the nature of our study, we were required to apply for approval from the data protection representative in the Health Trusts. Since we interviewed employees working with patients in vulnerable situations, we specified that no patient data would be collected, and we would only collect opinions, experiences, and information that focused on the participants.

4.2.9 Transcription – from speech to writing

Transcription is the reproduced written record of an interview's audio recording of what participants replied in their own words after a question. It can also be the written record of the content of a conversation between two participants, in the exact words they said. (Saunders et al., 2012, pp. 550–552). We transcribed each audio recording ourselves at the earliest practical opportunity and checked it for errors after transcription. Each participant received a coded identifier under transcription to ensure anonymity. The transcription was not sent back to the participants for validation as we wished to keep the participants' initial thoughts after each scenario as true to the initial reaction as possible.

4.3 Relevance of Data

The data collection of this thesis has been shaped by scientific articles and books, news articles, documents, and procedures. Everything has had some affiliation to the general topic of the thesis; however, some have become less relevant as it developed. There has been a scrutinizing selection on what should be included in the final thesis. With the research question as the foundation, we have selected the literature deemed the most relevant and necessary to provide a useful context and to answer our problem statement. Our findings have gone through a selection process as not everything brought up by the participants was deemed relevant to our problem statement. This process was done through a triangulation based on the collected data from both the questionnaires and focus group interviews. This process was not only about limiting the data but also about creating new findings to the current literature.

The selection process was done based on our subjective judgment on how to best represent reality. Factors that have played a role in this judgment are relevance, the credibility of a source,

the year of publication, and if it provides new or valuable information relevant to our thesis. While most of the data is found and selected by us, some of the data is included due to the recommendation or mention from participants, cooperating experts, or our supervisor. As the selection process was done through subjective judgments, there is a possibility that some data that could be regarded as relevant has been omitted from the final document. However, if this has occurred, it unconsciously happened as we have strived for a proper selection that sheds light on all sides of the problem statement.

4.4 Analyzing the Data

4.4.1 The Data from the Questionnaire

Descriptive nominal data counts the number of incidents in each category of a variable by giving a description of a numerical value otherwise tricky to define. *Ranked ordinal data* ask the responders to rank or score on each case within a researcher's data set, examples of such is to ask the responders on a scale how much they agree or disagree with a statement (Saunders et al., 2012, p. 475). Analyzing the data from the questionnaire were made more accessible by applying both *descriptive nominal data* and *ranked ordinal data* as early as in the interview guide. For instance, the participants were asked to rank their perception of the scenarios by categorizing to what degree they felt *safe* or *threatened* based on the events in the scenario description. Thus, already creating numeric data containing a description and categorizing as early as the interview rounds. Afterward, all we needed to do was to organize the raw data material down across all 40 participants' answers into one single sheet of paper on Excel™ to further analyze that data.

The next step in the process can be a *data matrix*, and a researcher plots their data into a table format. One can also create separate data matrices based on the sheer volume of data variables (Saunders et al., 2012, pp. 478–479). The approach of applying data matrixes was a natural second step in our process. We divided the raw data down into three spreadsheets, sheet 1 contained the data from Part 1 of the interview guide, sheet 2 contained the data from Part 2 and 3, and the last sheet contained the data from Part 5. The data was entered at the earliest opportunity after each interview, concluding with all sheets containing the comprehensive data of all 40 participants.

Descriptive statistics enables the researcher to describe and compare their gathered variables numerically for the reader. This is usually done to provide the reader with a general impression

of the gathered data and can be done through the calculation of the data, often known as the average or *mean* (Saunders et al., 2012, p. 503). We chose to use the unit of *mean* to present an overall picture of the participation pool. We sorted the raw data into a new Excel document and categorized it after variables such as scenarios, specific questions, order of presentation, and sets. Afterward, we calculated the *mean* of the questions within these variables.

4.4.2 The Data from the Focus Group Interviews

This thesis has used a combination of deductive and inductive approaches to analyze the collected focus group interviews data. Using a *deductive approach* means that you formulate your research question and your objectives based on a foundation of existing research. A weakness with the deductive approach is that one may stop the examination of specific issues prematurely and that there is a significant gap between the theoretical foundation and the collected empirical data. To combat these weaknesses, one may incorporate an *inductive approach* to reveal themes that were not prominent during the deductive analysis. The inductive approach relies on collecting and examining data to identify various themes and issues that require further attention (Saunders et al., 2012, pp. 548–549).

We chose to use a deductive approach with some inductive elements incorporated because there already exist various studies on the topic of near-misses and risk perception that served as a valuable foundation to discuss our research question. Furthermore, the theoretical foundation provided certain expectations regarding what the data could tell us. However, inductive elements were included as we recognize that our thesis explores near-misses in a new field, and there could therefore be new aspects influencing the topic of near-misses that had not previously been identified.

The data were prepared for analysis through transcription. We then categorized and unitized the data from the interviews, which means rearranging the data into larger categories and sorting units, such as a statement or answer from a participant, under each of the categories (Saunders et al., 2012, pp. 557–560). We had identified certain categories before we analyzed the data based on our theoretical foundation, but we also used the inductive approach to identify additional categories relevant to our problem statement. When the data had been categorized and unitized, we looked for patterns and relationships between the various categories. When a pattern or relationship was identified, we developed testable propositions. Testable propositions are an apparent connection or relationship between categories that require testing

to see if there exist alternative explanations or examples not conforming to the proposition. If alternative explanations or non-conforming examples exist, the proposition needs to be developed to account for these. A conclusion that can withstand these factors will be closer to reality and more valid than interpretations that fail to notice data not supporting the researchers' opinions (Saunders et al., 2012, pp. 560–562).

4.5 Quality of Research

There is no true answer to what makes the quality of research and its data superior to others. The highest quality of research is the data material that can enlighten upon a project's problem statement the best and cannot be adopted to another type of study. There is a systematic way to ensure the quality of the data is to break it down into two main quality criteria, reliability, and validity. (Grønmo, 2004, pp. 217–218). It is these two criteria we use as a foundation for our evaluation of the data quality.

4.5.1 Reliability

Reliability refers to the data materials of the research. The optimal way to receive total reliability in the data materials is to use the same investigation design at different sources to gather identical data about the same phenomena. Further reliability has the ability to show us a range of variations in the data material if it is due to the research design or data gathering. If the is a significant variation in the data material due to the research design, it concludes that the reliability is low. On the other hand, the reliability is high if the data material has little variation following the design, and instead, the data reflect the actual differences between the analyzed units. It is important due to the trustworthiness of the data and the interpretation of the results of the analysis (Grønmo, 2004, pp. 219–220).

One can argue that a weakness in our data collection is that we have two different scenario descriptions divided into Set 1 and Set 2. This means that there could be variations in the data material related to the questionnaire and that the gathered data is based on only half the participants' ratings as the data was divided into two sets. We decided to create the second set of descriptions due to participants reacting stronger than anticipated on the response descriptions between the near-misses and the control scenario. To examine if it was the nuances or the vulnerable- or resilient element that awoke this reaction within the participants, we counteracted it by switching the scenario descriptions in Set 2.

There were a number of variables that could have influenced the reliability of the participants during the interviews. Some variables could be that there were different types of wards that were interviewed, there are different routines between the wards, and they are under two different Health Trusts. However, they were all chosen because they interact with psychiatric patients that have the potential to display challenging behavior. Another main reason for the various types of wards is that the current psychiatric healthcare sector is undergoing a change, and it is important to collect the perception of multiple practitioners within different parts of the sector.

There were several terms that are used in the interviews and Norwegian literature that do not have a direct translation into English, such as *utagering.* This meant that we had to define what *utagering* would be described as in our thesis. We have used the term *challenging behavior* as we viewed it to be the best fit since it does not require that the patient have the intention and malicious intent to cause harm to anyone else. Another variable that affects the quality of data is that our interviews were conducted in Norwegian and subsequently translated for our thesis. We will present a series of quotes from the participants that are translated by us. The translation is somewhat adjusted from the original wording in the interviews, but this is done so that the participants are represented grammatically correct in English. We believe that doing so strengthens our findings more than if we had a word-for-word direct translation of the quotes, as it is not always possible to do it in a way that makes it understandable.

Another variable that could affect the reliability is the structure of how our interview guide was executed. The focus groups were susceptible to multiple variables such as receiving different scenario descriptions in different orders, the number of participants varied within the focus groups, and the ratings on S_2 could be affected based on the discussions from the S_1. Nevertheless, these variables were necessary to answer the problem statement and to properly conduct an exploratory study.

4.5.2 Validity

Validity is about the data materials' relevance to the problem statement that is being enlightened upon. The validity is high when the research design and data gathering results in data materials relevant to the problem statement. High validity is based on how well the actual data materials answer the researchers' intentions with the research design and data gathering. Nevertheless, it is difficult in practicality to determine how true the data material matches its intentions, but the

principality of the term is still considered an excellent stand to discuss and assess the validity of the research (Grønmo, 2004, p. 221).

The fact that the ward leaders could select what participants partook in the focus groups could potentially influence the validity. This influence could occur through a selection of participants that viewed the ward in a more favorable light or had views that corresponded with that of their leader. This selection was, however, seen as necessary as the safety within the ward was a priority, and the leader was best equipped to ensure this safety and to find the available individuals. We believe that the participants that were selected by the ward leader were chosen because they were at the ward on the scheduled day and not because of high personal interest in the thesis topic.

A variable that could have affected the findings from the open question discussion is that the participants were asked to discuss the theme of control. This question of perceived control could have activated the participants to give greater importance to the control variable's influence on their perceptions regarding threat and safety. However, we do see from the transcriptions that the participants brought up the theme themselves before we reached our planned question of control, see *appendix 4,* part four of the interview guide. This observation confirms that the participants consider their perceived control when assessing and responding to a potentially violent incident.

An observation that could have influenced the validity was that there were no temporary workers or extras that partook in the study. Statements made by the participants did indicate that there are a significant number of mentioned workers that did not get represented in our research. These are workers with limited education in psychiatric healthcare and that only work a much smaller percentage than a full-time worker. While it would be interesting to examine the perception within this group further but considering this thesis problem statement, this weakness is not detrimental to the overall validity of the research.

4.5.3 Ethical questions

There are some pitfalls to consider when writing a thesis related to healthcare. Themes within the sector deal with personal information and a portion of the population that are in a vulnerable position. As this thesis focuses on violent incidents within psychiatric healthcare, we could contribute to more unintended stigmatization of the patient group. That has never been our

goal, and we believe that we have succeeded in portraying that these incidents only represent a small number of psychiatric patients'. We also had to complete applications to two different Health Trusts' which deemed our project to be up to code with their protocols.

Since we are not gathering any sensitive information on any patients but instead collecting the perception of healthcare workers in psychiatric healthcare, the data from the interviews removed any information that could be considered to be too sensitive. But it was not relevant information for our problem statement. We believe that we have not contributed to any further stigmatization of psychiatric patients and have stayed true to our thesis topic.

5 Findings

This chapter will present all the data and themes we identified through the interview process. First, we will present the questionnaire data, and this section will be divided into five sub-chapters based on the questionnaire section of the interview guide. Then we will present the findings from the focus group interviews. This data will consist of three major themes uncovered through the focus groups. To gain a more accurate understanding of the examined topics, we have chosen to present the findings from a holistic perspective rather than viewing each group as individual units.

5.1 The Questionnaire Findings

In the following sub-chapters, we will present the findings from the questionnaire sections of the interview guide. Its purpose is to shed light on psychiatric healthcare professionals' perception of incidents of violence or threats directed toward them. We have chosen to present our findings in the unit defined as *mean*. This unit is another way of characterizing an average, and the *mean* is calculated based on the average rating from all 40 participants. Afterward, we will then present the findings from Part 5. These findings will be presented in the unit *mean,* which will calculate the average number of incidents involving violence or verbal threats.

The different averages based on the unit *mean* are presented in different tables. *Table 3*-6 demonstrates the calculated average of the scores from questions one to four from Parts 2 and 3 in the interview guide. Furthermore, the table presents which type of near-miss received which scores by separating it into the vulnerable near-miss, the resilient near-miss, and the control scenario. Those scores are further divided into two sections based on the order of appearance. The two sections illustrate the *mean* based on when the scenario appeared to the participants, if participants received it as their first scenario, the table shows the mean behind S1, or if other participants got the same scenario as their second, this is illustrated as S_2.

The S_1 and S_2 is and is divided into two different sets. The two sets are needed as half of the participants got the original scenarios, and the latter received the reworded version of the scenarios, see chapter 4.3.3.2. Additionally, we have also calculated the mean of S_1 and S_2 in both sets to can an overall score of each scenario to see if there is any clear distinction between the different types of near-miss and the control scenario.

All scores will be presented and described as what they indicate, the system being that the S_1s from both sets will be compared, then the S_2s, and lastly, the overall scores from both sets – systematically going through each type of near-miss and the control scenario one at a time.

5.1.1 Q 1 | In your experience, how well did the employee respond to the situation?

The first question and its adjacent five-point scale are presented in *figure 1*, with its corresponding table of the participants' scores in *table 3*.

Figure 1 The five-point scale of question 1

1. In your experience, how well did the employee respond to the situation?				
Very bad	Bad	Neither nor	Good	Very good
1	2	3	4	5

Table 3 Calculated mean of question 1

SET 1			**SET 2**		
PRESENTED SCENARIO		***Mean***	**PRESENTED SCENARIO**		***Mean***
THE VULNERABLE NEAR-MISS SCENARIO	*S_1*	3,11	**THE VULNERABLE NEAR-MISS SCENARIO**	*S_1*	3,00
	S_2	2,20		*S_2*	2,20
	Overall	2,26		*Overall*	2,60
THE RESILIENT NEAR-MISS SCENARIO	*S_1*	3,50	**THE RESILIENT NEAR-MISS SCENARIO**	*S_1*	4,14
	S_2	2,33		*S_2*	2,75
	Overall	2,92		*Overall*	3,45
THE CONTROL SCENARIO	*S_1*	2,88	**THE CONTROL SCENARIO**	*S_1*	3,56
	S_2	2,69		*S_2*	3,60
	Overall	2,78		*Overall*	3,58

The table indicates overall, no matter the placement, either being S_1 or S_2, as well as affiliation to either set, we see that the participants ranked the employee's response in the vulnerable near-miss the lowest compared to the two other scenarios. With a closer look at *table 3*, the scores of the vulnerable scenario in both sets are ranked higher when presented as S_1, respectively **3,11** and **3,00**, compared to the scores of S_2 with scores of **2,20** and **2,20**. This indicates that the selection of participants that got the near-miss as their first scenario rated it mainly as *neither nor*, while the S_2 participants rated the scenario-mitigation as a *bad response* with a slight sway towards *neither nor*. The overall mean scores from the two different sets are respectively put at **2,26** and **2,60**, indicating that the first set of participants perceived the mitigation as *bad,*

leaning towards *neither nor,* and the second set of participants scored it in between *bad* and *neither nor* with a slight incline towards *neither nor.* The overall mean scores from the two different sets are respectively put at **2,26** and **2,60**, indicating that the first set of participants perceived the mitigation as *bad*, and the second set of participants perceived the response as between *bad* and *neither nor.*

This relatively small difference in the scores from the two sets of the vulnerable near-miss is not reflected in the following scenario. There is a distinct difference in scores between the two sets of the resilient near-miss. Participants that rated it as their S_1 gave it a score of **3,50**, and this score jumped up to **4,14** by their counterparts from the Set 2 participants. A noteworthy difference to the participants that rated the near-miss as their S_2, where scores from Set 1 to 2 only increased by 0,42 points. Averaging their total score of the employee's mitigation as, respectively, between each set as **2,92** and **3,45**. This means that the participants view the employee's response as *neither nor*. The first set of participants slightly swayed toward *bad*, while the second set of participants comparatively leaned strongly towards *good.*

As for the last scenario, the ratings within Set 1 are scored relatively close to each. The S_1 was rated at **2,88**, lesser than the participants from the second set of participants with a score of **3,56**. This trend is reflected by other participants that rated the control scenario as their second scenario with a score of **2,69** and **3,60,** respectively, between each set. Affecting the overall scores with a more than a half-a-point between the two sets (**2,78** and **3,58**), indicating that the Set 1 participants perceived the mitigation from the scenario-employee to be a *neither nor*, leaning towards *bad.* Meanwhile, the participants from Set 2 scored the mitigation as *good* with a lean towards *neither nor.*

In the end, *table 3* shows a somewhat unanimous rating of the employee's response across all three scenarios. The general response is that the mitigating actions range from *bad* to *neither nor*, with a slight incline towards *good* on the resilient near-miss and the control scenarios from the Set 2 participants. Furthermore, we see that the latter set of participants rated in general more positive on the mitigation than the first set.

5.1.2 Q 2 | How threatened would you perceive this incident if you were in this situation?

The second question of the questionnaire inquired the participants to rate how threatened they would feel if they were in the scenario presented before them. Like the previous sub-chapter, a

five-point scale is provided in *figure 2*, and the ratings are in *table 4*. Based on the overall ratings of the scenarios is, the vulnerable near-miss rated as the most threatening across both sets. However, the resilient scenario from Set 2 is a close second to the lower-rated vulnerable near-miss. Indicating that, based on those participants that rated those scenarios believed that they would have felt *somewhat threatened* if they were in the hypothetical situation.

Figure 2 The five-point scale of question 2

2. How threatened would you perceive this incident if you were in this situation?				
Not threatened	A little threatened	Somewhat threatened	Threatened	Very threatened
1	2	3	4	5

Table 4 Calculated mean of question 2

SET 1			**SET 2**		
PRESENTED SCENARIO		***Mean***	**PRESENTED SCENARIO**		***Mean***
THE VULNERABLE NEAR-MISS SCENARIO	S_1	3,44	**THE VULNERABLE NEAR-MISS SCENARIO**	S_1	2,67
	S_2	2,60		S_2	4,20
	Overall	3,02		*Overall*	3,43
THE RESILIENT NEAR-MISS SCENARIO	S_1	2,25	**THE RESILIENT NEAR-MISS SCENARIO**	S_1	3,71
	S_2	2,67		S_2	2,25
	Overall	2,46		*Overall*	2,98
THE CONTROL SCENARIO	S_1	2,50	**THE CONTROL SCENARIO**	S_1	2,67
	S_2	2,69		S_2	2,80
	Overall	2,60		*Overall*	2,73

A deeper dive on vulnerable near-misses' ratings show that there is a different view between Set 1 and 2 when the near-miss is presented as the first scenario compared to if it when it was presented as the second scenario. Participants that received this scenario as the first scenario ranked the near-miss as *somewhat threatened* with a rating of **3,44**, leaning towards *threatened*. While the participants from Set 2 rated the near-miss as **2,67,** *a little threatened* with a sway towards *threatened*. The participants that received the near-miss as their second scenario rated it as less threatening with a score of **2,60** in the first set. That rating jumped significantly compared to the participants of Set 2, scoring it at **4,20**, meaning they perceived the scenario as *threatened* with an incline towards *somewhat threatened*. Even though there are distinct jumps between the two different sets, the increase and decrease are opposite each other when it is introduced as S_1 compared to when it is introduced as S_2, averaging the total scores close

to each other. With just a little half-point difference between the two sets with scores of **2,46** and **2,98**, the participants from the first set rated it less threatening than their counterparts.

While there is a similar type of change in the scoring for the resilient near-miss, the change is the opposite of its vulnerable counterpart. The participants from the first set rated the S_1 near-miss as **2,25**, *a little threatened*, whereas the participants from the second set rated the near-miss higher with a score of **3,71**. Indicating that the second set of participants believe that they would have felt *threatened*, leaning towards *somewhat threatened.* The change we were previously referring to was the decrease of the perceived threat level from the first set to the second set from the participants when they received the resilient near-miss as their second scenario. Participants of the first set rated their S_2 at **2,67**, while the participants from the second set rated the near-miss as **2,25**. Indicating the participants of Set 1 perceived the near-miss as more threatening compared to their counterparts. A similar effect from the previous near-miss is affecting the overall score of the resilient near-miss by bringing the total scores closer to each, but the participants from the second set did rate the near-miss more threatening.

The ratings from the control scenarios are quite close to each other no matter placement of the introduction of the scenario and affiliation to each of the sets. The scores do show that the Set 2 participants ranked higher on the level of threat compared to their counterparts. With a slight increase from the S_1 participants of **2,50** to **2,67**, indicating both groups of participants perceived the level of threat to be *a little threatened*, with a lean toward *somewhat threatened.* The same is done by the participants that ranked the control scenario as their S_2, they did however rank higher in general compared to the former with scores of **2,69** and **2,80**. Demonstrating that the participants perceived the control scenario as *somewhat threatened.* In the end, the overall scores are pretty close to each other, at *somewhat threatened.*

5.1.3 Q 3 | How safe would you have felt if you were in this situation?

The third question relates to the level of safety. The corresponding five-point scale is presented in *figure 3*, and the average calculated scores are in *table 5*. The consensus of all scenarios, no matter the placement of introduction or affiliation to either of the sets, shows that the participants mostly perceived their own level of safety to be at a *neither nor.*

Figure 3 The five-point scale of question 3

3. How safe would you have felt if you were in this situation?				
Very unsafe	Somewhat unsafe	Neither nor	Somewhat safe	Very safe
1	2	3	4	5

Table 5 Calculated mean of question 3

SET 1			SET 2		
PRESENTED SCENARIO		***Mean***	**PRESENTED SCENARIO**		***Mean***
THE VULNERABLE NEAR-MISS SCENARIO	S_1	2,56	**THE VULNERABLE NEAR-MISS SCENARIO**	S_1	2,33
	S_2	2,80		S_2	2,00
	Overall	2,68		*Overall*	2,17
THE RESILIENT NEAR-MISS SCENARIO	S_1	3,25	**THE RESILIENT NEAR-MISS SCENARIO**	S_1	2,86
	S_2	3,00		S_2	3,75
	Overall	3,13		*Overall*	3,30
THE CONTROL SCENARIO	S_1	3,38	**THE CONTROL SCENARIO**	S_1	3,00
	S_2	2,31		S_2	2,90
	Overall	2,84		*Overall*	2,95

The participants that received the vulnerable near-miss as their first scenario rated it to be at **2,56** compared to the second set with a score of **2,33**. Indicating that participants in both sets perceived their level of safety to be between *somewhat unsafe* and *neither nor.* While the participants that received the near-miss as S_2 rates it similar but distinctly more different between themselves. Where the first set of participants rated it at **2,80** and the latter set rating it at **2,00**. Demonstrating that the latter group perceived the presented scenario to be *somewhat unsafe* whereas the former is at a *neither nor.* Making the overall scores between the two sets were **2,64** and **2,17** separately, where the first set of participants rated the level of safety higher than the latter.

The resilient near-misses across both sets were ranked highest of the three scenarios. The participants that received the near-miss as their S_1, with a score of **3,25,** decreases from Set 2, which scored **2,86**. This indicates that both sets perceived their level of safety in the scenario as *neither nor*, but the first set of groups swayed more towards *somewhat safe* while the latter did the opposite and leaned towards *somewhat unsafe.* Meanwhile, it had the opposite rating when the near-miss was presented as the second scenario, separately scored at **3,00** and **3,75**. This score shows that the near-miss was deemed as a true *neither nor* by the first set of participants receiving it as their S_2, while the second set scored it as *somewhat safe w*ith quite

close scores to each other the overall scores of the two sets from the resilient near-miss end up at scores of **3,13** and **3,30**. Indicating that the general consensus that the resilient near-miss affects the level of safety mainly as a *neither nor* but leaning towards *somewhat safe* in both sets.

The last scenario, the control one, surrounds mostly *neither nor*. There are some scores that stand out, such as the score from the first set of participants, which scores their S_1 as **3,38**, with the most substantial lean towards *somewhat safe* from *neither nor.* Compared to the second set of participants with a score of **3,00**, a true *neither nor*. As for the participants that received the scenario as their S_2, there is just a little more than half a point between the ratings between the two sets. With scores of **2,31** and **2,90,** respectively, the first set of participants scored it as *somewhat unsafe* while the latter scored it close to *neither nor.* Concluding their overall scores to be at **2,84** and **2,95**, indicating the consensus to be as neither nor when it regards to the participants' level of safety.

5.1.4 Q 4 | How much can coincidences affect the outcome of this incident?

The final question of the scenario relates to how *coincidences* are perceived to influence the outcome of the scenarios. The question with its corresponding rating options is presented in *figure 4*, and the average calculated scores are presented in *table 6.* With a general overview of *table 6*, we see that the consensus across all scenarios and both sets are that the participants rate the influence of coincidence at *neither nor*, with a significant portion of the participants leaning towards *largely.*

Figure 4 The five-point scale of question 4

4. How much can coincidences affect the outcome of this incident?				
Not at all	Slightly	Neither nor	Largely	Only coincidences can determine the outcome
1	2	3	4	5

Table 6 Calculated mean of question 4

SET 1			SET 2		
PRESENTED SCENARIO		***Mean***	**PRESENTED SCENARIO**		***Mean***
THE VULNERABLE NEAR-MISS SCENARIO	*S_1*	3,67	**THE VULNERABLE NEAR-MISS SCENARIO**	*S_1*	3,33
	S_2	3,20		*S_2*	3,60
	Overall	3,43		*Overall*	3,47
THE RESILIENT NEAR-MISS SCENARIO	*S_1*	3,00	**THE RESILIENT NEAR-MISS SCENARIO**	*S_1*	3,14
	S_2	3,67		*S_2*	3,75
	Overall	3,33		*Overall*	3,45
THE CONTROL SCENARIO	*S_1*	3,25	**THE CONTROL SCENARIO**	*S_1*	3,56
	S_2	3,38		*S_2*	3,40
	Overall	3,32		*Overall*	3,48

The participants in Set 1 scored the vulnerable near-miss S_1 as **3,67,** and under the same conditions, the participants from Set 2 rated the S_1 as **3,33**. Though there is only a 0,34-point difference between the two sets of participants, the number of the first set shows that they have a stronger belief that coincidences *largely* do affect the outcome, while the latter set is closer to *neither nor*. The participants that received the vulnerable near-miss as S_2 reversed which set that rated coincidences the highest, with Set 1 giving a rating of **3,20** and a rating of **3,60** in Set 2. The overall rating differed minimally, with a rating of **3,43** in Set 1 and **3,47** in Set 2.

In the resilient near-miss, the participants from the Set 2 give a higher rating than the Set 1 participants. This increase is not significant enough to indicate any major variation as the ratings only differ by 0,16 between the two sets. But the scores related to the resilient near-miss scenario show that in both sets, there is an increase in the weight given to coincidences when we compare the ratings from participants that received the near-miss as their first scenario, respectively **3,00** and **3,14** versus the other participants that received it as their second scenario with scores of **3,67** and **3,75**. This trend of distinct increase does not appear to be occurring in the other near-miss and control scenarios.

Furthermore, the control scenario has the most consistent scores when we compare the ratings of the S_1 and S_2 participants across both sets, **3,25** and **3,38** in Set 1 and **3,56** and **3,40** in Set 2. With a slight increase in the Set 1 participants of 0,13 scores and a slight decrease of the score from the Set 2 participants with -0,16. Based on the overall ratings, the numbers indicate that participants from both sets perceived the element of a coincidence to be mainly a *neither nor*,

with scores of **3,32** in Set 1 and **3,48** in Set 2, but they do lean somewhat towards *largely* more so in Set 2.

5.1.5 Risk Perception Compared to Various Factors

As the different types of departments deal with different types of patients, we wanted to provide an overview of the number of incidents the different departments experience at their current workplace. This section is based on the fifth part of the interview process. In the following order, the elements which are rated by the participants are [1] violent incidents towards themself, [2] threats towards themself, [3] violence and threats towards their colleagues, [4] near-misses, and [5] the feeling of overhanging violence or threats at, all at current workplace. The ratings of all departments were separated into their respective categories, and the calculated mean is presented in *table 7*. The table shows that the security facilities score the highest across several of the questions regarding the number of incidents, followed by the open psychiatric wards and, lastly, the DPCs.

Table 7 Calculated mean for questions in Part 5

PART 5					
TYPE OF DEPARTMET	**QUESTION 1**	**QUESTION 2**	**QUESTION 3**	**QUESRION 4**	**QUESTION 5**
PSYCHIATRIC SECURITY FACILITIES	4,13	3,88	4,13	4,75	4,00
DISTRICT PSYCHIATRIC CENTERS	1,00	2,44	2,19	2,50	2,27
OPEN PSYCHIATRIC WARDS	3,19	4,06	4,25	4,31	3,31
Overall	**2,50**	**3,38**	**3,40**	**3,68**	**3,05**

In the following section, we will present how the participants' risk perception compares to various factors based on the rankings distributed on the control scenario's four questions; see *figures 1-4*. Based on these rankings, a mean has been calculated to compare with the various factors. This comparison is a measurement of the participants' risk perception towards [1] seniority in psychiatric care, [2] seniority in their current workplace, [3] number of violent incidents directed at them, and [4] number of threats directed towards them. All units are calculated based on the rankings provided in Part 5 of the interview guide, and the common theme across all three tables that will be presented is based on 'current workplace'.

5.1.5.1 Risk perception compared to seniority in psychiatric care

The first element presented is the length of time in psychiatric care versus the number of incidents presented in *table 8*. We chose to categorize the participants into six groups. Initially, considering all the groups should have the same time interval of five years. However, as we were examining if the seniority could influence their risk perception of the control scenario, we opted for a shorter time span for the 'youngest' groups. The reasoning behind this is that five years in psychiatric care could have made the participants acclimated to their current situation and stabilized their perception of risk. A potential merge of the 'rather new and unsure' participants with the 'sure ones' could therefore muddle the true perception of the different seniority groups. Thus, presenting the six seniority groups as such; [1] 0-2 years, [2] 3-5 years, [3] 6-10 years, [4] 11-15 years, [5] 16-20 years, and [6] 21 and more years. Within those, the participants are divided correspondently into three, five, ten, six, eleven, and five participants in each group.

Table 8 Risk perception compared to seniority in psychiatric care

RISK PERCEPTION COMPARED TO SENIORITY IN PSYCHIATRIC CARE

on a five-point-scale			SENIORITY PSYCHIATRIC CARE					
			0-2 yrs.	**3-5 yrs.**	**6-10 yrs.**	**11-15 yrs.**	**16-20 yrs.**	**21 < yrs.**
RISK PERCEPTION based on questions 2 and 3 from the control scenario	**How threatened would you perceive this incident if you were in this situation?**	***Mean***	3,67	2,40	2,50	3,17	2,64	2,20
	How safe would you have felt if you were in this situation?	***Mean***	3,33	2,60	3,40	2,66	2,36	2,80

The scores in the table show the freshest employees in psychiatric care rated the scenario the most threatening compared to their colleagues. Meanwhile, the ones with the longest seniority rated their level of threat to be *a little threatened.* The rest of the scores from the table do not show any trends of an even decrease the longer one has been in psychiatric care. Instead it depletes and increases before it decreases again. As for their level of safety, it is the freshest, and those that have been in psychiatric care ranked their level of safety the highest compared to the rest. While it is the ones with 3-5 years and 21 and more years of seniority that mainly

surround *neither no*r, it is only the participants with 16-20 years' experience that rate the scenario as *somewhat unsafe*

5.1.5.2 Number of incidents compared to seniority in the current workplace

The second element presented is the time at the workplace versus the number of incidents presented in *table 9.* Based on the same reasoning from the previous section, we have chosen to continue with the new seniority groups of; [1] 0-2 years, [2] 3-7 years, [3] 8-12 years, and [4] 13 or more years. This is because there is a significant difference between the seniority in psychiatric care compared to 'at their current workplace', by 23 years shorter at current workplace compared to the former. Within those groups, the participants were distributed accordingly as nine, eleven, seven, and thirteen individuals in each group. The scores from the table indicate the longer one's seniority increases, the more violent incidents directed towards them they have experienced. The same can be said about threats directed toward them. However, the group with the highest seniority ranked the number of verbal threats lower than those who had seniority of 3-7 years and 8-12 years.

Table 9 Number of incidents compared to seniority in the current workplace

NUMBER OF INCIDENTS COMPARED TO SENIORITY IN THE WORKPLACE

on a six-point scale			SENIORITY IN THE CURRENT WORKPLACE			
			0-2 YEARS	**3-7 YEARS**	**8-12 YEARS**	**13 < YEARS**
NUMBER OF INCIDENTS based on questions 1 and 2 from Part 5	**How many violent incidents directed towards you have you experienced at your current workplace?**	***Mean***	0,89	2,18	3,29	3,46
	How many threats directed towards you have you experienced at your current workplace?	***Mean***	1,67	3,45	4,14	4,08

5.1.5.3 Risk perception compared to seniority in the current workplace

As all participants had received at least one of the two control scenarios, we chose to further compare the seniority group's calculated average to the one's perception of the level of threat and safety. Presented in *table 10.* The scores on this table indicate that the participants that have been at their current workplace between 3-7 years ranked the control scenario as *a little*

threatened compared to the other groups, closely followed by 8-12 years, **2,67**, and 13 and more years, **2,85**. Making the shortest workers rank the scenario highest with **2,89**, *somewhat threatened.* As for the question about safety, *figure 3* it is the 'oldest' group of 13 and older ranked the scenario as *somewhat unsafe*, while the 8-12 years is on the opposite side of the spectrum with a score of *neither nor*, leaning towards *somewhat safe* compared to their co-participants.

Table 10 Risk perception compared to seniority in the current workplace

RISK PERCEPTION COMPARED TO SENIORITY IN THE WORKPLACE

on a five-point-scale			SENIORITY IN THE CURRENT WORKPLACE			
			0-2 YEARS	3-7 YEARS	8-12 YEARS	13 < YEARS
RISK PERCEPTION based on question 2 and 3 from the control scenario	**How threatened would you perceive this incident if you were in this situation?**	***Mean***	2,89	2,36	2,57	2,85
	How safe would you have felt if you were in this situation?	***Mean***	3,00	3,09	3,14	2,31

5.1.5.4 Risk perception compared to the number of violent incidents

The third element compared the participants' risk perception with the number of violent incidents directed towards them in their current workplace. The process is the same as the former table, and we grouped the participants after their rankings from Question 1 of Part 5 of the interview guide. Creating groups containing respectively seven, thirteen, three, three, five, two, and seven individuals in each group. Based on those numbers, we calculated the separate groups' mean for the questions relating to threat and safety from the control scenarios and plotted them in *table 11*.

Table 11 Risk perception compared to the number of violent incidents

RISK PERCEPTION COMPARED TO THE NUMBER OF VIOLENT INCIDENTS

on a five-point-scale			NUMBER OF VIOLENT INCIDENTS						
			0	**1-5**	**6-15**	**16-30**	**31-60**	**61-100**	**100 <**
RISK PERCEPTION based on question 2 and 3 from the control scenario	**How threatened would you perceive this incident if you were in this situation?**	***Mean***	2,43	2,85	3,33	2,33	2,60	2,50	2,57
	How safe would you have felt if you were in this situation?	***Mean***	2,86	2,69	2,00	3,00	3,00	3,00	3,14

The group that ranked highest in their level of threat, with a score of **3,33**, was the participants that had experienced violent incidences 6-15 times. Participants that had experienced it 16-30 times ranked the control scenario the lowest with a score of **2,33**. This means the latter group ranked the level of threat as *a little threatened* and the aforementioned group as *somewhat threatened* – both groups leaning more towards threatened on the scale. The scores further indicated that the level of threat does increase from the group of 0 incidents through the group with 1-5 incidents and reaches a peak with the participants of 6-16, before falling down at 16-30 incidents. Nevertheless, this decrease in the level of threat does not coincide with the latter group of 31-60, 61-100, and 100 and more, all ranking their level of threat around *a little threatened* and *somewhat threatened.*

The scores about their level of safety are relatively close to each other in rankings. The participants that have experienced 6-15 incidents of violent incidents perceived the scenario to be *somewhat unsafe* with a score of **2,00**. As for the rest of the participants, they ranked their level of safety to be around *neither nor*. It is only the participants with more than 100 incidents of violent incidents under their belt whose rank is leaning towards *somewhat safe* with a score of **3,14**.

5.1.5.5 Risk perception compared to the number of verbal threats

The final element we wanted to compare the participants' risk perception with was the number of threats directed towards them in their current workplace. The process is the same as the two

former tables, and we grouped the participants after their rankings from Question 2 of Part 5 of the interview guide. Creating groups containing respectively one, eleven, five, four, four, four, and eleven individuals in each group. Same as before, the mean scores based on these conditions are plotted in *table 12.*

Table 12 Risk perception compared to the number of verbal threats

RISK PERCEPTION COMPARED TO THE NUMBER OF VERBAL THREATS

on a five-point-scale			NUMBER OF VERBAL THREATS						
			0	**1-5**	**6-15**	**16-30**	**31-60**	**61-100**	**100 <**
RISK PERCEPTION based on question 2 and 3 from the control scenario	**How threatened would you perceive this incident if you were in this situation?**	***Mean***	2,00	2,86	2,75	3,33	3,00	2,67	2,57
	How safe would you have felt if you were in this situation?	***Mean***	4,00	2,86	3,25	2,00	3,00	2,00	3,14

There was only one participant that had never experienced any threats directed towards them at their current workplace. The same participants were also the ones that ranked their level of threat the lowest compared to the rest of the participants and their level of safety as the highest. Compared to the rest of the participants, in general, the level of threat was scored between **2,57** and **3,33**, *somewhat threatened*. The group that rated the highest were those that have received between 16-30 threats directed towards them at their current workplace. Based on the rest of the scores, the level of threat does slightly decrease the more threats are given.

The one participant that had received no threats stood out from the rest of the scores with a *somewhat unsafe*, while the rest stayed between **2,00** and **3,25**, a place between *somewhat unsafe* and neither nor. The score does not show any apparent trend between the number of threats and a correlation to their level of safety. Disregarding the zero-incident-participant, the table shows a slight increase before depleting when the participants had received 16-30 threats. After that, the scores jump up and down before landing on a **3,14** based on the participants that had experienced more than a hundred threats at their current workplace, a score of *neither nor* with a slight inkling towards *somewhat safe.*

5.2 The Open Discussion Questions

We identified six main themes during the interviews. The main themes are [1] response to challenging behavior, [2] violence as a threat, [3] the relationship between patient and employee, [4] the relationship between employees, [5] control, and [6] the physical structures within the ward. Some of the themes had been selected beforehand based on previous literature and the framing of the interview, while others emerged during the examination of the qualitative data. The six themes have been further categorized into three categories as several of the themes relate close to each other. The categories are [1] employees' response, [2] violence as a threat, and [3] control. The categorized findings will be structured in the next sub-chapters.

An overall finding is a general agreement that the scenarios were familiar, recognizable, or something similar could happen in the participants' own ward. Findings from both sets will be interchangeably presented in the upcoming sub-chapters. Several quotations will be presented in the following sub-chapters, all quotations are translated by the authors.

5.2.1 Employee response

The response was a preselected theme we expected would be brought up during the interview. This is due to our questionnaire asking the participants to rank on a five-point scale of how good the employees' responses were in the scenario description. The description of response was based on guidelines for mitigation from OUH (n.d.-b), the same elements were in all three scenarios, but we did some tweaks between the near-misses and the control scenario as we wanted to prevent the participants from perceiving the scenarios to similar from each other. From the focus groups, two sub-categories about responses were brought up from the majority of participants. These two sub-categories will also structure this sub-chapter in order of [1] participants' judgment of the response and [2] suggestions for a better response from the participants.

An important finding is that a significant amount of the participants in both sets expressed difficulty rating the response due to little information in the scenarios. Some stated that they used the previous experience to fill in the gaps, while others expressed various assumptions were made to create arguments for both sides if the employees' response was good or bad. This is supported by a majority of the participants, regardless of their initial judgment of the

response, who expressed that a number of aspects could influence if the response resulted in success or failure. These arguments will be presented in the following sections.

5.2.1.1 Participants' judgment of response

Set 1

The first half of the focus groups, also known as Set 1, had the general agreement that the response in the near-miss descriptions was bad. Some argued it was closer to being *neither nor* due to the lack of information. It was for the same reason some participants stated they could create counterarguments from the consensus. Stating since there was no other description of the relationship between the patient and employee that, it could simply be that way the employee communicated with *that exact patient*. Based on that, participants that belonged to the same groups of the individuals that made the counterarguments acknowledged they could recognize themselves in such statements, even triggering forwards statements presented below.

> *"…. I could quickly have done something similar if I saw someone yelling loudly. I would have walked towards and tried to calm down and explain that it is unpleasant and such"* (participant from Set 1 on vulnerable near-miss as S_1)

This participant and others recognize they would do something similar with their own patients, but the majority of the participants expressed they would only approach in such a way when they are comfortable with the patient and are familiar with them. Even though we are presenting the quote from a participant that received the vulnerable near-miss, the counterargument was brought up more often from the groups who received the resilient near-miss.

There were several reasons why the majority of participants stated the response in the near-misses' scenarios was judged as *bad*. Critique included that the response was perceived to be demeaning by the employee standing above the patient instead of sitting down. Additionally, the response was too direct, as illustrated by the following quote.

> *"… I feel the approach was not right. It is more like 'now you must stop!' to the patient"* (participant from Set 1 on resilient near-miss as S_2)

> *"… I think the employee had too much focus on how the patient affected the surroundings instead of taking care of the patient. And that is always unfortunate, I*

think. It is a way to create a confrontation really, instead of deescalating" (participant from Set 1 on control scenario as $S_{1)}$

Furthermore, the participants expressed that in the description, the employee showed no indication of trying to get a better understanding of the underlying problems or the patients' feelings and that the employee did not seek out support from other workers on the day unit. The opposition stated that the mitigating efforts did seem to have the right intentions, but the execution was flawed, and it would most likely only be the correct response if the employee knew the patient from before.

When participants reviewed the response in the control scenario, the general agreement was it was better than what it was in the near-misses. This improvement was related to the approach and the order of mitigation. The participants highlighted the positive aspects of the approach was that the employee sat down by the patient first and then inquired why they were yelling. The participants believed that that approach created an equal footing in the patient-employee relationship. Though the control scenarios approach was found more favorable by the participants compared to the near-misses' approach, the participants stated it was not the most optimal approach there could be. Criticizing the same elements that could be found in the near-miss scenario descriptions.

"… the difference was that he sat down, that was maybe another approach than in the first scenario, but still not optimal…" (participant from Set 1 on control scenario as S_2)

Even though the response description between the two near-misses was the same, statements from the groups showed a difference in opinion when we compared the review between the vulnerable near-miss and the control scenario versus the resilient near-miss and the control scenario. Participants that received the vulnerable near-miss clearly expressed that they felt that the control scenario's response was much better than that of the resilient near-miss scenario. Meanwhile, the participants that received the resilient near-miss stated that while the responses in the two scenarios were quite similar, the control scenario was only experienced to be slightly better.

Set 2

The second set of participants, groups 6-10, received the reworded version of the scenarios. This change showed a more positive change of opinion regarding the response compared to the

first set of groups. Now that the employee sat down with the patient in the resilient near-miss, the participants assessed the approach as good. Mentioning the same elements from the first set that focused on the actions of mitigation brought the employee to the same level as the patient, and it showed that the employee had learned from the first day of events when responding to the challenging behavior on the second day.

> *"I think it was a good response based on experience since this is all that we know… that the previous experience helped"* (participant from Set 2 on resilient near-miss as S_1)

The same description of response was not positively judged by the participants that received the vulnerable near-miss. That they did not learn from *yesterday's events*, as illustrated in the quote below.

> *"… for a patient, this behavior can be repetitive without escalation, but for this patient, it seems to actually be escalating"* (participant from Set 2 on vulnerable near-miss as S_1)

That the act of sitting down in the vulnerable near-miss was deemed as bad by a large majority of the participants as it indicated that the employee did not learn from the events the day before. Furthermore, it was argued that the act of sitting down prevents the employee from backing away from the situation if it should escalate, and this showed a lack of ability to think about their own safety. The same participants also acknowledged that the other mitigating efforts were reasonable, as illustrated in the quote below.

> *"… but the way they talked, […], was good, but I would have probably stood at a distance and said it."* (participant from Set 2 on vulnerable near-miss as S_2)

Participants in the vulnerable scenario acknowledged the positive attributes of sitting down but stated that this would be irrelevant if the employee got attacked. Participants in Set 2 highlighted a couple of the same points as participants in Set 1, such as the importance of a good relationship with the patient, the lack of support from coworkers, and that the response could be interpreted as confrontational, depending on how the response was delivered.

5.2.1.2 Suggestions from the participants for better response

Both sets of participants agreed that the employee in the scenario description could have responded better to the challenging behavior displayed. Several of the participants expressed that there seemed to be a lack of consideration for the precursor events leading up to the event, and there should have been implemented new measures for the next days based on *yesterday's events.*

> *"… and he hasn't learned from the first situation in scenario 1, that is really important…"* (participant from Set 1 on vulnerable near-miss as S_1)

Based on the information provided in the scenarios, multiple suggestions were made by the participants. All the focus groups expressed the importance of ensuring one has support from their coworkers when approaching a patient displaying challenging behavior in case of potential escalation. As the incident was occurring in the common room in the scenario description, another suggestion brought up by multiple participants was to move the patient into a private room. Additionally, communication with the patient should be better, and they perceived the communication in the descriptions to be too direct and corrective. They expressed that one should not start the response by asking the patient to stop their behavior but instead should rather dig into the root of the patient's problems and figure out how they can help the patient. There is a disagreement among the participants. Some participants did not like the tactic of using other patients to calm down the patient, while others agreed with the action described in the scenario

> *"I think that the employee pointing out that it is unpleasant, that I feel unsafe when you yell loudly. That can often help."* (participant from Set 2 on control scenario as $S_{1)}$

Lastly, the participants used their own ward as an example for better response. Several participants expressed if the incident that is portrayed in the scenario description had occurred in their own ward, new measures would have been implemented for the upcoming days as an answer to the challenging behavior.

5.2.2 Violence as a threat

The second theme preselected was *violence as a threat*. Its purpose is to map the participants' risk perception of violence. As mentioned previously, the majority of the participants perceived

the scenarios as familiar and recognizable and acknowledged something similar could occur in their own ward. They expressed there is a wide range of factors that affect their perception of threat, and more information is needed to establish a clear picture of the threat. There was no significant difference between the participants from Set 1 compared to those in Set 2.

When analyzing the transcriptions, three sub-categories were identified, [1] risk assessment of the scenarios, [2] the general risk of violence in the ward, and [3] reduced perception over time. The last category emerged during the interview process and was not considered under the development of the interview guide but was brought up by a majority of the focus groups.

5.2.2.1 Risk assessment of the scenarios

Participants stated that the scenarios had the potential to escalate and that the scenarios could be perceived as threatening or scary. The three main factors participants highlighted they used for their judgment of the risk were [1] taking earlier incidents into their consideration, [2] the relationship between the employee and the patient, and [3] the availability of additional personnel.

A majority of the participants stated that a recent incident of challenging behavior indicated that there was a higher potential for violence from the patient. They expressed that challenging behavior and violence within the ward and against healthcare workers was one of the better signs for identifying if a patient could turn violent. Participants expressed that the violent risk assessment score was not something they usually utilized when they assessed the risk of violent behavior. They argued that patients could be assigned a moderate score based on something that occurred a long time ago or in circumstances that differed vastly from the circumstances in the ward.

> *"I don't know how much I trust these violence risk assessments either. I feel that it isn't something I usually would care about unless it is something special."* (participant from Set 2 on control scenario as $S_{1)}$

Almost every participant stated that the relationship between employee and patient would influence how threatened they would feel. A patient whom the participants were familiar with would make them feel less threatened compared to an unknown patient. This relationship was also noted by participants regarding the feeling of safety. The participants expressed further that this was because they would have a better foundation for determining the best response

and that they would know more about the signs a patient could show before a situation escalated. Many participants stated a preference for one of the near-miss scenarios as they had more information about the patient compared to the information they received in the control scenario. Other participants mentioned that they preferred the control scenario due to the more prevalent potential for violence in the near-misses.

> *Participant 1: "… I might have felt more unsafe in this situation [the control scenario] when we have no past event and don't know exactly what will happen."*
>
> *Participant 2: "That's interesting, because for me it's the opposite. I would feel more unsafe in the other situation [the resilient near-miss] […], now I know that there is a potential"* (two participants from Set 2 discussing the resilient near-miss and the control scenario)

5.2.2.2 General threat in their current workplace

All participants acknowledged there is a risk for violence that exists in their workplace. However, the perceived level of potential violence differed among the participants. Most participants highlighted there is a high potential for violence and patients displaying challenging behavior, while some participants stated that this was a more infrequent issue in their wards. As illustrated by the quote below,

> *"But we have a structure that makes one feel fairly certain that it will end well, that a lot is required before something goes wrong."* (participant from Set 2 on question 5 part 4)

A majority of the participants noted that they have a large number of patients with judged moderate or high violence risk assessment and that it could not be viewed as a clear indication of violence. Participants gave various reasons for this view, such as the assessment or incident that was initiated as far back in time, that many patients could act violent towards police or other groups, but that they did not behave in a similar fashion towards healthcare personnel. As demonstrated by the quote below,

The patient-employee relationship was highlighted by the participants as an essential factor in how the participants felt in regard to safety and threat. A better-known patient increased the feeling of safety for a majority of the participants as they stated that it provided an opportunity

for a more precise response catered to the specific patient, and they would know more about what to expect from the patient. Some participants expressed that they rather interact with a known patient with challenging behavior than with a new and unknown patient. As illustrated below,

> *"If someone says, I will kill you, it could be really threatening. But sometimes it wouldn't bother me at all if someone said it, because it is just an expression of frustration. But you'll have to know them to some degree."* (participant from Set 1 on final remarks)

Participants stated that this relationship influenced how they reacted to challenging behavior and verbal threats and that some patients just need to relieve some pent-up frustration when the participants arrive before they can have a more proper dialogue. With regards to verbal threats, some participants noted that the more specific a verbal threat was, and if it contained personal information about the participant, it was perceived as more threatening than a more general threat. Furthermore, if family was included in the verbal threats, the perceived risk increased even further. Participants also noted that the level of risk increased if drugs were involved.

A large number of the participant stated that they generally felt safe at work. A majority of participants expressed that incidents that were similar to the presented scenarios regularly occurred at work and that there were incidents that made them feel more unsafe. However, many followed this up by expressing a general feeling of safety. The feeling of safety that many participants expressed was usually attributed to the support from colleagues and that they believed they would receive assistance if needed. The lack of additional personnel in the scenario was something participants expressed heightened the threat as the employee was missing support if the situation escalated. A significant amount of the participants expressed that their feeling of safety fluctuated depending on who was working the same shift. The need for competent personnel and the use of alarms were elements that were brought up by participants when discussing the support from colleagues. As demonstrated below,

> *Participant 3: "... for I want to say if I have with me 100 percent experienced colleagues, then almost 99 percent of the times we will be able to respond and achieve a safe situation. That might be somewhat of an exaggeration. […] but I think it has something to say."*

Participant 4: "Who you are working with?"

Participant 3: "... How safe we are, how coordinated we are, and how good we are at dividing tasks, and do what we agreed upon. Yes." (participants from Set 1 on final remarks)

The utilization of alarms was usually given an attenuating effect on the perceived level of risk by the participants. However, some participants stated that the alarm could increase the level of risk as they were obligated to assist other wards if there were incidents, and this was an element of uncertainty. As illustrated below,

"But I'm also thinking about the calmer days, when we are on alarm duty […] on most of the alarms you're running to, there's a risk of violence, for that means that it was no longer enough with only them at their ward." (participants from Set 2 on final remarks)

The participants that expressed they had little experience with the alarms also stated that they got less feeling of safety from the alarm. They acknowledged that the alarm was a safety measure but continued to state that they felt it could escalate the situation, that they were uncertain of the procedures if the alarm were activated or that there was a high threshold for activating the alarm.

5.2.2.4 Reduced feeling of threat over time

Multiple participants expressed that they felt safer and that incidents occurring during their shifts affected them less now compared to when they started working. The participants reasoned that it was because they had more experience with challenging behavior, that they had become better at regulating their own feelings and that a deescalating response came more automatically now, compared to earlier in their career. Some participants stated that this reduced feeling of risk also occurred as they interacted with the same patient over a longer period of time. However, the types of patients admitted to the participants' wards could both decrease and increase the feeling of risk, and participants noted that their perceptions probably fluctuate depending on the intensity of incidents within the ward.

5.2.2.3 Attributes of the patient and external factors

The participants highlighted several attributes of the patient when considering a situation's levels of threat and safety. Some of the attributes were the sex of the patient, history of

substance abuse, external factors that can disrupt the patient, and type of diagnosis. A distinct few of the participants noted that the sex of the patient had been omitted from the scenario description, but the ones that did not remark on this omission primarily referred to the patient as male. The ones that did notice expressed that the sex of the patient is an attribute that plays a prominent role when they consider the potential for violence and their own safety. Participants also noted that if a patient had acted violently toward healthcare workers in an earlier incident, they would be more activated compared to if the patient had acted violently towards the police or other parts of the population. Other patient attributes that the participants stated could influence their perceptions of a situation were recent history of challenging behavior, type of diagnosis, and external factors that could impact the patient's behavior

> *"Then you have the patients with high risk assessment or known history for violence where they have displayed challenging behavior with the police and been locked up for violence against police officers, but they could never think to hit a nurse"* (participant from Set 1 on the resilient near-miss as S_2)

5.2.3 Perceived Control

The third category that had been selected before the interviews were perceived control. Two sub-categories emerged when analyzing the data they are *control over preventing challenging behavior and violence* and *control over preventing damage*.

5.2.3.1 Control over preventing challenging behavior

The topics brought up in this sub-category did not differ significantly between the participants in Sets 1 and 2. The participants stated that they believed to have more control if they knew the patient well, as they could recognize warning signs from the patient and that they knew what type of response had the highest chance of delivering the most optimal outcome. Many participants believed that they had significant control over if a situation would escalate. There was, however, a significant portion of participants that believed they had little control.

> *"We can lie and say that we have a lot of control, but I think that in reality it's pretty low. In my belief at least. …"* (participant from Set 2 on preventing violence and verbal threats)

Regardless of the participant's stance on control, almost every participant acknowledged that there were many elements they could not control and that there would be some incidents that they could not prevent but that they could influence the situation. Participants brought up early prevention, ward routines, colleagues, and their own knowledge or previous experience as the factors that brought the most control over preventing the escalation of challenging behavior. Factors that caused a feeling of little control among the participants were when a patient was under the influence of drugs, what type of patients were admitted to the ward and which colleagues were on a particular shift.

Colleagues were an element that was regularly brought up by participants as an important control factor. If the participants had what they perceived as competent and experienced coworkers on their shift, they felt they had more control over the situation. Participants acknowledged that less knowledgeable or less experienced coworkers were a valuable part of the team and inherited the intentions to do a good job, but that they had more factors stacked against them to maintain the same level of control. Examples participants brought up were the difficulty maintaining a relationship with a patient if one worked fewer days, that it could take time to receive the correct courses and training and that these coworkers had to handle complex situations with a non-proportional level of education.

5.2.3.2 Prevention of damage

A significant portion of participants stated that even if challenging behavior or violent incidents cannot be controlled or prevented, they have notable control over the potential damage that could be prevented. There were no noteworthy differences between the sets. However, some topics were consistently brought up by participants working in certain types of wards. Many participants expressed that it was easier to control damage than to control if a patient expressed challenging behavior.

> *"We have good control over preventing damage towards us but preventing the patient from behaving violently. That is more difficult"* (participant from Set 1 on preventing violence and verbal threats)

Participants working in DPCs expressed more often that they have the opportunity to withdraw from an unsafe situation to control the damages compared to participants working within security or an open psychiatric ward. The latter categories of ward types highlighted the usage

of alarms and cooperation between colleagues as the preferred method of damage control. Some of these participants also noted the ability to control the environment, and what enters the ward as elements they have a high level of control over.

6 Discussion

The following discussion will compare our findings to our previously established theoretical foundation. This chapter is in two sub-chapters which will examine our two research questions and the problem statement. In the first sub-chapter, we will explore if our findings align with the existing literature on near-misses and discuss if there are any discrepancies between them. This exploration is connected to research question one, "*[1] Does the nature of the near-miss affect how psychiatric healthcare workers perceive their own level of threat and safety, and how they assess an incident's response?"*. The second sub-chapter is based on the second research question, *"[2] What are the general variables that affect psychiatric healthcare workers' perception of near-misses?". It will discuss identified factors from our findings that could influence them* psychiatric healthcare workers' risk perception.

How does awareness of *successful* and *unsuccessful* responses to incidents of violence or threats directed towards employees affect psychiatric healthcare workers' perceived risk of violent incidents?

6.1 The Nature of the Near-Miss Influence the Risk Perception

It is important to highlight that the participants expressed that it was challenging to provide ratings with confidence due to the limited information in the scenario descriptions. Where several participants within multiple focus groups reasoned that the displayed response could go either way, as they had the opportunity to fill up the information gap with their own experiences and surroundings to assess the scenarios. However, the participants discussed their thought processes and the assumptions they made when answering the ratings. Therefore, we could get a broader understanding of how the participants assessed the scenarios.

The structure of this sub-chapter will first present the vulnerable near-miss scenario, followed by the resilient near-miss scenario. The control scenario will be woven in both near-misses as its function is to be a static variable for comparison. Lastly, the sub-chapter will discuss if the order of appearance of the scenarios affects the participants' perception of the different near-misses and the control scenario.

6.1.1 The Vulnerable Near-Miss

One of the most apparent findings from the questionnaire was that the vulnerable scenario was perceived as the overall worst scenario regarding the employee's response and level of threat and safety. By that, we mean that the participants rated it as having the worst response, the most threatening, and the scenario they would feel the most unsafe. This aligns with the existing literature on near-misses which states that an incident perceived as almost occurring, also known as a vulnerable near-miss, can result in a higher level of perceived risk (Dillon et al., 2014). The ratings are also supported by the findings from the interviews where the participants expressed that they perceive the vulnerable scenario to have the most potential of resulting in an unfortunate occurrence compared to the control scenario.

Our findings indicate that there is a significant difference between how two different near-misses are judged. This provides nuance to the existing research from Dillon & Tinsley (2008), which states that individuals would judge an actor as more competent if their response resulted in a coincidental near-miss compared to an actor that conducted a similar response that was unsuccessful. While an actor whose response ended in a near-miss could be perceived as more competent than an actor with an unsuccessful response, we argue that the degree to which the near-miss is perceived as resilient or vulnerable will affect the level of competence attributed to the actor. If this is correct, an individual's perceived competence of an actor will differ less between an unsuccessful response and a vulnerable near-miss response than between a resilient near-miss response and an unsuccessful response.

Even though the response contained the same elements across all scenario descriptions, the response from the vulnerable near-miss was given a worse rating by the participants compared to the responses in the resilient near-miss and the control scenario. Participants noted that the vulnerable scenario showed a higher potential for a violent incident to occur and that yesterday's employee were the closest to having gotten hurt. A more vulnerable near-miss might have motivated the participants to scrutinize the response more than the responses in the other scenarios. This indicates that there exists a scale in which a response is judged more harshly the closer it is for a negative outcome to occur.

Multiple participants expressed the need for proper reports in written or oral form to assess the risk of violence adequately. They stated that this was necessary as they would not be present for every incident in the ward. Additionally, the importance of how information is presented is

also highlighted by some participants as they felt that the presentation of the vulnerable scenario contained information only causing fear compared to that of the control scenario. These statements indicate that social factors can affect how near-misses and incidents experienced by coworkers influence how healthcare workers perceive risk, which aligns with what is described by Siegrist & Árvai (2020).

The participants expressed that the lack of new measures negatively affected their ratings. While the participants acknowledged that the different scenarios' responses were similar, the incident portrayed in the vulnerable near-miss would activate them to have more heightened attention toward the patient. They further expressed that if a similar incident occurred in their ward, new measures would have been implemented to prevent another incident.

> *"… and he hasn't learned from the first situation in scenario 1, that is really important…"* (participant from Set 1 on vulnerable near-miss as S_1)

This implies that if the vulnerable scenario description had included a description of newly implemented measures for *today's event*, the participants might view the same response as more favorable. This nuance grants an alternative explanation for why the participants rated the vulnerable response more negatively than the rest.

While the lack of new measures could be the reason for the different ratings regarding the employee's response in the three different scenarios, it does not explain the differences in the ratings from the participants regarding the perceived level of threat and safety. With a difference of approximately half a point, the vulnerable scenario is ranked as more threatening and less safe than the other scenarios. This heightened level of threat and a low feeling of safety could explain why participants saw the need for additional measures, which they did to a lesser degree in the other two scenarios. This lends support to the observation that near-misses influence healthcare workers' perceptions and actions in a similar fashion to previous observations by Tinsley et al. (2012) in other fields, and the link between risk perception and the implementation of mitigating actions (Nordgren et al., 2007)

6.1.2 The Resilient Near-Miss

The questionnaire's findings regarding the resilient near-miss' employee response were rated quite similar to the control scenario. This indicates that the participants saw little difference in the quality of response between the resilient near-miss and the control scenario. This coincides

with statements made by the participants that the response was of the same quality in both scenarios, and several participants could not determine which of the scenarios had the better response. These findings give support to the research by Dillon & Tinsley (2008), which states that others will view an actor that successfully averts a near-miss as just as competent compared to an actor succeeding without experiencing a near-miss.

Participants scored the resilient near-miss and the control scenario close to each other regarding the threat level. The scenarios are rated less threatening by the first set of participants than the second set. This might be due to the two different sets having different descriptions. The Set 1 resilient near-miss described the challenging behavior as hitting the chair and beginning to yell loudly in a common room. With the intention of containing the same elements as the near-miss, the Set 1 control scenario described the challenging behavior as hitting the table, yelling loudly, and cursing. Based on these descriptions, the participants rated the resilient near-miss slightly less threatening than the control scenario, while the Set 2 participants reversed the ratings. This could indicate that the participants grounded their perception of threat on small details when facing challenging behavior and that the nuances in Set 1's control and Set 2's resilient near-miss is slightly more threatening.

The resilient near-miss is rated as safer than the control scenario by the participants. This could indicate that resilient near-misses increase the feeling of safety, which aligns with what Dillon et al. (2014) found in their research. Participants stated that the extra information about *yesterday's events* in the scenario description positively impacted their feeling of safety in *today's events* as they have the knowledge that the same type of mitigating efforts had worked in a previous incident. The representation bias might also influence this type of assessment as participants give significant weight to only one incident. Regardless of the underlying processes, this shows that resilient near-misses positively affect feelings of safety.

6.1.3 Order of Appearance Matter

6.1.3.1 Response

Taking the response scores closer into consideration, we see larger discrepancies in the scores between the near-misses and the control scenario, no matter the order of appearance and affiliation to either of the sets. Comparing the scenarios as S_1, we see that the resilient near-miss response is rated more than half a point higher than the control scenario's response. This preference disappears when it appears as S_2, with the resilient near-miss' score being reduced

by more than a point and scored lower than the S_2 control scenario. The vulnerable near-miss closely follows this with a drop of almost one point from S_1 to S_2. This indicates that when the participants only review a near-miss, their judgments are kinder than when they have the control scenario fresh in mind. This is supported by what some participants said during the interviews when we inquired if they would change any ratings when they received the near-miss as S_1. The participants who were willing to change their ratings almost uniformly considered changing the near-misses' rating.

The lower rating in S_2 of near-misses could be caused by the participants discussing the first scenario among themselves and therefore moderating their answers according to the group when answering the second scenario. However, this discrepancy is only reflected in the ratings of the near-miss scenarios. The scores from the control scenario stay consistent regardless of the order of appearance. This is supported by the participants, as there was no indication of a change of heart regarding their ratings on the control scenario, only on the near-misses. This could mean that the near-misses less influence the participants' judgment of the responses after assessing another response and discussing the incidents with their fellow participants. We argue that these findings further highlight the importance of debriefing, not only after an unwanted occurrence but also after near-misses, to mitigate the effect of near-misses on perceptions

6.1.3.2 Threat, safety, and the availability bias

We assumed that the scores regarding the levels of threat and safety would be closely connected and that there would be an interdependency between the two. By this, we mean that as the threat level increases, the safety level decreases and vice versa. The overall findings from the questionnaire support the assumption. However, some deviations require an explanation before full support can be given to the threat-safety relationship. As some deviations exist, we argue that the correlation between the two factors is not as straightforward as we first assumed and that the two factors can be influenced independently without the other being affected.

Specific ratings of a perceived threat do not align with the safety ratings in some scenarios. Participants that received the vulnerable near-miss rated their level of safety similarly regardless of the order of appearance. This is in stark contrast to their scores regarding the threat level which differed by more than one-and-a-half points between S_1 and S_2. This lack of correlation weakens our previous assumption regarding the relationship between threat and safety. However, while the amount of increase and decrease differ drastically between threat

and safety, the scores still show a slight indication that the vulnerable near-miss follow our initial assumption. But due to this slight deviation, we cannot determine the relationship between the factors with confidence.

Another discrepancy in the threat-safety relationship is within the control scenario. In Set 1, the threat levels remain stable, whereas the levels of safety differ significantly between S_1 and S_2. When rating the control scenario as S_2, the participants scored the level of safety a whole point less safe than the participants that received it as their first scenario. Based on the safety scores, we would expect that the scores on threat would have the same variation between S_1 and S_2, yet their levels of threat were scored quite similarly. A possible explanation for the distinct decrease in safety between S_1 and S_2 might be due to $2/3$ of the participants that received the control scenario as S_2 received the vulnerable scenario beforehand. Making it possible that the incident described in the near-miss influenced their perception of upcoming events.

We argue that the scores on the control scenario as S_2 were scored so low because $2/3$ of the participants had the vulnerable near-miss so recently in mind. The participants brought up more topics related to bad outcomes and expressed that it signaled a higher risk for escalation.

> *"…for a patient, this behavior can be repetitive without escalation, but for this patient, it seems to actually be escalating"* (participant from Set 2 on vulnerable near-miss as S_1)

Such a recent reminder of an incident where a bad outcome almost happened increases the potency of the availability bias and influences their perception of the feeling of safety. This observation is in line with what Siegrist & Árvai (2020) has described regarding the availability bias. In the following paragraphs, we will examine in more detail if the availability bias is a viable explanation for the discrepancy in the safety ratings in Set 1's control scenario.

Suppose the availability bias, in combination with the vulnerable near-miss, affects the participants' feeling of safety. In that case, one may wonder why the level of safety is rated significantly lower in the S_2 control scenario versus the S_1 vulnerable scenario among the same participants. One would assume that the vulnerable near-miss would affect the participants' scores in the same way, but the participants still rate the S_2 control scenario as lower. This

implies that unexplained variables need to be explored before the availability bias can be viewed as a viable explanation.

A possible explanation for the low rating in the S_2 control scenario might lie in what the participants expressed during the interview's open questions. Some stated that since they had to base their assessments on a limited amount of information, they would fill in some of the scenario's gaps with assumptions derived from personal experiences or their knowledge. This could in turn affect their ratings negatively as they might fill the information gaps with possible worst-case scenarios. The addition of participants' own assumptions would impact the S_2 control to a higher degree than the S_1 vulnerable near-miss because the vulnerable near-miss did not have as many gaps to fill. The reason for this is that the vulnerable scenario provided more context, thus reducing the opportunity for the availability bias to play a more significant role in determining the participants' ratings. However, if this explanation were correct, we should see low ratings across all the control scenarios. As this is not the case, this explanation is not adequate to explain the low rating the control scenario received when it appeared as S_1 in Set 1.

The participants' conversations during the open questions after S_1 could have resulted in an increased effect of the combination of the availability bias and the vulnerable near-miss on the participants' scores regarding the S_2 control scenario. When the participants discussed the presented near-misses, they also brought up their own experiences. This could have resulted in them not only more easily remembering their own incidents but also those of their co-participants. The easier recollection could result in a lower score on the level of safety due to a more potent effect from the availability bias.

With regards to the participants from the Set 2 where $2/3$ of the participants who received the resilient near-miss before the control scenario, no similar reduction in the S_2 control was observed. We argue that since the resilient near-miss prevented an unfortunate incident by a more considerable margin than the vulnerable near-miss, the participants' conversation related to the open questions included more positive experiences from the participants. The recollection of positive experiences might balance out the negative experiences the participants brought up, thus preventing negative outcomes from being as easily remembered. These findings strengthen our argument that the availability bias, in combination with the near-misses, influences the participants' perception. Furthermore, the participants seem less

susceptible to being negatively influenced by the availability bias in future assessments when they are reminded of resilient near-misses compared to vulnerable near-miss.

The availability bias does not seem to be as relevant regarding the participants' perceived level of threat, as these ratings do not follow the same pattern of increase based on the order of appearance. An explanation could be that the perception of safety is more closely connected to the individual's feeling of safety when conducting their assessment, whereas threat could be more closely tied up to an individual's training and observations of the situation. This is supported by participants stating that when they determine the level of threat, they assess the physical surroundings around the challenging behavior by assessing various factors. They further corroborated that the factors could be potential material damages and the potential for objects that could cause harm. This provides a signal that there are some variables affecting the perception of threat and safety independently.

We do observe that there is a relationship between threat and safety. Yet, this relationship is not as symbiotic as we first expected them to be. While we observed that as one factor's score increased, the other one decreased, the relationship fluctuated significantly depending on the type of scenarios and in which order they were presented. This demonstrates that the two factors are determined independently, even though they describe similar aspects of the participants' perceptions regarding the scenarios. This is further corroborated by the interviews as some participants stated that they judge their own safety differently from a situation's threat picture. This shows the participants themselves do not believe the two terms are one and the same.

6.2 Variables Influencing Psychiatric Healthcare Workers' Risk Perception

For the purpose of this thesis, it was deemed prudent to explore the common denominators identified across the focus groups in light of the second research question. It goes as follows "*What are the general variables that affect psychiatric healthcare workers' perception of near-misses?".* In this sub-chapter, we will discuss some common themes identified in a majority of the focus groups. The first theme is coincidences and the feeling of control, followed by the theme of trust, and lastly, it will discuss the decreased perception over time. The three scenarios are interwoven in the sub-chapter and will not be discussed independently.

6.2.1 Coincidences and the Feeling of Control

There was an overall consensus among the participants that coincidences can influence the outcome of the scenarios to some degree. While the findings indicate that coincidences can influence the outcome of the scenarios, the degree to which this may happen cannot be concluded. This rating did not differ significantly regardless of which scenario the participants rated. This indicates that coincidences' perceived influence on a situation remains relatively stable independently of the previous near-miss experience. However, it is difficult to establish to which degree previous near-misses or experiences in general influence how healthcare workers perceive the outcome of these types of incidents. As our average participant had worked within psychiatric healthcare for 13 years, this can indicate that their perception of the influence of coincidences is based on their experiences during this time. It is a reasonable assumption that previous work experience has a more decisive influence on the judgment of coincidences compared to two short scenarios and a near-miss. Nevertheless, one can argue that healthcare workers recognize that they do not have complete control over scenarios where a patient's behavior escalates and that coincidences play a role in the adhering outcomes.

Contrary to the notion of coincidences playing a role in outcomes, there was no clear consensus among the participants regarding the amount of control they experienced over preventing the occurrence of challenging behavior in the form of violence and verbal threats. While the majority of participants stated that they were unable to prevent *every* incident, some stated that they would be able to prevent a majority of escalations from occurring. Other participants were more reserved regarding their ability to prevent challenging behavior on a general basis. Most participants focused on early prevention and establishing a relationship with the patient to reduce the likelihood of challenging behavior. This indicates that there could be a curve for how the feeling of control decreases as the challenging behavior becomes more apparent, as some participants stated that they experienced a low degree of control at moments when the patient exhibits challenging behavior. However, these participants also expressed that they would have a higher success rate of behavioral prevention at an earlier stage.

Participants expressed that they experienced more control over potential consequences related to an escalated situation than experiencing control over whether the situation escalates or not. This distinction between *control over further escalation* and *control over potential consequences of an escalation* is reflected in Nordgren's (2007) article about control, more precisely [1] control over exposure and [2] control over outcome. However, it is not completely

clear which of the types of controls align with the participants' stated distinction. One can argue that the different control types expressed by the participants could fit within the scope of both control types from the literature. *Control over further escalation* could fall under the control over outcome definition from the literature. Considering that by preventing or controlling further escalation, one effectively controls the outcome. However, at the same time, it could be argued that preventing a violent incident is controlling the exposure, as prevention ensures that the participants are not exposed to negative consequences as a result of a violent incident. This sentiment also rings true in relation to *control over consequences of an escalation*. One example of this is that the participants, according to their internal procedures, have the option to leave the situation. This option can be interpreted as a control-over-exposure strategy, but it could also be viewed as a control-over-outcome strategy as they effectively prevent injuries to themselves. This thesis will argue that *control over further escalation* falls under the control over exposure, while *control over consequences of an escalation* falls under control over outcome.

Considering that we previously have defined violent behavior and verbal threats as a risk source, which means it is an element that potentially can cause negative consequences, this does not necessarily connote physical injury. A patient with violent behavior does not necessarily cause injury to a healthcare worker, but the potential for such injuries does exist. However, it is important to distinguish between the patient as a risk source and the behavior of the patient as a risk source. For the purpose of this thesis, it is important to acknowledge that the patient in themselves is not viewed as a risk source, but rather the behavior the patient exhibits. Considering this, if a healthcare worker manages to deescalate the situation, they are therefore also able to control their exposure to the risk source. The actions a healthcare worker performs after the situation has escalated are measures done to control the outcome, which is to prevent injury to employees, the patient, material damages, or other potential hazards.

Examples of control over consequences can be the employee positioning in the room and in relation to the patient, requesting assistance from coworkers, or the ability to remove themselves from the situation. These elements were also mentioned by the participants in relation to judging the risk of violence, which indicates that control plays a role in how participants perceived the risk. While the participants experienced having a certain control in relation to being able to request assistance, leaving, or repositioning themselves in relation to the patient, the participants also expressed that there were aspects related to these situations

outside of their control. The majority of participants stated that while the presence of coworkers or additional personnel increased their feeling of control, they also expressed a lack of control in controlling which coworkers were on each shift and that requests for additional personnel such as police were dependent on if the police had available resources.

6.2.2 Trust in Psychiatric Healthcare

Much of the participants' expression related to successful incident response within psychiatric healthcare could be related to trust. One notion the participants stressed was the reliance on their coworkers as a support function for experienced control and general well-being in the meeting of potentially violent incidents. These statements emphasize the importance of trust in relation to how the participants perceive risk and how they act in threatening situations. Many participants stated that they rely on their coworkers' support and potential intervention in scenarios where this is needed. Considering the vulnerable position the participants put themselves in when engaging with a patient showing challenging behavior, many participants emphasized that they were hesitant to do so without one or more coworkers present. However, it was highlighted by the participants that they felt generally safe in such situations as there exists an inherent expectation within the groupings that they will receive support when needed. This sentiment is illustrated by the following quote,

> *"But we have a structure that makes one feel fairly certain that it will end well, that a lot is required before something goes wrong."* (participant from Set 2 on question 5 part 4)

This behavioral pattern is also described in other research projects related to trust. Such research states that trust occurs when an individual accepts being vulnerable because they trust another individual's intentions and behavior. Furthermore, this type of trust is presented through the benevolence dimension of the literature, which states that trust can be built through the belief that others have good intentions and highlights themes such as loyalty, support, and care (Colquitt et al., 2007). As participants expressed the importance of support from colleagues in difficult situations, we argue that the benevolence dimension is one of the more important dimensions for shaping psychiatric healthcare workers' trust. The significant weight participants gave to cooperation between coworkers indicates that trust could be an essential factor in the participants' perceived level of control and safety.

The willingness to engage in vulnerable situations might not rest solely on the interpersonal trust between coworkers, but it might also depend on trust related to the pre-existing routines and procedures within the ward and the larger healthcare system. Participants stated that through the use of alarms, they are able to work alone with patients knowing that other personnel within their own and adjacent wards will respond quickly if needed. Part of this behavior could be attributed to the trust in the overall routines and procedures of the ward.

The trust placed in the procedures enables the participants to trust their coworkers in other wards without knowing who is working at any given time and rely on the knowledge that regardless of whom, they will come to aid if needed. However, some participants expressed that they experienced no increased feeling of safety and control in connection to the use of alarms. These participants argued that they were unsure whether their coworkers could assist in a way that improved their safety if they decided to activate their alarms. This could be an indication of lacking trust in their coworkers related to certain incidents, but it could also be a lack of trust in the procedures related to the use of such alarms. Furthermore, these participants noted that they did not have extensive experience with alarms and therefore experienced uncertainty related to their effectiveness. These findings indicate that while routines and procedures do play a role in how participants perceive their safety, the trust in these routines and procedures is not automatically established when a procedure is implemented.

Another dimension related to trust is trust built on knowledge and ability. This type of trust relates to the belief one has that someone inhabits particular abilities, skills, or knowledge that makes them especially suited for specific tasks (Colquitt et al., 2007). Throughout the interviews, several of the participants experienced an increased level of safety when working with experienced coworkers. This increased level of safety also affected the degree to which the participants experienced being in control over situations with patients. On the other side, many of the participants expressed that the experienced level of safety decreased when working with inexperienced or unfamiliar coworkers.

This type of difference in experience might indicate that the knowledge and ability dimension plays a vital role in trust-building and overall level of comfort for health workers. Colquitt et al. (2011) claimed that the ability dimension was not related to trust in high-reliability contexts. However, this thesis observed that this might be a faulty assumption for this type of work environment, as the participants expressed a higher level of comfort and safety related to

coworkers, which they perceived as more competent while expressing a decreasing level of comfort and safety related to inexperienced ones. This might be due to the context in which the healthcare workers experience their peers. As noted by the participants, many of the healthcare workers currently employed are unskilled workers. Considering this, the level of competency attributed to the workers, either by education or experience within the field, may affect the level of trust someone is attributed.

The last dimension relates to integrity. According to Colquitt et al. (2007), the integrity dimension is related to the belief that someone acts according to ethically and morally sound principles. The participants expressed that they experienced all their coworkers were well-intentioned in their actions. This can be seen as an expression of a high level of experienced integrity within their field. It was evident throughout the interviews that the participants viewed their coworkers to be well-intentioned in spite of some being inexperienced. When considering this, the findings indicate that this specific dimension is less relevant for this field, as the experienced notion is that the workers have high integrity.

6.2.2.1 Trust between healthcare worker and patient

In the following paragraphs, we will discuss the relevancy of the three trust dimensions described in Colquitt et al. (2007) in regard to the development of trust between healthcare workers and patients. Since we only have the perspectives of the healthcare workers, the discussion will only focus on how the dimensions influence the development of trust from the participants' point of view in regard to their patients.

In every group interview, the relationship between the patient and healthcare worker was brought up. Participants expressed that the better relationship they had with a patient and the longer they had known the patient, the less threatened they would feel. They argued that this was because they started to know the signals for when the patient was getting uneasy and that they had better knowledge of how to respond if the patient started to exhibit challenging behavior. Some also stated that they were not affected by verbal threats by certain patients because of their personal relationship and that they knew that the patient meant no harm and would calm down shortly. As illustrated by the quote below,

> *"If someone says, I will kill you, it could be really threatening. But sometimes it wouldn't bother me at all if someone said it, because it is just an expression of*

frustration. But you'll have to know them to some degree." (participant from Set 1 discussing what they would perceive as threatening)

This can be interpreted as a form of trust the participants have in their patients. More precisely, one can argue that the benevolence dimension described by Colquitt et al. (2007) plays a large role in justifying the participants' statements. While the patients could be perceived as threatening by an individual that does not know them, the participants believe that the patient has no ill intentions towards them and will do them no harm despite their verbal outburst.

We observe no apparent influence from the ability dimension based on the statements from the participants. We can assume that the reason for this is that there are few aspects of ability and knowledge that mitigate the risk of violence. However, as some participants state, they would feel more at risk if the patient were male than if the patient were female. They argue that a woman is less able to cause serious harm. This could be due to biological factors such as muscle mass and size but could also be due to some participants expressing that the majority of violent patients are male. We could therefore argue that the ability dimension is more influenced by the lack of ability to do harm. While these factors could be attributed to the dimension of ability, a better explanation would be to attribute these factors to the participants' capability to control the patients. While both patients of both genders could show violent behavior, it might be easier to physically control a woman or man, of a smaller size, compared to a larger individual.

No statements from the participants mention any aspects that can relate to the integrity dimension in connection to their relationship with the patient, as we have no clear evidence that the integrity dimension is considered by our participants. Based on our collected data, we determine that this dimension is not relevant when healthcare workers develop trust toward their patients.

6.2.3 A Decreased Risk Perception over Time

According to our findings, presented in table 9, the number of violent incidents and threats a participant has experienced at their current workplace increases the longer the participant has worked. This table also shows that participants experienced more threats than violent incidents within this period. There is a slight decrease in experienced threats between the last two age groups. However, this could be explained by several factors, such as different wards where fewer threats occur, or it could be affected by the questionnaire. These results provide a

foundation for examining if the scenarios are perceived as less threatening or safer as the participants gain more experience within the field.

When comparing the participants' ratings on how threatened they would perceive certain scenarios in relation to their years of experience at their current workplace. We found that there is a decrease in perceived threat from the participants in the youngest age group compared to the next. There is also an increased rating found between age groups two and three. Participants in group three still rate the scenario as less threatening than the youngest age group. However, the group of participants that have stayed the longest at their current workplace rated the scenario to be just as threatening as the youngest groups. These findings show little correlation between the hypothesis that the participants would perceive the scenarios as decreasingly threatening over time. The experienced feeling of safety ratings also undermines this hypothesis as age groups two and three only rated the scenarios marginally better than the youngest group, with the oldest group giving the lowest rating of safety overall.

As the participants come from varied backgrounds within psychiatric care, the ratings might be influenced by the amount of experience the participants have with incidents involving violent challenging behavior. We found that the participants within DPCs have significantly less experience with these types of incidents compared to the participants in the security wards. We calculated the average ratings for threat and safety compared to the number of violent incidents and threats the participants reported having experienced. When comparing the ratings to the number of verbal threats, the ratings still provided little support to the hypothesis. The level of perceived threat, when compared to number of violent incidents, provided some support as it was observed that the rating dropped off among the participants that had experienced more than 16 incidents. However, the participants with no reported incidents at their current workplace gave the second-lowest threat rating, which speaks against the perceived threat going down the more incidents a participant has experienced. The same kind of rating can be found in the participants' feeling of safety, where the participants with zero incidents gave a higher rating than the participants that had experienced 1 to 15 incidents but lower than the participants that had experienced 16 or more incidents.

A possible explanation for this finding is the heuristics that can influence the perceived risk. A participant with no experienced incident at their current workplace may have a harder time imagining incidents that might have gone wrong or that nearly went wrong, thus being

influenced differently by the availability bias than the participants with more experienced incidents. These findings indicate that the participants that have experienced between 1 and 15 incidents experience the lowest level of safety. This might be explained by the availability bias, which dictates that having some own experiences enable individuals to recall uncomfortable incidents more vividly while at the same time not having a vast enough sample to experience a high level of control. Due to this, it is a reasonable assumption that participants with a higher level of experienced incidents experience more control over situations, thus having a higher level of experienced safety.

On the contrary, the qualitative findings provide support to the argument that risk perception decreases over time, as a significant number of participants expresses or agree that incidents have less impact on them now than when they started and that they have become more used to encountering these types of incidents over time. One explanation for the discrepancy between the findings in the focus group interviews and the questionnaire is that while the participants have gotten more used to working in an environment that could pose a risk of violence, how they rate that risk has not changed. In other words, the perceived risk itself remains the same, but the participants' attitude toward the perceived risk changes over time. The literature on near-misses shows that individuals do not change the provided measure of probability when encountering a near-miss, but how they perceive the risk after an incident changes.

The findings from the focus groups strongly indicate that healthcare workers adapt the level of risk of violent incidents over time, which in turn impacts how they perceive risk at work. This coincides with previous research in other fields that have observed that the longer individuals live in hurricane-prone areas, their perception of the risk of hurricanes decreases. While the questionnaire findings did not support the hypothesis, this might be due to availability bias.

6.2.4 Does Nuances in Descriptions Influence Risk Perception?

We choose to create Set 2 due to some strong reactions from participants regarding the employee’s response in the near-miss scenarios in the original scenario descriptions in Set 1. Based on the ratings concerning response, perceived threat, and feeling of safety, no findings indicate that these strong reactions were affected by differences in the scenario descriptions. Statements made by the participants also refuted the concerns that there were too large discrepancies between the descriptions between the sets. This was highlighted by participants

in Set 2 critiquing the same aspects of the response that were perceived as better in Set 1. Illustrated in the quotes below,

> *"... the difference was that he sat down, that was maybe another approach than in the first scenario, but still not optimal..."* (participant from Set 1 on control scenario as S_2)

> *"... but the way they talked, [...], was good, but I would have probably stood at a distance and said it."* (participant from Set 2 on vulnerable near-miss as S_2)

We propose that the availability bias partially explains why near-misses influence risk perception. It was observed that participants that received the vulnerable near-miss scenario would focus on negative loaded experiences during the open discussion compared to those participants receiving the resilient near-miss and the control. This could indicate that the vulnerable near-miss made it easier to recollect negative experiences compared to the two other scenarios. Furthermore, it is noted that the discussions were more positively aimed when speaking of the resilient near-miss scenario as compared to when speaking of the vulnerable near-miss scenario. These statements, in combination with the participants' answers about feeling safe from the questionnaire, indicate that the participants have more positive connotations of resilient near-miss scenarios from their own experiences.

There were few observations that other heuristics played a prevalent role in influencing the participants' perceptions of the level of threats and safety. The optimism bias described in Siegrist & Árvai (2020) was prevalent during multiple interviews as participants stated that they felt that they were more secure than other types of wards within the healthcare sector, but there were few indications that this bias had any significant influence on the participants' overall perceptions. An argument could be made that the representation bias, described by Renn (2008), influenced the participants as they relied on a single incident in the near-misses to make their assessment. However, as the scenarios had limited information, it is understandable that the participants focused on the single event that provided them with more information. Furthermore, many participants noted that one incident did not determine the overall behavior of the patient but that it was a sign for them to be more alert.

Lein (2018) claims that violent incidents are complex and have many factors which may influence the situation. We found that while the near-misses could influence how participants perceived the levels of threat and safety, there were other factors that also had an effect on how

they perceived risk. Participants expressed that the characteristics of the patient, such as gender, recent incidents, diagnosis, and external factors that could impact the patient's behavior, were important when they assessed the risk of violence. As such, the foundation of which violent events are described by scholars corresponds with our findings.

Furthermore, we observed that a violence risk assessment set to moderate had little effect on the participants. This sentiment was expressed in a majority of the groups to a varying degree. The main argument for why participants did not take the assessment more into account was that they felt that it could provide an unbalanced picture of the patient.

> *"I don't know how much I trust these violence risk assessments either. I feel that it isn't something I usually would care about unless it is something special."* (participant from Set 2 on control scenario as $S_{1)}$

Some participants further stated that a moderate score on the violence risk assessment was sort of the norm for the patient group. In other words, this classification resulted in a neutral response from the participants concerning their experienced potential of violence from the patient. This gives additional support to our earlier argument that risk perception will reduce over time and with exposure, as these participants no longer saw a moderate score as an identifier for heightened risk of violence. We argue that while the moderate assessment did not significantly influence the participants, they countered this by relying more on their experiences and the experiences of their coworkers. By relying more on experience, we see that they are more inclined to be influenced by incidents and near-misses that are seen as more or less successful.

6.2.5 Successful and Unsuccessful Response and the Complexity of Psychiatric Healthcare

The focus of this research project has, at first glance, is a homogeneous population of psychiatric healthcare workers. All groups brought up some similar themes which differed minimally in meaning among the participants. These themes involved fundamental attitudes the participants had towards patient interaction and relationship building, and we see that these attitudes align with the principles established in MAP. However, we argue that there is also an array of different opinions within this population, demonstrated in the findings from both the questionnaire and the focus group interviews. Some examples are how participants disagreed about the correctness of response and in what types of situations they would feel the safest.

Participant 1: "... I might have felt more unsafe in this situation [the control scenario] when we have no past event and don't know exactly what will happen."

Participant 2: "That's interesting, because for me it's the opposite. I would feel more unsafe in the other situation [the resilient near-miss] […], now I know that there is a potential" (two participants from Set 2 discussing the resilient near-miss and the control scenario)

While we asked the participants to rank the employee's responses, they expressed that the kinds of situations containing the same elements from our scenario descriptions are complex and that there are few responses that can be deemed to be correct in all solutions. This is highlighted when we examine the verbal responses from all the groups as no consensus formed on how well the employee had responded to the situation in the scenario. However, the ratings derived from the questionnaire show that the participants still are influenced by the various variables previously identified in chapter 3. Furthermore, themes from the interviews indicate which variables participants utilize when forming their perceptions of the risk of violence. These variables include trust, control, and previous experience, as the ones most prevalent in our interviews.

The participants expressed that the incidents involving challenging behavior are complex and that all the responses could be successful if the right conditions were in place. These statements from the participants provide little validation for the influence of successful or unsuccessful responses. However, findings from the questionnaire and other statements the participants made showed that the participants judged the response in the vulnerable near-miss as significantly worse than the others. We conclude that while a response might not be judged as unsuccessful by the healthcare workers, there are still responses that are viewed as having a lower quality. Furthermore, while we assume that we could design a response deemed unsuccessful, we argue that our findings show that the use of the term unsuccessful is inappropriate in the context of psychiatric healthcare.

7 Conclusion

We sought to explore how previous experiences influence the perception of risk among psychiatric healthcare workers. To explore this topic, we chose to focus on the problem statement:

How does awareness of *successful* or *unsuccessful* responses to incidents of violence or verbal threats directed towards employees affect psychiatric healthcare workers' perceived risk of violent incidents?

We found that healthcare workers judge the vulnerable near-miss to have the lowest quality of response, that they perceived it as the most threatening, and that they would have felt the least safe in it. We further observed that the participants that received this scenario expressed a higher need for additional measures to prevent a future incident. Our findings substantiate earlier research on near-misses by Tinsley et al. (2012). Our findings related to resilient near-misses do, at first glance, ratify what Dillon & Tinsley (2008) observed regarding how an individual would judge the response in a near-miss similar to the response in a no-near-miss incident. However, some of our ratings indicate that it is more nuanced, as we observed that our participants would rate the resilient near-miss significantly worse if they had already received the no-near-miss incident.

We argue that the differences in perceptions between the vulnerable near-miss and the other two scenarios could be due to the influence of the availability bias. Additionally, there are indications that demonstrate that this influence can be heightened through the sharing of negative experiences and vulnerable near-misses. However, we also observe that the negative effect of the availability bias could be neutralized through positive associations brought out by resilient near-misses.

Based on our findings, we see strong indications that participants believe that coincidences have some influence over the outcome in events with challenging behavior. We observe that there is no consensus among psychiatric healthcare workers about their level of perceived control over preventing an incident from escalating. There are indications that healthcare workers divide control into two categories, *control over further escalation* and *control over potential consequences of an escalation,* and that they perceive that they have a higher degree of *control over potential consequences of an escalation.* We argue that these two categories

expressed by the participants align with the categories control-over-outcome and control-over-exposure identified by Nordgren et al. (2007).

We see indications that trust plays a vital role in healthcare workers' feeling of safety. We argue that the benevolence and ability dimensions regarding trust are the most important in the development of trust between healthcare workers. There are indications in our findings that there is a correlation between exposure to violence and verbal threats and the level of risk perceptions regarding challenging behavior.

These findings show that the use of the term unsuccessful response is unsuitable as a measure of quality in psychiatric healthcare as most responses could work in the right circumstances and because healthcare workers believe that coincidences have some influence over the final outcome of a situation. However, we see that responses are measured up against what the participants viewed as best practice and that the more vulnerable incidents mobilize healthcare workers to a higher degree than less vulnerable incidents. There are strong indications that trust is an important factor for healthcare workers' feeling of safety and that trust can affect how they act in threatening situations.

7.1 Recommendations

Our thesis has examined risk perception among psychiatric healthcare workers and how it is influenced by variables such as near-miss experience, trust, and control. Future research should examine risk perception among part-time employees with limited healthcare education and how they affect full-time workers' risk perceptions, as our participants stated that these workers make up a significant portion of the psychiatric workforce. Furthermore, we recommend creating more detailed scenarios when examining the influence of near-misses as this could lead to more precise assessments of risk among the partaking healthcare workers. We found that control could be divided into control-over-exposure and control-over-outcome. However, more thorough research on how these two categories affect risk perception is needed. Lastly, our findings indicate that trust has a considerable influence on healthcare workers' risk perception, and this relationship deserves scientific attention in the future.

References

Achat, H. M., Stubbs, J. M., & Mittal, R. (2022). Australian healthcare workers and COVID-19 vaccination: Is mandating now or for future variants necessary? *Australian and New Zealand Journal of Public Health*, *46*(1), 95–96. https://doi.org/10.1111/1753-6405.13191

Aci, O. S., Kackin, O., Karaaslan, S., & Ciydem, E. (2022). Qualitative examination of the attitudes of healthcare workers in Turkey regarding COVID-19 vaccines. *International Journal of Nursing Knowledge*, *33*(2), 136–146. https://doi.org/10.1111/2047-3095.12342

Aven, T. (2018). An Emerging New Risk Analysis Science: Foundations and Implications. *Risk Analysis*, *38*(5), 876–888. https://doi.org/10.1111/risa.12899

Aven, T. (2020). *The Science of Risk Analysis: Foundation and Practice*. Routledge.

Aven, T., Ben-Haim, Y., Andersen, H. B., Cox, T., Droguett, E. L., Greenberg, M., Guikema, S., Kröger, W., Renn, O., Thompson, K. M., & Zio, E. (2018). *Society for Risk Analysis Glossary*. 9.

Aven, T., & Flage, R. (2020). Foundational Challenges for Advancing the Field and Discipline of Risk Analysis. *Risk Analysis*, *40*(S1), 2128–2136. https://doi.org/10.1111/risa.13496

Blaikie, N. (2010). *Designing social research* (2nd ed.). Polity Press.

Colquitt, J. A., Lepine, J. A., Zapata, C. P., & Wild, E. R. (2011). TRUST IN TYPICAL AND HIGH-RELIABILITY CONTEXTS: BUILDING AND REACTING TO TRUST AMONG FIREFIGHTERS. *The Academy of Management Journal*, *54*(5), 999–1015.

Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology*, *92*(4), 909. https://doi.org/10.1037/0021-9010.92.4.909

Dillon, R. L., & Tinsley, C. H. (2008). How Near-Misses Influence Decision Making under Risk: A Missed Opportunity for Learning. *Management Science*, *54*(8), 1425–1440.

Dillon, R. L., Tinsley, C. H., & Burns, W. J. (2014). Near-Misses and Future Disaster Preparedness. *Risk Analysis*, *34*(10), 1907–1922. https://doi.org/10.1111/risa.12209

Dillon, R. L., Tinsley, C. H., & Cronin, M. (2010). Why Near-Miss Events Can Decrease an Individual's Protective Response to Hurricanes. *Risk Analysis*, *31*(3), 440–449. https://doi.org/10.1111/j.1539-6924.2010.01506.x

Douglas, K. S., Guy, L., & Hart, S. (2009). Psychosis as a risk factor for violence to others: A meta-analysis. *Psychological Bulletin*, *135*(5), 679. https://doi.org/10.1037/a0016311

Douglas, K. S., Hart, S. D., Webster, C. D., Belfrage, H., Guy, L. S., & Wilson, C. M. (2014). Historical-Clinical-Risk Management-20, Version 3 (HCR-20V3): Development and Overview. *International Journal of Forensic Mental Health*, *13*(2), 93–108. https://doi.org/10.1080/14999013.2014.906519

Douglas, K. S., Webster, C. D., & Belfrage, H. (2013). *HCR-20 V3: Voldsrisikovurdering: Brukermanual* (3rd ed.). Simon Fraser University, Mental Health, Law and Policy Institute.

Earle, T. C. (2010). Trust in Risk Management: A Model-Based Review of Empirical Research. *Risk Analysis*, *30*(4), 541–574. https://doi.org/10.1111/j.1539-6924.2010.01398.x

Earle, T. C., Siegrist, M., & Gutscher, H. (2010). Trust, Risk Perception and the TCC Model of Cooperation. In *Trust in Risk Management: Uncertainty and Scepticism in the Public Mind*. Earthscan. https://books.google.no/books?hl=no&lr=&id=ff0pECUY1BAC&oi=fnd&pg=PA1&dq=earles+et+al+2010&ots=RQ__7EgnCU&sig=ppPYWk-_J1Kluj_lxJ9ZJCswjJM&redir_esc=y#v=onepage&q=earles%20et%20al%202010&f=false

Fiscella, K., Mauksch, L., Bodenheimer, T., & Salas, E. (2017). Improving Care Teams' Functioning: Recommendations from Team Science. *The Joint Commission Journal on Quality and Patient Safety*, *43*(7), 361–368. https://doi.org/10.1016/j.jcjq.2017.03.009

Gjerstad, B., Nødland, S. I., & Teig, I. L. (2020). Trust building in a Norwegian municipal acute ward. *Journal of Health Organization and Management*, *34*(6), 673–685. https://doi.org/10.1108/JHOM-11-2019-0334

Grønmo, S. (2004). *Samfunnsvitenskapelige metoder*. Fagbokforlaget.

Hartvig, P. (2012). Schizofreni og vold – kan man forutsi voldelig atferd? *Tidsskrift for Den norske legeforening*. https://doi.org/10.4045/tidsskr.12.0267

Hawley, K. (2015). Trust and distrust between patient and doctor. *Journal of Evaluation in Clinical Practice*, *21*(5), 798–801. https://doi.org/10.1111/jep.12374

Helse Nord. (2021). *Ledelsens gjennomgang av virksomheten 2020* (Styresak No. 11). Helse Nord.

Helse Vest. (2019). *Internkontroll i Helseføretaka*. Helse Vest.

Hooks, T., Schuitema, G., & McDermott, F. (2019). Risk Perceptions Toward Drinking Water Quality Among Private Well Owners in Ireland: The Illusion of Control. *Risk Analysis*, *39*(8), 1741–1754. https://doi.org/10.1111/risa.13283

Hurducas, C., Singh, J. P., de Ruiter, C., & Petrila, J. (2016). Violence Risk Assessment Tools: A Systematic Review of Surveys. In *International Perspectives on Violence Risk Assessment* (pp. 76–97). Oxford University Press.

Krogstad, U., Saastad, E., Enger, Ø., Kolseth, A., Hafstad, E., & Flesland, Ø. (2015). Meldinger om vold og aggresjon i spesialisthelsetjenesten—Et pasientsikkerhetsperspektiv. *Kunnskapssenteret*, *9999*, 1–41.

Lein, M. (2018). *Psykisk sykdom fører ikke til mer vold—NHI.no*. Norsk Helseinformatikk. https://nhi.no/psykisk-helse/psykiske-lidelser/psykisk-sykdom-forer-ikke-til-mer-vold/

Lien, L., & Bergem, A. K. (2021). Psykiatrien trenger et løft – ikke tomme løfter. *Tidsskrift for Den norske legeforening*, 1–3. https://doi.org/10.4045/tidsskr.21.0532

Lindøe, P. (2018). Kapittel 1 Innleding. In *Risiko, tillit og kontroll: En aktørperspektiv på risikostyring* (1st ed., pp. 21–56). Gylendal Norsk Forlag.

Malt, U. (2019). Utagering. In *Store norske leksikon*. http://snl.no/utagering

Martin, P. (2019). *The Rules of Security—Staying safe in a risky world* (1st ed.). Oxford University Press.

Myhrvold, O. A., Sem-Jacobsen, Å., Strand, M., Fasteraune, B., & Toppe, K. (2018). *Representantforslag 60 S (2018-2019)* (pp. 1–4) [Dok 8:60 S (2018-2019)]. Stortinget. https://www.stortinget.no/globalassets/pdf/representantforslag/2018-2019/dok8-201819-060s.pdf

Nag, T., Engen, M., Eldhammer, G., & Svenning, B. (2021). Et samlet fagmiljø står bak MAP-programmet for forebygging av vold. *Sykepleien*. https://doi.org/10.4220/Sykepleiens.2021.86110

NHD. (2018). *Voldsrisikoutredning ved alvorlig psykisk lidelse—Nasjonale faglige råd*. The Norwegian Health Directorate. https://www.helsedirektoratet.no/faglige-rad/voldsrisikoutredning-ved-alvorlig-psykisk-lidelse

NLIA. (n.d.). *Avvik og avvikshandtering*. Norwegian Labour Incpection Authority. Retrieved June 3, 2022, from https://www.arbeidstilsynet.no/hms/avvik-og-avvikshandtering/

NLIA. (2022). *Vold og trusler*. Norwegian Labour Incpection Authority. https://www.arbeidstilsynet.no/tema/vold-og-trusler/

Nordgren, L. F., van der Pligt, J., & van Harreveld, F. (2007). Unpacking perceived control in risk perception: The mediating role of anticipated regret. *Journal of Behavioral Decision Making*, *20*(5), 533–544. https://doi.org/10.1002/bdm.565

NSD. (n.d.). *Data Protection Services*. Norsk Senter for Forskningsdata. Retrieved May 28, 2022, from https://nsd.no/en/data-protection-services

Ose, S. O., Lilleeng, S., Pettersen, I., Ruud, T., & van Weeghel, J. (2017). Risk of violence among patients in psychiatric treatment: Results from a national census. *Nordic Journal of Psychiatry*, *71*(8), 551–560. https://doi.org/10.1080/08039488.2017.1352024

OUS. (n.d.-a). Bruk av alarm NBHP. In *Ehandboken.ous-hf.no*. Oslo University Hospital Health Trusts. Retrieved May 19, 2022, from https://ehandboken.ous-hf.no/document/132305

OUS. (n.d.-b). Håndtering av uakseptabel atferd i avdelingen. In *Ehandboken.ous-hf.no*. Oslo University Hospital Health Trusts. Retrieved May 19, 2022, from https://ehandboken.ous-hf.no/document/133719

OUS. (n.d.-c). *Uønskede hendelser, risikoforhold og forbedringsforslag i Achilles*. ehandboken.ous-hf.no. Retrieved June 11, 2022, from https://ehandboken.ous-hf.no/document/11

Petrocchi, S., Iannello, P., Lecciso, F., Levante, A., Antonietti, A., & Schulz, P. J. (2019). Interpersonal trust in doctor-patient relation: Evidence from dyadic analysis and association with quality of dyadic communication. *Social Science & Medicine*, *235*, 112391. https://doi.org/10.1016/j.socscimed.2019.112391

Psychiatric healthcare act. (2021). *Act relating to establishing and execution of psychiatric healthcare* (LOV-2021-05-07-34). https://lovdata.no/dokument/NL/lov/1999-07-02-62?fbclid=IwAR1XtoMflhRzDmn2K8eVQgTbLjLoTnYKVGjrI2hCqxXERDxgiTW-Lo_XMmE#KAPITTEL_3

Renn, O. (2008). *Risk Governance: Coping with uncertainty in a complex world*. Routledge.

Revue, E., Eyer, X., & Chauvin, A. (2021). Why don't health care workers in France trust the COVID-19 vaccine? *Canadian Journal of Emergency Medicine*, *23*(5), 722–723. https://doi.org/10.1007/s43678-021-00172-1

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Introduction to Special Topic Forum: Not so Different after All: A Cross-Discipline View of Trust. *The Academy of Management Review*, *23*(3), 393–404.

Rutherford, M. M. (2014). The Value of Trust to Nursing. *Nursing Economics*, *32*(6), 283-288,327.

Saunders, M., Lewis, P., & Thornhill, A. (2012). Formulating the research design. In *Research methods for business students* (6th ed., pp. 158–207). Pearson.

Siegrist, M. (2019). Trust and Risk Perception: A Critical Review of the Literature. *Risk Analysis*, *41*(3), 480–490. https://doi.org/10.1111/risa.13325

Siegrist, M., & Árvai, J. (2020). Risk Perception: Reflections on 40 Years of Research. *Risk Analysis*, *40*(S1), 2191–2206. https://doi.org/10.1111/risa.13599

Sjöberg, L. (2000). Factors in Risk Perception. *Risk Analysis*, *20*(1), 1–12. https://doi.org/10.1111/0272-4332.00001

Slovic, P. (2000). *The Perception of Risk*. Earthscan from Routledge.

Sollien, T. (2020, June 25). *Antall sengeplasser i psykiatrien må opp*. Aftenposten. https://www.aftenposten.no/meninger/kommentar/i/awg7X7/antall-sengeplasser-i-psykiatrien-maa-opp-therese-sollien

Spector, P. E., Zhou, Z. E., & Che, X. X. (2014). Nurse exposure to physical and nonphysical violence, bullying, and sexual harassment: A quantitative review. *International Journal of Nursing Studies*, *51*(1), 72–84. https://doi.org/10.1016/j.ijnurstu.2013.01.010

ssb. (2019, September 18). *Kortere liggetid i psykisk helsevern*. Statistics Norway. https://www.ssb.no/helse/artikler-og-publikasjoner/kortere-liggetid-i-psykisk-helsevern

STAMI. (n.d.). *Vold og trusler om vold (samlet)*. Statens Arbeidsmiljø Institutt. https://noa.stami.no/tema/psykososialtorganisatorisk/vold-mobbing-trakkasering/vold/

Sutherland, B. L., Pecanac, K., LaBorde, T. M., Bartels, C. M., & Brennan, M. B. (2021). Good working relationships: How healthcare system proximity influences trust between healthcare workers. *Journal of Interprofessional Care*, *0*(0), 1–9. https://doi.org/10.1080/13561820.2021.1920897

Tinsley, C. H., Dillon, R. L., & Cronin, M. A. (2012). How Near-Miss Events Amplify or Attenuate Risky Decision Making. *Management Science*, *58*(9), 1596–1613.

Appendix 1 | Letter of information and consent form

Vil du delta i forskningsprosjektet:

Risikopersepsjon og nesten-hendelser i Helsevesenet

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke hvordan ansatte innenfor en sektor med økt risiko for voldshendelser oppfatter trusselen for vold fra pasienter, og denne oppfatningens påvirkning på videre forebygging av voldshendelser. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

I vårt masterprosjekt undersøker vi hvordan ansatte i helsevesenet reagere på nesten-hendelser, og om dette kan forme videre atferd på arbeidssted. Prosjektet har som ambisjon å intervjue ansatte fra avdelinger og enheter fra ulike Helse regioner i Norge.

Opplysningene som blir innhentet vil ikke brukes til noen annet formål enn masterprosjektet, og slettes etter prosjektslutt.

Hvem er ansvarlig for forskningsprosjektet?

Universitetet i Stavanger er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Du får spørsmål om å delta fordi du arbeider ved en avdeling hvor vold mot ansatte kan forekomme og din leder tror at du kan bidra til tematikken i prosjektet vårt.

Valg av avdelinger og underenheter er basert på at det er rapportert et større antall voldshendelser på psykiatriske avdelinger sammenlignet med det som er på somatiske avdelinger. Avdelingene består av ulike størrelser, for å kartlegge potensielle variasjoner for atferd mellom en større og liten enhet. I tillegg består utvalget av avdelinger som kan ha ulik grad av rapporterte voldshendelser.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet innebærer det at du gjennomfører et gruppeintervju. Intervjuet vil ta omtrent 60-75 minutter. Selve intervjuet vil lagres elektronisk på en båndopptaker som senere vil bli transkribert og lagret elektronisk. Kontaktopplysninger vil lagres elektronisk separat fra intervjuet.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Du og dine svar vil ikke kunne gjenkjennes i publikasjon.

De eneste som vil ha tilgang på kontaktopplysninger og opptak fra intervju er masterkandidatene og masterveileder ved Universitetet i Stavanger. Kontaktopplysninger og opplysninger fra intervju vil lagres separat. Eventuelle identifiserbare opplysninger under intervju vil ikke overføres ved transkribering og erstattes med en kode som lagres på en separat navneliste som lagres adskilt fra øvrige data.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen vil være tolv uker etter prosjektslutt 15.06.2022. Lydopptak fra intervju og kontaktinformasjon vil bli slettet etter prosjektslutt.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra Universitetet i Stavanger har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvor kan vi finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- Universitetet i Stavanger ved Kenneth Arne Pettersen Gould – 51 83 16 58 / 97 18 89 65
- Vårt personvernombud: personvernombud@uis.no

Hvis du har spørsmål knyttet til Personverntjenester sin vurdering av prosjektet, kan du ta kontakt med:

- Personverntjenester på epost (personverntjenester@sikt.no), eller på telefon: 53 21 15 00.

Med vennlig hilsen

Kenneth Arne Pettersen Gould (Forsker/veileder)

Kristian Gjestrum & Melissa Bamrungkho Thomassen (student/forfattere)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet Risikopersepsjon og nesten-hendelser i Helsevesenet, og har fått anledning til å stille spørsmål. Jeg samtykker til:

- ☐ å delta i gruppe intervju

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

---

(Signert av prosjektdeltaker, dato)

Appendix 2 | Approval from NSD

OM VURDERINGEN
Personverntjenester har en avtale med institusjonen du forsker eller studerer ved. Denne avtalen innebærer at vi skal gi deg råd slik at behandlingen av personopplysninger i prosjektet ditt er lovlig etter personvernregelverket.

Personverntjenester har nå vurdert den planlagte behandlingen av personopplysninger. Vår vurdering er at behandlingen er lovlig, hvis den gjennomføres slik den er beskrevet i meldeskjemaet med dialog og vedlegg.

DEL PROSJEKTET MED PROSJEKTANSVARLIG
For studenter er det obligatorisk å dele prosjektet med prosjektansvarlig (veileder). Del ved å trykke på knappen «Del prosjekt» i menylinjen øverst i meldeskjemaet. Prosjektansvarlig bes akseptere invitasjonen innen en uke. Om invitasjonen utløper, må han/hun inviteres på nytt.

TYPE OPPLYSNINGER OG VARIGHET
Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til den datoen som er oppgitt i meldeskjemaet.

LOVLIG GRUNNLAG
Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake.

Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER
Personverntjenester vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene ipersonvernforordningen om:

lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen

formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte ognberettigede formål, og ikke behandles til nye, uforenlige formål

dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet

lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER
Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), og dataportabilitet (art. 20).

Personverntjenester vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

Personverntjenester legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

Ved bruk av databehandler (spørreskjemaleverandør, skylagring eller videosamtale) må behandlingen oppfylle kravene til bruk av databehandler, jf. art 28 og 29. Bruk leverandører som din institusjon har avtale med.

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre dere med behandlingsansvarlig institusjon.

MELD VESENTLIGE ENDRINGER
Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til oss ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde: https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-forpersonopplysninger/melde-endringer-i-meldeskjema

Du må vente på svar fra oss før endringen gjennomføres.

OPPFØLGING AV PROSJEKTET

Personverntjenester vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Appendix 3 | Original version of the interview guide

DELTAKER: ___

Del 1

1. Hva er din alder og utdanningsbakgrunn?

2. Hvor lenge har du arbeidet innenfor helsevesenet?

3. Hvor lenge har du arbeidet innenfor psykiatri?

4. Hvor lenge har du jobbet på nåværende avdeling?

DELTAKER: ___

Del 2

Det blir presentert enten en av de to nesten hendelsene eller kontroll scenarioet.

3. Hvor bra opplevde du at den ansatte håndterte situasjonen?

Svært dårlig	Dårlig	Verken eller	Bra	Svært bra
1	2	3	4	5

4. Hvor truende hadde du opplevd hendelsen hvis du var i denne situasjonen?

Ikke truende	Litt truende	Noe truende	Truende	Svært truende
1	2	3	4	5

5. Hvor trygg hadde du følt deg hvis du var i denne situasjonen?

Svært utrygg	Noe utrygg	Verken eller	Noe trygg	Svært trygg
1	2	3	4	5

6. Hvor mye kan tilfeldigheter påvirke utfallet av denne hendelsen?

Ikke i det hele tatt	I liten grad	Verken eller	I stor grad	Kun tilfeldigheter som avgjør
1	2	3	4	5

DELTAKER: ___

Del 3

Det blir presentert enten en av de to nesten hendelsene eller kontroll scenarioet.

1. Hvor bra opplevde du at den ansatte håndterte situasjonen?

Svært dårlig	Dårlig	Verken eller	Bra	Svært bra
1	2	3	4	5

2. Hvor truende hadde du opplevd hendelsen hvis du var i denne situasjonen?

Ikke truende	Litt truende	Noe truende	Truende	Svært truende
1	2	3	4	5

3. Hvor trygg hadde du følt deg hvis du var i denne situasjonen?

Svært utrygg	Noe utrygg	Verken eller	Noe trygg	Svært trygg
1	2	3	4	5

4. Hvor mye kan tilfeldigheter påvirke utfallet av denne hendelsen?

Ikke i det hele tatt	I liten grad	Verken eller	I stor grad	Kun tilfeldigheter som avgjør
1	2	3	4	5

Del 4

Åpent spørsmål etter hvert enkelt scenario

1. Har dere noen tanker rundt dette scenarioet?
2. Hvordan opplevde dere at den ansatte håndterte situasjonen?

Spørsmål etter begge scenarioer har blitt presentert

1. Hvordan opplevde dere disse scenarioene?
2. Håndterte den ansatte situasjonen bedre i det ene enn det andre scenarioet?
3. Er det noen likheter eller ulikheter mellom scenarioene?
4. Etter at vi nå har gått gjennom begge scenarioer, er det noen endringer i hvordan dere ville besvart spørsmålene etter hvert scenario?
5. Hvor mye kontroll opplever dere at dere har over å forhindre at en pasient utagerer med vold eller trusler?

Definisjoner

Vold: Enhver handling som har til hensikt å føre til fysisk eller psykisk skade på en person.
Trusler: Verbale angrep eller handlinger som tar sikte på å skade eller skremme en person
Tilfeldigheter: Alt utenfor en ansatts kontroll

DELTAKER: ___

Del 5

1. Har du opplevd vold rettet mot deg i sammenheng med nåværende arbeidssted?

    a. Hvis ja, omtrent hvor mange hendelser?

1-5 ganger 6-15 ganger 16-30 ganger 31-60 ganger 61-100 ganger 100 <

2. Har du opplevd trusler rettet mot deg i sammenheng med nåværende arbeidssted?

    a. Hvis ja, omtrent hvor mange hendelser?

1-5 ganger 6-15 ganger 16-30 ganger 31-60 ganger 61-100 ganger 100 <

3. Har du opplevd en hendelse som kunne eskalert seg til et dårlig utfall, men som ble avverget?

    a. Hvis ja, omtrent hvor mange hendelser?

1-5 ganger 6-15 ganger 16-30 ganger 31-60 ganger 61-100 ganger 100 <

4. Har du opplevd trusler og/eller vold rettet mot kolleger i sammenheng med nåværende arbeidssted?

    a. Hvis ja, omtrent hvor mange hendelser?

1-5 ganger 6-15 ganger 16-30 ganger 31-60 ganger 61-100 ganger 100 <

5. I løpet av en gjennomsnittlig arbeidsdag på din avdeling vil risikoen for vold eller trusler mot ansatte være?

Ikke-eksisterende	Lav	Moderat	Høy	Overhengende
1	2	3	4	5

Del 6

Da er vi ferdig med våre oppsatte spørsmål, så før vi avslutter intervjuet lurte vi på om dere sitter på noen tanker som dere ikke har fått sagt i løpet av intervjuet?

Appendix 4 | English version of the interview guide

PARTICIPANT: ___

Part 1

1. What is your age and education?

2. How long have you worked in health care?

3. How long have you worked in psychiatry?

4. How long have you worked at your current ward?

PARTICIPANT: ___

Part 2

Presented would either be one of the near-miss scenarios or the control scenario.

1. In your experience, how well did the employee respond to the situation?

Very bad	Bad	Neither nor	Good	Very good
1	2	3	4	5

2. How threatened would you perceive this incident if you were in this situation?

Not threatened	A little threatened	Somewhat threatened	Threatened	Very threatened
1	2	3	4	5

3. How safe would you have felt if you were in this situation?

Very unsafe	Somewhat unsafe	Neither nor	Somewhat safe	Very safe
1	2	3	4	5

4. How much can coincidences affect the outcome in this incident?

Not at all	Slightly	Neither nor	Largely	Only coincidences can determine the outcome
1	2	3	4	5

PARTICIPANT: ___

Part 3

Presented would either be one of the near-miss scenarios or the control scenario – the opposite from the scenario presented in Part 2.

1. In your experience, how well did the employee respond to the situation?

Very bad	Bad	Neither nor	Good	Very good
1	2	3	4	5

2. How threatened would you perceive this incident if you were in this situation?

Not threatened	A little threatened	Somewhat threatened	Threatened	Very threatened
1	2	3	4	5

3. How safe would you have felt if you were in this situation?

Very unsafe	Somewhat unsafe	Neither nor	Somewhat safe	Very safe
1	2	3	4	5

4. How much can coincidences affect the outcome in this incident?

Not at all	Slightly	Neither nor	Largely	Only coincidences can determine the outcome
1	2	3	4	5

Part 4

Open question after each scenario

1. Do you have any thoughts about this scenario?
2. How did you perceive the way the employee responded in the situation?

Open question after both scenarios has been presented

1. How did you experience these scenarios?
2. Did the employee respond better in one of the scenarios than the other?
3. Is there any similarities or differences between the scenarios?
4. After we have now been through both scenarios, is there any changes in how you would answer the question after each scenario?
5. How much control do you perceive to prevent a patient to display challenging behavior with violence and threat?

Definitions

Violence: Any action with the purpose to cause physical or psychological harm to a person

Threat: Verbal attacks or actions which aims to hurt or scare a person

Coincidences: Everything outside an employees' control

PARTICIPANT: ___

Part 5

1. Have you experienced violence directed towards you in at your current workplace?

    a. If so, how many incidents?

1-5 times 6-15 times 16-30 times 31-60 times 61-100 times 100 <

2. Have you experienced threats directed towards you at your current workplace?

    a. If so, how many incidents?

1-5 times 6-15 times 16-30 times 31-60 times 61-100 times 100 <

3. Have you experienced an incident that could have escalated into a bad outcome, but was prevented?

    a. If so, how many incidents?

1-5 times 6-15 times 16-30 times 31-60 times 61-100 times 100 <

4. Have you experienced threats and/or violence directed towards colleagues at your current workplace?

    a. If so, how many incidents?

1-5 times 6-15 times 16-30 times 31-60 times 61-100 times 100 <

5. In an average workday at my department is the risk for violence or threats directed towards employees is?

Non-existing	Low	Moderate	High	Overhanging
1	2	3	4	5

Part 6

We are now done with our main questions, so before we finish we were wondering if you have any final remarks you have not had the opportunity to express during the interview?

Appendix 5 | Original scenario description

	SET 1 SCENARIOER	SET 2 SCENARIOER
SCENARIO AV DEN SÅRBARE NESTEN-HENDELSEN	"En pasient er innlagt på tvunget psykisk helsevern på en døgnpost. Pasienten har fra tidligere en kjent historie med voldshendelser. Hen ble voldsrisikovurdert ved innleggelse og denne er satt til moderat. På gårsdagens vakt hadde pasienten en utagerende episode. En ansatt hadde satt seg ned og tatt kontakt med pasienten for å prøve å roe ned situasjonen, men pasienten hadde da slått hardt mot den ansatte. De andre ansatte på avdelingen klarte å skille den ansatte og pasienten fra hverandre før noen ble skadet, og pasienten roet seg gradvis ned og ingen lignende utagering hadde skjedd resten av vakten. I dag sitter pasienten for seg selv i fellesstuen etter frokost. Etter å ha sittet alene en stund begynner pasienten å bli urolig og begynner å slå i stolen. Pasienten fortsetter å slå i stolen og begynner å rope høyt. En ansatt som befinner seg i fellesstuen går bort til pasienten for å prøve å roe hen ned og for å deeskalere situasjonen. Dette blir gjort ved at den ansatte ber pasienten om å slutte å rope og slå og at oppførselen til pasienten oppleves som ubehagelig for de andre pasientene. Videre spør den ansatte om hvorfor pasienten roper. "	"En pasient sitter for seg selv i fellesstuen på døgnpost og er innlagt på tvunget psykisk helsevern. Pasienten har en kjent voldshistorikk og er blitt vurdert til å ha en moderat voldsrisiko. På gårsdagens vakt hadde pasienten en utagerende episode. En ansatt hadde satt seg ned og tatt kontakt med pasienten for å prøve å roe ned situasjonen, men pasienten hadde da slått hardt mot den ansatte. De andre ansatte på avdelingen klarte å skille den ansatte og pasienten fra hverandre før noen ble skadet, og pasienten roet seg gradvis ned og ingen lignende utagering hadde skjedd resten av vakten. I dag, etter å ha sittet en stund i fellesstuen starter pasienten å rope høyt, banne og slå i bordet. Den ansatte på jobb prøver å deeskalere situasjonen ved å sette seg ved bordet for å roe pasienten ned. Dette gjør den ansatte ved å spørre hvorfor pasienten roper, forklarer at de andre på avdelingen blir ukomfortable og ber pasienten om å slutte å rope og slå."
SCENARIO AV DEN RESILIENTE NESTE-HENDELSEN	"En pasient er innlagt på tvunget psykisk helsevern på en døgnpost. Pasienten har fra tidligere en kjent historie med voldshendelser. Hen ble voldsrisikovurdert ved innleggelse og denne er satt til moderat. I løpet av gårsdagens dagvakt hadde pasienten hatt en utagerende episode. En ansatt på avdelingen hadde satt seg ned i et forsøk på å få tatt kontakt med pasienten og prøvd å roe ned situasjonen. Den ansatte fikk gradvis roet pasienten og pasienten hadde ingen videre utagering resten av dagen. ' I dag sitter pasienten for seg selv i fellesstuen etter frokost. Etter å ha sittet alene en stund begynner pasienten å bli urolig og begynner å slå i stolen. Pasienten fortsetter å slå i stolen og begynner å rope høyt. En ansatt som befinner seg i fellesstuen går bort til pasienten for å prøve å roe hen ned og for å deeskalere situasjonen. Dette blir gjort ved at den ansatte ber pasienten om å slutte å rope og slå og at oppførselen til pasienten oppleves som ubehagelig for de andre pasientene. Videre spør den ansatte om hvorfor pasienten roper. "	"En pasient sitter for seg selv i fellesstuen på døgnpost og er innlagt på tvunget psykisk helsevern. Pasienten har en kjent voldshistorikk og er blitt vurdert til å ha en moderat voldsrisiko. I løpet av gårsdagens dagvakt hadde pasienten hatt en utagerende episode. En ansatt på avdelingen hadde satt seg ned i et forsøk på å få tatt kontakt med pasienten og prøvd å roe ned situasjonen. Den ansatte fikk gradvis roet pasienten og pasienten hadde ingen videre utagering resten av dagen. I dag, etter å ha sittet en stund i fellesstuen starter pasienten å rope høyt, banne og slå i bordet. Den ansatte på jobb prøver å deeskalere situasjonen ved å sette seg ved bordet for å roe pasienten ned. Dette gjør den ansatte ved å spørre hvorfor pasienten roper, forklarer at de andre på avdelingen blir ukomfortable og ber pasienten om å slutte å rope og slå."
KONTROLL SCENARIO	"En pasient sitter for seg selv i fellesstuen på døgnpost og er innlagt på tvunget psykisk helsevern. Pasienten har en kjent voldshistorikk og er blitt vurdert til å ha en moderat voldsrisiko. I dag har pasienten vært rolig, og det har ikke vært noe å bemerke ved hens oppførsel i løpet av vakten. Etter å ha sittet en stund i fellesstuen starter pasienten å rope høyt, banne og slå i bordet. Den ansatte på jobb prøver å deeskalere situasjonen ved å sette seg ved bordet for å roe pasienten ned. Dette gjør den ansatte ved å spørre hvorfor pasienten roper, forklarer at de andre på avdelingen blir ukomfortable og ber pasienten om å slutte å rope og slå. "	"En pasient er innlagt på tvunget psykisk helsevern på en døgnpost. Pasienten har fra tidligere en kjent historie med voldshendelser. Hen ble voldsrisikovurdert ved innleggelse og denne er satt til moderat. I dag har pasienten vært rolig, og det har ikke vært noe å bemerke ved hens oppførsel i løpet av vakten. Pasienten sitter for seg selv i fellesstuen etter lunsj. Etter å ha sittet alene en stund begynner pasienten å bli urolig og begynner å slå i stolen. Pasienten fortsetter å slå i stolen og begynner å rope høyt. En ansatt som befinner seg i fellesstuen går bort til pasienten for å prøve å roe hen ned og for å deeskalere situasjonen. Dette blir gjort ved at den ansatte ber pasienten om å slutte å rope og slå, og at oppførselen til pasienten oppleves som ubehagelig for de andre pasientene. Videre spør den ansatte om hvorfor pasienten roper. ."

Appendix 6 | English version of the scenario descriptions

	SET 1 SCENARIOS	SET 2 SCENARIOS
THE VULNERABLE NEAR-MISS SCENARIO	"A patient is admitted under compulsory psychiatric care at a day unit. The patient has a previously known history with incidents of violence. They were risk assessed at admittance and this was put as moderate. On yesterday's shift there was an episode were the patient acted out. An employee sat down and reached out to the patient to try to calm down the situation, but the patient had then struck hard towards the employee. The other employees in the ward managed to separate the employee and patient before anyone got hurt, and the patient gradually calmed down and no similar incidents of acting out occurred for the rest of the shift. Today the patient is sitting by themselves in the common room after breakfast. After sitting by themselves for some time, the patient starts to become restless and starts hitting the chair. The patient continues to hit the chair and begins to yell loudly. An employee that is in the common room walks towards the patient to try to calm them down and deescalate the situation. The employee does this by asking the patient to stop yelling and hitting, and that the behavior of the patient is experienced as unpleasant by the other patients. Further, the employee asks the patient why they are yelling."	"A patient is sitting by themselves in the common room at a day unit and is admitted under compulsory psychiatric care. The patient has a known history of violence and is assessed to have a moderate risk of violence. On yesterday's shift there was an episode were the patient acted out. An employee sat down and reached out to the patient to try to calm down the situation, but the patient had then struck hard towards the employee. The other employees in the ward managed to separate the employee and patient before anyone got hurt, and the patient gradually calmed down and no similar incidents of acting out occurred for the rest of the shift. Today, after sitting in the common room for a while the patient starts to yell loudly, curse and hit the table. The employee at work tries to deescalate the situation by sitting down by the table to calm down the patient. This is done by the employee by asking why the patient is screaming, explaining that the others in the ward are becoming uncomfortable and asks the patient to stop screaming and hitting."
THE RESILIENT NEAR-MISS SCENARIO	"A patient is admitted under compulsory psychiatric care at a day unit. The patient has a previously known history with incidents of violence. They were risk assessed at admittance and this was put as moderate. During yesterday's dayshift there was an episode were the patient acted out. An employee on the ward had sat down in an attempt to contact the patient and tried calming down the situation. The employee managed to gradually calm the patient down and the patient had no further incidents of acting out for the rest of the day. Today the patient is sitting by themselves in the common room after breakfast. After sitting by themselves for some time, the patient starts to become restless and starts hitting the chair. The patient continues to hit the chair and begins to yell loudly. An employee that is in the common room walks towards the patient to try to calm them down and deescalate the situation. The employee does this by asking the patient to stop yelling and hitting, and that the behavior of the patient is experienced as unpleasant by the other patients. Further, the employee asks the patient why they are yelling."	"A patient is sitting by themselves in the common room at a day unit and is admitted under compulsory psychiatric care. The patient has a known history of violence and is assessed to have a moderate risk of violence. During yesterday's dayshift there was an episode were the patient acted out. An employee on the ward had sat down in an attempt to contact the patient and tried calming down the situation. The employee managed to gradually calm the patient down and the patient had no further incidents of acting out for the rest of the day. Today, after sitting in the common room for a while the patient starts to yell loudly, curse and hit the table. The employee at work tries to deescalate the situation by sitting down by the table to calm down the patient. This is done by the employee by asking why the patient is screaming, explaining that the others in the ward are becoming uncomfortable and asks the patient to stop screaming and hitting."
THE CONTROL SCENARIO	"A patient is sitting by themselves in the common room at a day unit and is admitted under compulsory psychiatric care. The patient has a known history of violence and is assessed to have a moderate risk of violence. Today the patient has been calm, and there has not been anything to note about their behavior throughout the shift. After sitting in the common room for a while the patient starts to yell loudly, curse and hit the table. The employee at work tries to deescalate the situation by sitting down by the table to calm down the patient. This is done by the employee by asking why the patient is screaming, explaining that the others in the ward are becoming uncomfortable and asks the patient to stop screaming and hitting."	"A patient is admitted under compulsory psychiatric care at a day unit. The patient has a previously known history with incidents of violence. They were risk assessed at admittance and this was put as moderate. Today the patient has been calm, and there has not been anything to note about their behavior throughout the shift. The patient is sitting by themselves in the common room after lunch. After sitting by themselves for some time, the patient starts to become restless and starts hitting the chair. The patient continues to hit the chair and begins to yell loudly. An employee that is in the common room walks towards the patient to try to calm them down and deescalate the situation. The employee does this by asking the patient to stop yelling and hitting, and that the behavior of the patient is experienced as unpleasant by the other patients. Further, the employee asks the patient why they are yelling."