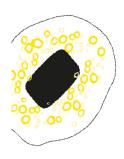
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Police Use of Force

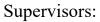
A Comparative Study about Use of Force Training in the Dutch and German Police

by

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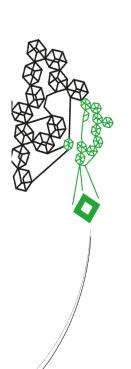


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Abstract

This thesis researched the topic of Police Use of Force (PUOF) Training in the Netherlands and Lower Saxony, Germany, based on the idea that academy training impacts the understanding of responsible use of force. In recent years, the media heavily portrayed excessive use of force by the police, and researchers investigated possible causes like personal characteristics or a stressful working environment. In Europe, the idea that police training impacts disproportionate police force has appeared in the scientific realm. In a small-scale case study, personal experiences of police students and trainers from the Netherlands and Lower Saxony with the skills taught during the use of force training were researched. Interviews were conducted to answer the following research question: "How do Dutch and German police students and trainers experience the Police Use of Force Training in terms of educational programs, skills, and responsible use of force?".

A theoretical framework was created to highlight aspects of PUOF Training possibly linked to responsible use of force. Legal theoretical concepts, the design of educational programs, teaching methods, and non-physical skills necessary for police work were taken from existing literature to analyze the interviews and official course manuals for police programs at police academies. After comparing the findings from the study materials and interviews from each country, it can be said that there are few differences in the design and methods of academy training. There is also an overlap in theoretical background and non-physical skills taught to police students. This small-scale case study showed that, in the Netherlands and Germany, a connection between legal regulations, educational design and methods, and a combination of physical and non-physical skills training could be made to the perception of responsible use of force. For future research, more data should be collected to investigate the generalizability of these findings for police training in Germany and the Netherlands.

General Remark

The term Police Use of Force will either be abbreviated to PUOF or written in capital letters to emphasize the importance of this phrase for this thesis. If the term use of force is utilized without the word police prior to it, capitalization will not be used as it does not exclusively refer to physical actions taken by the police.

Further, different terms will be used to describe the physical misuse of police powers. Responsible use of force describes approaches by the police that follow guidelines to ensure certain levels of responsibility adequacy when using physical measures or aids to coercive force. The terms not responsible use of force, excessive force, or disproportionate force will be used interchangeably to describe police actions that do not follow restrictions and guidelines on how to use physical measures responsibly

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Thanks to my parents and siblings for encouraging me to pursue my goals. Thanks to Clara for being my best friend and greatest supporter. Thanks to Jule for being an essential part of my student life and a helping hand even from afar. Thanks to my boyfriend, who supported and encouraged me while writing this thesis.

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1. Introduction

In recent years, allegations of police violence have become a topic heavily portrayed in the media and scrutinized by society. For example, the death of George Floyd in May of 2020 caused an extreme outcry about the police's misuse of force that was not limited to the United States. Currently, in the Netherlands and Germany, police tactics are also criticized.

During an incident in Germany, a seasoned officer kneeled on the neck of a visibly distressed teenager lying on the ground while explaining his approach to a police student (Gensing, 2020). This led to questions about whether the police's use of force training might be overly focused on forceful measures when they are dispensable.

In the Netherlands, human rights groups have criticized the rules for Police Use of Force (PUOF) as being "too broad" without adequate limitations for when and how to use force or defense weapons (Amnesty, 2021). Official reports by the Dutch police further noted increasing incidents of use of force in 2021 (NU, 2022).

However, especially during Covid-19, violent attacks on police officers have become more frequent. Demonstrations about new corona measures regularly turn into riots, often with the police as target of the rioters' anger (NOS, 2021; Zeit Online, 2021). In situations like these, the police have the duty to protect society and the right to defend themselves. Therefore, they are trained to use physical measures with discretion. Understanding how the training is designed and which skills are taught can be crucial to comprehending how and why specific actions are chosen.

The influence of police training on the use of force in the field has only recently appeared in the focus of German researchers and is addressed in a handbook with practical advice for PUOF Training (Staller & Koerner, 2022a). Staller and Koerner have conducted a small case study about the use of force training at a police academy in Hesse (Staller et al., 2021). Other papers focus on the delivery of use of force training, less on the skills that are taught (Koerner & Staller, 2020; Staller & Koerner, 2021b).

Dutch researchers Adang and Timmer released a book about the training of use of force, with advice for trainers on how to teach students (Adang & Timmer, 2005). Afterward, Adang released a journal article listing essential skills police officers must possess for responsible use of force based on Dutch research in 2006 (Adang, 2012; Adang et al., 2006). This article has been used internationally for police research (Rajakaruna et al., 2017).

A country where PUOF and its training were studied to a greater extent is the United States. Findings show that training programs often are relatively short, not offering enough time to train basic physical policing skills, such as the use of firearms and arrest techniques. Also, the necessary social skills and theoretical knowledge needed for police work are not sufficiently included (O'Neill et al., 2019). As a result, American policing students often cannot transfer knowledge and skills from practice to actual

police operations (Shane, 2018). However, American researchers, in general, have focused more on personal or environmental characteristics that can cause excessive use of force (Macdonald et al., 2003). Even though more research has been conducted about police training and PUOF in the United States, comparing the findings to European countries is challenging. Countries like Germany and the Netherlands have different educational programs, with more intense education over a longer time. Hence, comparing them to American findings can create issues with inaccurate generalizations. Further, the political and legal landscape surrounding the police in Europe and the United States differs immensely. Therefore, this thesis focuses primarily on Germany and the Netherlands, neighboring countries with similar law and policing structures. Both countries are members of the European Union (EU), which makes it further interesting to research their police education as EU countries often collaborate to support each other.

Research about police training in Europe based on the skills being taught in the academies is still at an early stage. As a result, cross-border comparisons have not been conducted to identify how the use of force is impacted by police educational programs and policing skills, especially non-physical ones. It is undeniable that the police must be allowed to defend themselves and use force, if necessary, to preserve social order and the rule of law. Therefore, they have to have certain powers that are not granted to civilians. When using force as part of these powers, regulations must be respected, and coercive measures must be adequately trained and understood. In the police academy, recruits have their first contact with use of force and learn about responsibilities connected to it. What students learn and how it is taught will likely impact how they conduct police approaches throughout their careers. Investigating this training can potentially fill research gaps in Europe about the influence of use of force training on responsible use of force. Additionally, by gaining insight into the training, the skills taught to the students, and whether the students perceive the training as adequate preparation for their future work, researchers can make possible connections between police training and incidents of excessive use of force by the police. These discoveries can lead to improvements in police training, preparing recruits for responsible use of force, and preventing disproportional police violence as early as in the academy training.

The thesis topic is Police Use of Force Training and responsible use of force in Dutch and German police academies to understand how the police teach and practice the responsible use of force. The following research question is posed: "How do Dutch and German police students and trainers experience the Police Use of Force Training in terms of educational programs, skills, and responsible use of force?".

A set of sub-questions is investigated to gain a deeper insight into the topic.

First: "How do the police educational programs differ or coincide in the Netherlands and Germany considering the design and contents?". Second: "Which skills are taught in the use of force training in

Dutch and German police academies?". Third: "What does responsible use of force mean to Dutch and German police students and trainers?".

To answer the research questions, a small-scale, comparative study is conducted, interviewing Dutch and German police students, trainers, and officers. The interviews are used to gain personal insights into the use of force training and to identify potential differences and similarities between the two countries.

In *Chapter 2*, the conceptualization for this thesis is introduced, discussing aspects of policing and PUOF Training like design, methods, and skills taken from existing research. A framework is developed rooted in the theory that guides the subsequent analyses.

Chapter 3 lays out the methodology of the thesis and the research design used to answer the question describing data collection, operationalization, and analysis.

In *Chapter 4*, the first sub-question is answered by looking at the design and contents of PUOF Training in Dutch and German academies using educational manuals.

Sub-question two is addressed in *Chapter 5* using interview findings from Dutch and German participants regarding the skills taught during the academy training.

The interview participants' understanding of responsible use of force, hence sub-question three, is analyzed in *Chapter 6*.

The chapters discussing the sub-questions first address each country individually. They are then completed with a comparison of the Dutch and German findings.

To answer the main research question, the conclusion in *Chapter 7* provides a recap of the thesis, talks about the findings and their significance, address limitations surrounding the thesis, and present an outlook on possible future research and advice for practitioners.

This thesis researches Police Use of Force Training and aims to provide insight into police education and perception of responsible use of force in two neighboring countries to foster understanding across borders and cooperation between EU countries.

2. Conceptualization

This chapter provides the definitions and concepts used in this thesis. A general description of police and Police Use of Force Training is given. Aspects of PUOF Training are introduced, and a theoretical framework is developed based on these concepts. The elements described in this chapter are used to analyze the findings.

2.1 Police and Police Use of Force Training

According to Brodeur (2010), the police is a complex entity. It encompasses different agencies with various tasks and designs in multiple sectors (public, private, hybrid). Providing a coherent definition is a challenging undertaking. Therefore, in this thesis, "police" refers to a state organization with executive

force. The focus is on patrol officers and other uniformed units that directly interact with citizens in the field. A definition by Egon Bittner is applied to characterize the police. Bittner (1975) explains that the police have the legal right to use force to contain or attain public order. This is called the "Police Monopoly of Violence". Thus, the police as an executive force have privileges civilians do not have. If citizens use coercive measures to attain a state of control, it is illegal and can be punished. The Police Monopoly of Violence allows the police, in certain situations, to use force against citizens without punishment. This power has to stay within the defined legal limits. It should be proportional to the corrected offense, and the least violent intervention should be chosen (Bittner, 1975). However, these limits are blurry, and discerning appropriate from excessive force is problematic as use of force is context-dependent. This means that using force against citizens does not follow strict step-by-step rules. The method and amount of force applied have to be decided and adjusted individually. However, the police-citizens relationship is built on mutual trust and a societal contract (Schaap, 2018). Citizens cannot take the law into their own hands but trust the police to protect them and their property and answer their needs. The police need certain legal freedoms to do so. Yet, the police are held to a standard that dictates that in every case, the use of force "[...] must be restricted to an unavoidable minimum" (Bittner, 1975, p.106). Even though police officers have permission to use force, it is also vital to voluntarily refrain from using it when force is not necessary to control a situation. Generally, officers are held to using discretion and professional judgment to identify the most appropriate, least invasive approach during a police operation.

Police Use of Force Training is crucial as it prepares recruits for their duty to protect citizens and the rule of law (Bittner, 1975). Therefore, officers must know how to use force adequately for a different scenario and with minimal physical measures.

According to Adang et al. (2006), responsible use of force by the police is defined as causing as little harm as possible to suspects, bystanders, and officers. The police also have to prevent escalations. Additionally, the principles of proportionality, subsidiarity, and legitimacy are crucial guidelines for the police to determine appropriate approaches and measures (Adang et al., 2006).

The proportionality and subsidiarity principles derive from juridical concepts. However, they can also be applied in many decision-making situations, like police work. A decision is proportionate if the action taken is appropriate to achieve an intended goal, it is necessary to take the step because other, lesser actions will not produce the intended outcome, and the action taken is assumed to be reasonable (Cărăuşan, 2009). The principle of subsidiarity in legal terms means that the lowest level has decision-making powers for effectiveness and efficiency reasons. In policing, it refers to the proportionality principle of necessity and implies that the police should apply the least harmful means (Adang et al., 2006). Lastly, an approach is legitimate if it is "conforming to recognized principles or accepted rules and standards" (Merriam Webster Dictionary, 2022). In the case of police approaches, it means that those who are subject to the intervention must find it acceptable

How these principles and other legal regulations show in Dutch and German law is stated in detail in Appendix I.

Besides knowing the guiding principles of proportionality, subsidiarity, and legitimacy, students are confronted with aspects of the training that will impact and shape their understanding of responsible use of force, their approaches and techniques. These elements are discussed in the following three chapters.

2.1.1 The Design

The design of the police training and education is the first element impacting the perception of responsible use of force.

The length can differ depending on the type of educational program the students follow. For example, Germany and the Netherlands offer dual bachelor programs, combining academic learning with internships (Politicacademie, 2022c; Polizeiakademie Niedersachsen, 2022). The Netherlands has an additional vocational program that is more practically oriented (Politicacademie, 2022a). Countries like the U.S. offer shorter courses with less practice time, often only taking place over a few weeks, and compact theoretical teaching (O'Neill et al., 2019). These differences in length come with differing contents and foci. Whereas some programs focus on basic skills like in the U.S., other programs, like the Dutch vocational program, also include theoretical aspects into the basic skills. In bachelor's programs, an academic component is added. More extensive programs allow students to gain more experience and skills, furthering their understanding of police approaches and responsibility.

Furthermore, PUOF Training has to be applicable in daily police work. Hence, it is fundamental that theory and practice are linked, and students can follow specific protocols in dangerous situations. Young officers will struggle to adequately assess scenarios if the theory or physical practices do not reflect the skills needed for actual police operations. As a result, they might choose inadequate measures. This hinders their more experienced colleagues and decreases the unit's effectiveness (van der Torre et al., 2011).

Therefore, Police Use of Force Training must be designed to teach students an extensive skill set. The design must include firearms practice, self-defense, and other physical skills (Adang, 2012). Yet, following the principle of minimal force, other non-physical skills for understanding, controlling, and descalating potentially dangerous situations are equally important (Vodde, 2012). Additionally, law and psychology courses and social skill theories can contribute to a more responsible use of force by police officers as they provide background knowledge about human behavior and its consequences (Rajakaruna et al., 2017).

The design is a crucial aspect of the Police Use of Force Training. The length and focus of an educational program decide over teaching contents and allow students to gain various skills, from physical to non-

physical and theoretical, to introduce students to options they can use when deciding on the most responsible approach in dangerous situations.

Next to the design, the methods used to convey specific skills to students are also important. Those are discussed in the next chapter.

2.1.2 The Methods

The methods of use of force training focus on teachers and coaches and how they convey educational components to students.

As trainers are an essential part of the students' professional development, they must constantly update their knowledge to provide the most effective training to students (Kleygrewe et al., 2022; Staller & Koerner, 2021b). Additionally, trainers' expertise can vary depending on the subjects they teach. For example, some trainers only teach specific, theoretical classes, while others teach physical skills and include non-physical police approaches in their training (Kleygrewe et al., 2022). Based on the trainers' expertise, the methods they use to teach students also impact how they perceive and handle use of force.

A variety of methods can be used in PUOF Training. They include frontal teaching, mixed methods combining theory and practical tasks, or group role-plays to practice skills in more realistic scenarios. Combining methods means helping students to connect theoretical background knowledge with different physical approaches. Students need to incorporate theory into practice for responsible use of force. The theory includes the three aforementioned principles and theoretical aspects of using various coercive means or safety procedures. Theory teaches students about the possible consequences of specific physical techniques, and they learn alternative approaches and preventative measures (Staller & Koerner, 2021a). Scenario training allows students to practice their physical and non-physical skills as they are also combined in actual police operations.

Another vital training method is feedback. Trainers can use evaluation and constructive criticism, so students build confidence in their skills and strengthen their knowledge by reflecting on their capabilities (Rajakaruna et al., 2017). Feedback is also crucial for the development and improvement of the recruits. If students are first allowed to try different approaches and then receive feedback on what they have done well or can improve, they learn from mistakes and train self-reflection necessary to adjust strategies while in action (Kleygrewe et al., 2022).

The knowledge of trainers and how they teach students have an impact on students' perception of responsible use of force. If training methods combine physical and non-physical skills and background knowledge, students not only know the consequences of their actions but also practice alternative approaches to different scenarios, which they can improve through feedback and self-reflection.

The next chapter introduces the aforementioned skills in detail and explains their significance for use of force training and responsible use of force.

2.1.3 The Skills

As mentioned previously, physical, non-physical, and theoretical skills are part of use of force training. Physical skills like self-defense, arrest techniques, or firearms use are essential basic policing skills, and they are taught in every police program. Non-physical skills are the less direct part of use of force. However, officers' behavior, communication, and decision-making abilities can influence the interactions between citizens and police and the responsible use of force (Adang et al., 2006). Therefore, the following focuses on non-physical skills to highlight their significance for responsible use of force.

Adang (2012) has stated crucial non-physical skills police officers should master for responsible use of force in the field. Based on the findings of Adang, Rajakaruna et al. (2017) adapted these skill categories. The research by Adang and Rajakaruna et al. is mainly used to illustrate the non-physical skills that should be taught to students.

Communication is the most crucial non-physical police measure (Rajakaruna et al., 2017). It can be used in different ways to help police officers during operations, which trainers should teach during academy training.

Communicating with the dispatch and fellow officers before and during an operation is necessary to gather as much information as possible, especially in high-stress, high-pressure situations (Rajakaruna et al., 2017). Also, communicating correctly with citizens and suspects can influence a situation. Therefore, police students must learn to use verbal and non-verbal communication cues (Adang, 2012). The tone of voice and word choice can affect police-citizen interactions. Posture, gestures, and facial expressions can cause positive or negative reactions in officers and citizens. Making conscious use of communication skills can create trust in the officer (Zaiser et al., 2022). Officers must be aware that the conversation partner's cultural background impacts how they perceive gestures and expressions (Adang et al., 2006). Hence, being aware of the power of one's verbal and non-verbal communication is a crucial skill for police students.

Awareness of emotions is a powerful non-physical tool for use of force. Research has shown that complex or stressful situations can lead to disproportionate use of force by the police (Heil & Bechold, 2022). If officers are aware of their own and citizens' emotions and the stress connected to an operation, they can redirect situations away from escalating (Rajakaruna et al., 2017). This is part of police-citizen trust-building. For example, preconceived opinions of an officer toward a suspect based on stereotypes or previous bad experiences might cause faster, more aggressive reactions. This also counts for the citizen's behavior toward the police (Adang et al., 2006).

Furthermore, officers need to be able to use situational awareness (Heil & Bechold, 2022). They must filter crucial information in a situation to determine escalation factors and possible aggressors and weapons (Rajakaruna et al., 2017). Therefore, situational and emotional awareness are essential skills students obtain during the training. They help identify risk factors, allowing officers to think about alternative approaches or de-escalating techniques.

During the use of force training, decision-making skills need to be built. Police officers have to make split-second decisions about which approach to take. Thus, they have to be able to follow pre-set protocols that determine which measures should be used in a scenario (Adang et al., 2006). However, not being flexible during an operation can be disadvantageous and lead to disproportionate use of force. Hence, being responsive to what is needed in the situation can be more appropriate than a rigid approach that only follows predetermined protocols (Adang, 2012). Flexibility falls into a skill called "adaptive expertise" (Bohle Carbonell & van Merrienboer, 2019). This term describes that someone cannot only use knowledge in familiar situations but can transfer this knowledge to unknown scenarios to create new approaches while in action (Staller & Koerner, 2022b).

Students must practice the right balance between following strategies and using flexibility to prepare for actual police work. Through the training, students can learn a variety of approaches and will be able to decide whether to stick to protocols or to adjust an approach.

Another non-physical skill identified by Rajakaruna et al. (2017) is fostered through feedback. Appraisal is the ability to reflect on one's skills and shortcomings. As mentioned in *Chapter 2.1.2*, reflection helps students identify aspects they need to improve and approaches they have already mastered (Kleygrewe et al., 2022). Training appraisal or self-reflection in the academy does not only allow students to develop their skills. It also helps them in actual police operations to decide whether an approach needs to be adjusted or to reflect if a strategy might not follow the guidelines of responsible use of force.

The aforementioned skills are not only trained for de-escalation or prevention purposes. They can be used in different techniques to evaluate a police operation and decide whether an approach is appropriate or not.

In the Netherlands, a technique called "doel aanpakanalyse" (Eng "target approach analysis") is trained to evaluate situations and approaches. This can be used in any scenario to determine the right action, measures, and aids of force, for example, tasers, batons, firearms, or handcuffs. For this approach, Adang developed five questions every officer should ask themselves before taking action. What is the intended goal? What are the risks in the situation, and which approach should be considered? Am I allowed to do what I am planning to do? Do I have the skills and resources to do it? Which plan do my colleagues and I have? (Adang & Timmer, 2005).

This approach is an essential guideline for Dutch police students and officers. It combines background knowledge with non-physical skills to analyze whether a non-forceful approach can be taken or to evaluate the use of physical force.

In Germany, a military approach is used to analyze situations and decide on the correct approach. The OODA-loop (observe, orient, decide, act) should be followed to evaluate own emotions and the scenario to identify which actions should be taken (Enck, 2012). One starts with observing the situation and opponents. Then, one orients oneself in the environment and pays attention to how emotions can impact the scenario. After, one decides which actions to take, and lastly, one acts. This tactic can be used to reevaluate a situation as often as necessary to find the safest and most adequate approach (Enck, 2012). The OODA-loop and the doel aanpakanalyse are different techniques for students and officers to use non-physical skills during an operation to ensure responsible use of force through constant evaluation of scenarios and approaches.

To conclude, in the police academies, students train different non-physical skills in the use of force training to de-escalate scenarios or solve conflicts without having to use physical force. Each non-physical skill is essential for police work by itself. Yet, if students learn to combine them, they can make the most responsible decisions in stressful situations. The situational evaluation techniques incorporate various skills to choose an adequate police approach using communication, situational and emotional awareness, self-reflection, and fast decision-making. Hence, non-physical skills should be considered an essential part of police work and treated as such in training to support the understanding and use of responsible use of force.

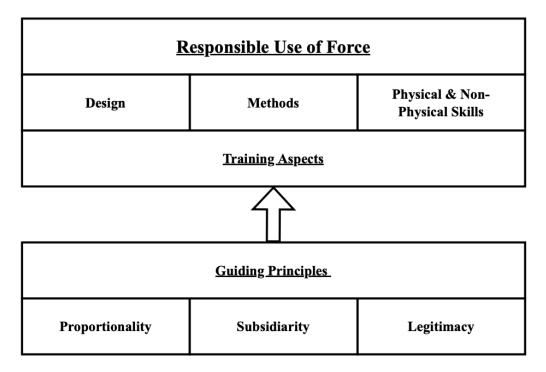
2.2 Theoretical Framework

The following visual creates a relationship between the previous Police Use of Force Training concepts. In addition, the figure highlights the importance of these elements for the responsible use of force.

Figure 1 guides the analysis of the Police Use of Force Training. The framework indicates different building blocks of police education that lead to the final results, responsible use of force by the police.

The ground stones to responsible use of force are the guiding principles: proportionality, subsidiarity, and legitimacy. Students must learn these principles as they must be able to apply them in their daily work. These aspects also guide the training since students practice using appropriate skills that follow proportionality, subsidiarity, and legitimacy. Emphasizing these principles in training creates internalized awareness and understanding in students of legal guidelines and, thus, affects the perception of responsible use of force throughout their career.

Figure 1. Theoretical Framework. Aspects of Police Use of Force Training that contribute to Responsible Use of Force.



As stated, the guiding principles impact the police training and education, the design, methods, and skills. In training, trainers have to make sure that these principles are taught and implemented in the practical scenarios. Every action of an officer should follow these guidelines and therefore they need to be included in the different aspects of training. However, the elements of academy training also have an individual impact on the recruits' perception of responsible use of force.

As aforementioned, the design of an educational program, its length, and contents impact the training's focus and intensity. A more extended program does allow students more time to learn skills and possibilities to practice a greater variety of them. In a shorter program, contents might be limited to the crucial basic knowledge. A program that prepares students for responsible use of force goes beyond the basic policing skills. It includes aspects of theoretical background, social sciences, and psychology, teaching students social skills which help process scenarios during daily police work. Further, the course contents should reflect real-life police work to provide a realistic setting and prepare students for the work practice.

The design of the training in terms of length, study contents, and realistic training can therefore impact the understating of responsible use of force as it impacts training opportunities and how intensive the skills are taught.

The teaching methods connect to the design. Not only is the program's design essential, but also how the trainers convey the contents. The trainers are integral to teaching students the responsible use of force. One aspect of the methods is combining theory and practical skills and incorporating the three fundamental principles. Providing opportunities for feedback allows students to learn from mistakes to improve personal skills. If trainers offer a variety of learning methods, recruits enhance their understanding of basic skills and can adapt their knowledge for the ultimate responsible use of force.

Lastly, the balanced combination of physical and non-physical skills affects the students' understanding of responsible use of force. Knowing how to use a firearm or arrest and self-defense techniques is crucial for the police. Yet, skills like de-escalation, communication, and awareness of emotions and environment can allow officers to handle a situation without using unnecessary force. In *Chapter 2.1.3*, skills are introduced that enable officers to analyze situations, filter the necessary information, determine why a person reacts in specific ways, and how to best react to the opponent. Being secure in the practical aspects of the use of force and understanding non-physical skills to control a situation can lead to fewer incidents of violence. Different techniques can connect the non-physical abilities to the physical ones and help officers determine the proper use of force approach.

Considering these building blocks, every aspect individually is crucial in educating students and preparing them for responsible police approaches. Yet, these blocks also connect, and treated as a whole they can lead to a use of force training that provides recruits with the necessary skills to use force responsibly. Conversely, disregarding one element can mean that significant parts of the training are left out, and specific skills are not conveyed to the students adequately and which can result in inappropriate use of force. Responsible use of force hinges on proportionality, subsidiary, and legitimacy, which are the guiding principles of theory every police officer should have internalized. The other elements are guided by the principles and interconnected. The program's design, length, and content are connected to the methods and physical and non-physical skills.

Mastering the physical and non-physical skills in every scenario is only possible if students are given the opportunities to practice and improve different competencies by being offered enough time to gain experience. They have to practice with realistic scenarios and methods that not only help recruits to reflect on their skills but also to connect every element and make use of them in an adaptable way which can ultimately foster responsible use of force.

3. Methodology

This chapter provides data collection, operationalization, and analysis methods to indicate how the material is used to answer the research questions.

3.1 Data Collection

This thesis describes a comparative case study that uses interviews and academic materials for a crossborder comparison to answer the research questions. For this case study, police training facilities in the Netherlands and Lower Saxony were chosen to be analyzed for their training surrounding Police Use of Force.

Germany and the Netherlands were chosen as the structure of policing, the police laws, and the training are comparable. In Appendix I, *Table 1* and the preceding text show that the legal background of the police overlaps in both countries. Both countries offer a dual bachelor's program for police education. Due to the nations' geographic proximity, the police forces frequently cooperate, especially in the border regions (Blok, 2004). Additionally, both countries are EU members, a union that focuses on international collaboration. Knowledge about the policing tactics of the cooperation partners is therefore needed to practice border-crossing police tasks most effectively and efficiently. Understanding how the PUOF Training differs in both countries can help identify strong points and limitations of the design, methods, or skills for each police force to improve their training. Identifying similarities, however, can facilitate collaboration on an EU level, not only for international police operations but also for potential border-crossing police education and training.

To ensure the reliability of the research, "multiple methodologies" were used (Natow, 2020, p.161). Interviews to gain insight into personal experiences were conducted in addition to analyzing educational materials and web sources from police academies in the Netherlands and Lower Saxony.

Here it has to be acknowledged that the truth value of the empirical sources differs. Interviews show personal views, which can be subjective, and the educational materials present official information from the police academies. However, the study manuals were used in parts to verify interview answers even though this thesis aims at investigating unique insights.

The data for this thesis was collected based on specific criteria. The Netherlands and Germany were chosen for the cross-border comparison due to the abovementioned factors. Readers should note that in Germany, every federal state is responsible for its police and the education of recruits. As it would have exceeded the scope of this thesis, the author chose the federal state of Lower Saxony as it is her home state, and she is familiar with its laws. Due to the German regulations, the federal state can make the same police-related laws and decisions that the Netherlands as a country can make. Hence, it is possible to compare the police education of a country with that of a German federal state.

For the interviews, the author reached out to police students and use of force trainers in the Netherlands. Two IBT trainers (Dutch: Integrale Beroepsvaardigheden Training; English: trainers specialized in use of force) from a facility in Limburg agreed to participate in the Interviews. Both coaches have experience training students and officers in physical skills and theoretical knowledge about PUOF for six (DT1) and nine years (DT2). Furthermore, two recently graduated police students participated in the interviews. Dutch Student 1 (DS1) graduated with a bachelor's degree from a HBO, and Dutch Student 2

finished the two-and-a-half-years MBO program "politicagent GGP". Additionally, a police officer, Dutch Expert 1 (DE1), was interviewed for insights into how trained skills reflect in daily work.

Finding participants on the German side appeared more difficult, as some German federal states have strict rules about police interviews. Nevertheless, two trainers and one student from Lower Saxony were willing to be interviewed. Fewer interviewees participated on the German side due to difficulties in finding police personnel that was willing to participate.

Both selected trainers are no longer active in the position. However, German Trainer 1 (GT1) had eleven years of experience as an academy trainer with additional experience training fully trained officers. German Trainer 2 (GT2) was a member of a special forces unit and taught PUOF and special scenario training at a police training facility to students and fully trained police personnel. German Student 1 was a third-year bachelor's student at the police academy in Lower Saxony.

The abbreviations used for all participants are listed in the following *Table 1*.

Table 1. Abbreviations of Interview Participants, Country, and Level of Education for Students or the Training Area of Trainers

Participant	Abbreviation	Country	Education or Training Area
Dutch Trainer	DT1	The Netherlands	Students and fully trained police
1			
Dutch Trainer	DT2	The Netherlands	Students and fully trained police
2			
Dutch Student	DS1	The Netherlands	HBO "Bachelor of Policing"
Dutch Student	DS2	The Netherlands	MBO "politieagent GGP"
Dutch Expert	DE1	The Netherlands	HBO "Bachelor of Policing"
German	GT1	Germany, Lower Saxony	Students and fully trained police
Trainer 1			
German	GT2	Germany, Lower Saxony	Students and fully trained police
Trainer 2			
German Stu-	GS1	Germany, Lower Saxony	Bachelor "Polizeivollzugsdienst"
dent 1			

Based on the educational programs of the interviewed police students, the educational materials were selected for the research. The 2022 study manuals for the HBO "Bachelor of policing", the MBO program "politieagent GGP", and the 2021 manual for the bachelor of "Polizeivollzugsdienst" were selected. The Dutch and Lower Saxony police and police academy websites were also searched for information regarding the educational programs. The names of the educational program were entered into a

search engine, and official academy and police websites were searched for information about the educational programs, duration, contents, and PUOF-specific aspects. A detailed list of the web sources with countries, names, and links can be found in *Table 2 of Appendix I*.

Here, it should also be mentioned that Lower Saxony only offers one educational program, whereas the Netherlands offers two studies. The author chose to analyze all three programs to look for differences and similarities and the potential added value of a shorter program like the MBO program "politieagent GGP".

For the interviews, the questions were based on the conceptualizations of *Chapter 2*. The open-ended questions allowed participants to answer freely and provide their personal experiences. The question-naires contained different questions based on the interviewee's position within the police. Police students received other questionnaires than the trainers and expert. However, the questionnaires were similar. Questions were scenario-based and focused on PUOF, its training, the skills trained and seen as necessary, and aspects around preventing excessive use of force. For the interviews with the German participants, the questionnaires were translated. Every participant was provided with the questions beforehand and given the possibility to ask questions and raise concerns. The questionnaires in both languages can be found in Appendix II, *Tables 2 through 6*.

The interviews were one-on-one, semi-structured interviews conducted in person or via a phone or video call. All interviews were recorded, transcribed, and fully anonymized to protect the identity of the participants. The transcripts can be found in Appendix III. The interviews with the German participants were conducted and transcribed in German. The coding was done in English to facilitate the analysis. Four out of the five interviews with the Dutch participants were conducted in English. Every participant could change to Dutch to clarify answers or when they had difficulties expressing themselves in English. For the interview with DT2, it was agreed upon that the author speaks German, and the participant speaks Dutch. The language choice did not pose any problems for the interview or coding process. As the interviews were semi-structured, follow-up questions not listed in the initial question catalog were asked.

The approval of the Ethics Committee of the University of Twente was requested for the interview-based research. It can be found under the number 220146. Ethical standards were kept during the conduction of the interviews and further research to ensure ethical validity. Interview participants gave verbal consent and were provided with a written consent form, listed in *Table 1* of Appendix II. The identities of the participants were anonymized for confidentiality reasons.

For this thesis, eight interviews with Dutch and German police students and trainers were conducted on the topic of Police Use of Force, the training and necessary skills, and the idea of responsible use of force. Besides the interviews, study materials and web sources were analyzed for the same topics to compare the interview findings with additional empirical information.

The collected data was operationalized and later analyzed to answer the research question, which is described in the following sections.

3.2 Data Operationalization

To be able to analyze the information taken from the educational materials and the interviews, the collected data was coded.

Different variables taken from the conceptualization chapter were operationalized for the codes, primarily focusing on the articles by Adang (2012) and Rajakaruna et al. (2017). A code catalog was developed based on the aspects discussed in *Chapter 2*. The main elements for the analysis in *Figure 1* were also used for the operationalization. A mixed approach of inductive and deceive coding was chosen as specific codes derived from the concepts of *Chapter 2*. Other codes were created during the coding process as some statements emerged as important but were not part of the initial conceptualization and code.

The code catalog stated the general topics that were assumed to be essential for the analysis. These topics were "responsible use of force", "non-physical skills", "general training (critique)", "important skills/features", "feedback", "inappropriate behavior", and "PUOF". Then, the topics were separated into sub-properties based on the conceptualization of *Chapter 2*. For example, the variable "responsible use of force" contained properties like "laws", "subsidiarity principle" or "proportionality principle". The properties of "responsible use of force" were taken from the Adang et al. (2006) definition and developed as responsible use of force is one of the main elements in this thesis. Educational materials and interviews were searched for keywords related to these elements.

The properties of "non-physical skills" were taken from *Chapter 2.1.3*, heavily relying on the explanation by Adang (2012) and Rajakaruna et al. (2017). As non-physical skills are researched as a vital aspect of PUOF Training in this thesis, it was included in the code. This category contained skills like "communication", "situational awareness", emotional awareness", "fast decision-making", and "self-reflection". Other properties were mixed answers with multiple skills. For example, in the property of communication, aspects that stated the police use words or non-verbal communication in specific ways to support their approaches. Situational awareness contained elements of observations of the environment, identifying risks by being attentive to people and objects around the officers. Emotional awareness included features of recognizing the emotional state of oneself or others.

Also, Police Use of Force is one fundamental research category and hence had to be transferred into a code. The general category was included in the original code catalog. However, the properties emerged during the interviews and listed different aspects the participants stated regarding use of force.

The category "inappropriate behavior" was developed to identify whether the participants were exposed to police misconduct or excessive use of force and how they would handle such occurrences.

"Feedback" was included in the code as it was considered one of the most essential methods used in police education. This category was used to identify the characteristics of the feedback culture in the police academies.

"Important skills/features" emerged as a category around the idea of gaining insight into which skills or elements of training are considered to be crucial in preventing excessive force, according to the participants. However, its sub-properties were taken from the interviewees' answers and only identified after creating the initial code.

After developing the codes, interviews, study manuals, and internet sources from the police academies were searched for keywords and descriptions that could be allocated to different categories or sub-properties. During this coding process, new categories were developed when statements or manual information could not be assigned to the existing code yet contained important information. For example, the sub-property "safety measures" was added to non-physical skills. This property included techniques of how officers keep themselves and their colleagues secure in possibly dangerous situations.

As general information or criticism about the training was provided by participants or found in other sources, the category "general training (critique)" was developed. There, opinions about the training, its contents, and shortcomings were listed.

Table 3 of Appendix I displays a detailed code catalog with every category and sub-property used in the coding process.

The following chapter explains how the operationalized data was used to facilitate the analyses. Additionally, it describes how the different sources were analyzed and how the analyses have been structured.

3.3 Data Analysis

As the interviews were conducted in English, Dutch and German, the transcripts were not translated into English for the analysis. They can be found in their original language in Appendix III.

Statements from the interviews have been assigned to the topic and property in the coding matrix. They were translated to English if interviews were conducted in German or Dutch. The line numbers from the transcripts were added, and an explanation of the statement or association with the topic was made.

After the data collection and operationalization, information from the educational materials and interviews were analyzed.

For sub-question one, only data from the academy manuals and police websites of the HBO, MBO, and Lower Saxony Bachelor programs were considered.

After gathering information by looking for relevant skills, theories, or additional classes in the study manuals, these findings were compared to the conceptualizations of *Chapter 2* for each program individually. First, it was described how the Dutch HBO and MBO programs were designed. Then, the two Dutch programs were analyzed for skills, methods, and theoretical police knowledge. After, differences and similarities between the two programs were examined. The exact process was repeated with the German educational program, which was finally compared to both Dutch programs to see overlaps and divergences in educational design, methods, theory classes, and skills. Differences and similarities were listed in a table.

A combination of interview answers and educational materials was used for sub-question two, investigating if the skills mentioned in the manuals overlap with the interviewees' responses. First, the answers of all five Dutch participants were analyzed for overlaps with other participants and the module manuals. Then the same was done for the responses of the three German interviewees. Lastly, a comparison of

As sub-question three focused on the perception of responsible use of force, only interview findings were used. Answers to specific questions from the questionnaires were first analyzed on the Dutch side and compared to each other. Afterward, the process was repeated with the interviewees' responses from Lower Saxony. Again, a comparison of the Dutch and German findings was made, and a summary was provided in a table.

It must be acknowledged that the research uses eight interviews conducted in two countries. Thus, generalizing the findings should be done carefully. However, personal experiences are used to examine each country's police training and PUOF. The aim of this research was not to generalize ideas but to consider Police Use of Force Training from different individual perspectives. These personal views were used to give light to phenomena around police training and responsible use of force. By finding commonalities and discrepancies in the training and the participants' opinions, an attempt was made to pave the way for future, large-scale research and comparisons to facilitate cooperative police work on a European level.

In this thesis, the findings of the interviews and educational programs were analyzed in the form of a cross-border comparison, answering each sub-question separately for both countries and providing comparisons of the results afterward. How this was done can be read in the following chapters.

4. Police Education

This chapter addresses sub-question one, "How do the police educational programs differ or coincide in the Netherlands and Germany considering the design and contents?". First, the educational programs for each country are described. Then, the content of the programs is analyzed in terms of the skills

mentioned in *Chapter 2.1.3*. Lastly, a comparison between the Netherlands and Germany is conducted to identify similarities and differences in police education. The comparison is supposed to provide basic knowledge to understand whether differences in the educational programs impact the training and understating of Police Use of Force.

4.1 Police Education – The Netherlands

Becoming a police officer in the Netherlands is possible via various educational ways, varying in length of the program and the focus of the education. The Dutch police offer two HBO programs and an MBO program. The MBO program is taught at seven different locations (Amsterdam, Rotterdam, Den Haag, Apeldoorn, Leusden, Eindhoven, Drachten) whereas the HBO programs only takes place at the academy in Apeldoorn (Kom bij de politie, 2022b). Every program combines education in the academy with work in the police units to varying degrees (Politieacademie, 2022d).

At the MBO-level, students can follow a two-year program. The "politic agent GGP" (English: police agent for community policing) has recently been improved in design and length of education. This educational program is practically oriented and focused on basic policing tasks. Students participate in classes at the academy and practice their knowledge by working in designated police units (Politicacademie, 2022a).

The HBO program is the "Bachelor of Policing" (Dutch: politiekundige bachelor) (Politieacademie, 2022c). In the four-year dual bachelor program, students learn basic policing skills and get insight into different specialized departments of the police. Recruits gain practical experience working in police units and finish their education by writing a bachelor's thesis (Politieacademie, 2022c).

This four-year program can be shortened to two-and-a-half years if recruits have already obtained an HBO or university degree. The students will acquire the same qualification in the regular program simply in a shorter period (Politicacademie, 2022c). Yet, there are fewer possibilities to gain practical experience, as the focus lies on learning basic policing knowledge and skills (Politicacademie, 2022b).

The HBO and MBO programs offer different working opportunities within the police. The MBO program's emphasis lies on the essential tasks of the police with a practically-oriented education. In contrast, the bachelor's program is academically-oriented and offers a broader insight into police departments. If the differences in focus and length also show in the educational content will be analyzed in the following.

4.1.1 Educational Content – The Netherlands

The 2022 study manuals of the two Dutch police educational programs and web sources are analyzed in the following.

Both manuals provide an overview of the course contents, police work, responsibilities, and detailed information about testing and organizational aspects of the programs. However, in-depth details on course contents are only provided to the students after enrolment and cannot be accessed by outsiders (Politieacademie, 2022f, 2022e).

The educational program "politicagent GGP" was revised in 2021. It is now six months shorter, and lecturers visit students at their units to allow students more practice and less travel time (Politicacademie, 2022f, p.2). The program educates students in the field of "basispoliticacy" (Eng. basic police care), meaning it does not fall into a specialized area of police work. Students are taught about surveil-lance, handling of daily incidents, law enforcement, provision of (emergency) assistance, investigative work, and advisory functions, as the basic team has the main tasks of maintaining the rule of law and providing service to citizens (Politicacademie, 2022f, p.5). Students learn about police privilege, responsibilities and limitations, and the role of the police in a democratic society (Politicacademie, 2022f, pp.5-6). The manual introduces the principles of proportionality and subsidiarity as crucial aspects of police work, as they determine when to use force or refrain from it (Politicacademie, 2022f, p.5).

In the MBO program, students are prepared to do the daily police work and receive education on various important topics that guide police work. The two-year program is designed to fit as many training and educational hours as possible to prepare recruits for the occupational tasks.

The MBO program allows students to gain practice experience during their education, and course contents are designed to reflect actual police work (Politieacademie, 2022f, p.12). Sixty percent of the program is used for training in the academy or lectures. Forty percent is spent in the units and on the street. Students are encouraged to try. Mistakes are considered a way to learn and improve skills (Politieacademie, 2022f, p.9). This indicates that the actual training is aimed at a realistic portrait of the police profession, and students develop their abilities through practical tasks.

During the training, recruits are introduced to physical skills they have to master. These include self-defense and making arrests, shooting of firearms and tasers, driving skills, and first aid. Besides this 2training, the physical fitness of students is tested, and they are equipped with practical and theoretical knowledge for responsible use of force (Politieacademie, 2022f, p.22). From the MBO manual, one can discern that the use of force training is not only practically oriented but also provides background knowledge to understand the physical aspects and approaches better.

Other theoretical and non-physical skills are part of the program to practice reflected police work. Students train their ability to make fast decisions and switch between different actions and strengths of interaction (Politicacademie, 2022f, p.5). Further, they are schooled in laws regulating police and citizens. Recruits learn to consider the context in every incident to choose their actions. This means deviating from protocols can happen, and students must devise their own solutions (Politicacademie, 2022f, p.6). The manual suggests that students learn decision-making skills essential for police work, as stated

in *Chapter 2.1.3*. Fast decision-making, situational awareness, and flexibility determine police approaches in actual operations and must be practiced in the academy.

Besides flexibility, future police officers train preventative and proactive approaches to stop potentially dangerous situations from escalating (Politieacademie, 2022f, p.7). Additionally, students work in groups to internalize teamwork abilities. The sharing of feedback is encouraged to allow students to improve and critically reflect on their own actions (Politieacademie, 2022f, p.9). The last aspect mentioned in the manual is training to act according to the situation and people one interacts with (Politieacademie, 2022f, p.12). In the MBO program, recruits practice police work in a training setting which is supposed to give them the possibility to gain experience as teams and identify situational or emotional pointers to stop an escalation before it can happen.

The manual indicates that a great focus is put on practical training where theoretical aspects are included but not as prevalent as the scenario training of physical and non-physical skills. This two-year program attempts to prepare students for the basic and necessary tasks of police patrol work.

The module manual for the "Bachelor of Policing" lists similar skills as the MBO manual. However, as this is an HBO program, students learn academic and social skills as part of their higher education and the aforementioned basic police care skills (Politicacademie, 2022e, pp.5-6). In addition, this program is designed to introduce students to different roles in the organization, including research, specialized departments, and management (Politicacademie, 2022e, p.5). Again, the education in the academy is combined with gaining practical expertise by working in police units (Politicacademie, 2022e, p.7). In the dual bachelor's program, students focus on developing their academic ability to fill specialized or leadership roles in the police. Therefore, background knowledge needed for police work is a significant element in the HBO program.

The academy wants to train recruits to be "authentic, responsible and reflective professional[s]" (Politieacademie, 2022e, p.15). Therefore, they practice physical exercise and skills like self-defense, shooting firearms, arrest techniques, and driving (Kom bij de politie, 2022a). Additionally, the practical and theoretical aspects of use of force are trained (Politieacademie, 2022e, p.28). Like in the MBO manual, the HBO manual suggests combining theoretical knowledge to guide physical skills. In *Chapter 2.1.3*, the ability to link theory and practice has been highlighted as an essential skill for the police, especial in potentially dangerous situations, and, hence, has to be practiced during academy training.

Students are trained to become efficient and effective, innovative, and able to solve complex issues (Politieacademie, 2022e, pp.5-6). Hence, a variety of non-physical skills is part of the bachelor's edu-

(Politieacademie, 2022e, pp.5-6). Hence, a variety of non-physical skills is part of the bachelor's education. Students are asked to follow rules and protocols where appropriate but apply their knowledge to unknown situations and adapt the protocols based on the case (Politieacademie, 2022e, pp.28-29). Flexibility and adaptability are essential policing skills as rigidity in tense situations can lead to escalations or excesses of violence.

Classes about national and international laws and laws regulating the police are included. The importance of the police for democracy and rule of law is discussed (Politieacademie, 2022e, pp.29-30). The meaning of the proportionality, subsidiarity, and legitimacy principles for the police is taught (Politieacademie, 2022e, p.31). Additionally, students can create safety advice based on social scientific knowledge (Politieacademie, 2022e, p.30). Students know how social or psychological issues can impact a person's behavior, especially toward the police (Infopolitie.nl, 2022). These elements are considered background knowledge for police work, especially the three principles are guidelines for officers in combination with other legal regulations. The theoretical aspects mentioned in the manual emphasize the academic character of the program as social scientific elements are used to explain behavioral phenomena and to develop advice on how to best approach different policing scenarios.

Furthermore, HBO students learn the systematic identification and solving of problems. They work with their colleagues and citizens to create viable solutions (Politieacademie, 2022e, pp.30-31). Other skills trained are situational awareness, in terms of risk factors but also cultural and social aspects, and emotional awareness regarding their own and citizens' emotions. Additionally, professional and adequate communication is trained so that future officers can react based on the situation and target group. Lastly, students learn to use and apply self-reflection to understand their strengths and weaknesses for personal improvement (Politieacademie, 2022e, p.31).

The manual suggests that the bachelor's students are trained in many police skills with a strong focus on non-physical, theoretical knowledge, and academic abilities. The higher-education character of the program is visible as social scientific elements are reoccurring in the study guide, and students are prepared to conduct their work independently and adapt their skill set to different police operations. Through this program, recruits learn essentials of basic police patrol work and are prepared for other tasks in the police organization through theory and specialized courses.

Generally, both manuals provide insight into the contents of both programs. However, a significant focus is on organizational aspects and testing of the students. One can see that the MBO program focuses more on practical learning, whereas the HBO program has an emphasis on academic work and theory. In both programs, fitness is trained, and students learn different physical skills necessary for police work and self-protection. Further, both manuals list theoretical knowledge about the rule of law and legal requirements in addition to non-physical, social skills necessary when interacting with citizens and maintaining social order. The study guides for both programs contain various non-physical skills mentioned in *Chapter 2.1.3*. It is visible that specific aspects of police work that go beyond basic and physical skills are included in the academy training. However, details are missing about how the theoretical skills are taught. The manuals merely provide a superficial insight and are not detailed. Little information is provided about the workload or intensity of classes, and no specific descriptions are given of how the physical and non-physical skills are trained. Nonetheless, reading through the HBO and MBO

guides, it is possible to identify that policing skills, physical and non-physical, and background knowledge necessary for police officers are part of the academy training. Even without accessing additional materials about the programs, elements stated in *Chapter 2* can be found in the manuals that provide valuable insights into police education in the Netherlands.

4.2 Police Education – Lower Saxony

As established in *Chapter 3.1* and further explained in Appendix I, the police, its structures, and organizations are regulated by each German federal state individually. This also includes educational programs. In Lower Saxony, the education to become a police officer entails a three-year bachelor's program, "Polizeivollzugsdienst". Lower Saxony does not offer a policing program at a lower education level (Polizei Niedersachsen, 2022b).

The B.A. program is offered in three academies across Lower Saxony, Hann. Münden, Oldenburg, and Nienburg. During the dual three-year program, recruits learn basic policing skills, obtain more profound insights into specialized police tasks and participate in internships in police precincts to train theoretical skills in practice (Polizei Niedersachsen, 2018). The program has an academic focus and will be finished off with writing a bachelor's thesis (Polizeiakademie Niedersachsen, 2022).

The bachelor's program offers students the possibility to learn fundamental police skills, practice them by gaining experience in daily police work, and advance their academic knowledge (Polizei Niedersachsen, 2022a).

In the following, the program's educational content is analyzed to identify how the contents might impact the Police Use of Force Training and understanding of responsible use of force.

4.2.1 Educational Content – Lower Saxony

The following information is obtained from the module manual for the bachelor's program "Polizeiv-ollzugsdienst" from 2021. The manual overviews subjects, course contents, and learning goals. Additionally, general information and expectations about the occupation of police officers are stated. A detailed description of the order, length, and contents of all 15 modules can also be found. Moreover, it indicates how many approximate hours students should spend studying in class or alone during each module (Polizeiakademie Niedersachsen, 2021).

The bachelor's program is a dual study with internships at police units to prepare students for police work. Internships are used to install reflective thinking and problem-solving abilities in the recruits in the context of daily police practice (Polizeiakademie Niedersachsen, 2021, p.5). Furthermore, the study manual introduces the responsibilities of a democratic, constitutional state to protect country, citizens, and the rule of law as essential knowledge for every police officer (Polizeiakademie Niedersachsen, 2021).

The police academy already attempts to prepare students for their tasks with the module manual. It lists background information that helps understand the responsibilities of the police in an organized and detailed manner.

An emphasis is put on citizen-oriented work, meaning students are taught adequate communication and interaction skills and competencies to understand and deal with dynamic and possibly conflictual interactions (Polizeiakademie Niedersachsen, 2021, p.10). Further, it is highlighted that the police have to act responsibly and obeyed by the law, which students are supposed to internalize during their education (Polizeiakademie Niedersachsen, 2021, pp.10-11). During each of the 15 modules, students participated in classes ranging from police history, law, and social sciences to psychology and ethics (Polizeiakademie Niedersachsen, 2021). These different classes indicate that the academy training also integrates topics that do not appear to relate to police subjects at first glance. Nonetheless, these courses train students to think outside of the policing box. From the beginning of their education, students strengthen their ability to look for clues in social interactions that can help in actual police operations and guide police approaches.

Recruits learn Police Monopoly of Violence and its origins (Polizeiakademie Niedersachsen, 2021, p.41). The rights of the police and their limitations to their work are discussed. This includes when police officers are allowed to use force or means of coercive force and what the possible consequences of excessive force are. The proportionality principle and adjacent ideas, like subsidiarity, are included in the content of the law classes (Polizeiakademie Niedersachsen, 2021, p.32).

In Lower Saxony, recruits learn the essential legal principles and the importance of the Monopoly of Violence for the police work. These theoretical elements are included in the academy training to provide students with an understanding of the role of the police in society and how different aspects of psychology and law should be used to influence their choice of approach during police operations.

Besides this vital background knowledge and theoretical concept of police work, students train the classical police tasks and skills, like investigation, record taking, self-defense, use of firearms, arrest techniques, and aids to coercive force. These physical skills are trained with the theoretical background for correctly using each measure as part of responsible use of force. Also included is the training to read a situation, identify risk factors, keep themselves and their colleagues safe, and prevent further escalation (Polizeiakademie Niedersachsen, 2021, pp.72-73).

Physical abilities are a large part of police work and must be trained and developed. However, understanding theoretical aspects and using situational awareness are just as relevant in dangerous situations. They are, therefore, an essential part of the academy training in Lower Saxony, as the manual indicates.

Further, the manual lists several personal, methodological, social, and professional competencies students obtain during their education. This list contains skills like fast decision-making, structured planning and organizing, problem and conflict solving, assertiveness, teamwork, flexibility, and innovative thinking. Additionally, verbal and non-verbal communication is mentioned in the manual flexibly and constructively and for de-escalation (Polizeiakademie Niedersachsen, 2021, p.38).

Students will learn the ability to work under stress and be resilient in emotionally and physically impactful operations (Polizeiakademie Niedersachsen, 2021, p.13).

In feedback sessions, students are also confronted with self-perception and asked to reflect on it to proactively develop their skills by recognizing personal strengths and shortcomings (Polizeiakademie Niedersachsen, 2021, p.17).

The police academy in Lower Saxony addresses a variety of the skills mentioned in *Chapter 2.1.3*. Recruits learn skills beyond physical techniques and have to engage with how their mind, self-awareness, and social skills can be used to control the police-citizen-contact. The academy prepares students for police operations offering the possibility to develop these competencies appealing to the academic design of the educational program.

Students learn different non-physical skills that are needed for police work. However, these skills have to be put in context to be understood and used correctly. Therefore, one goal of police education is to install the ability to connect theoretical knowledge to practice situations and adapt knowledge and skills from familiar to unfamiliar situations. For example, one course focuses on the topic of Police Use of Force and how the police are perceived by society (Polizeiakademie Niedersachsen, 2021, p.70). Students learn the basic knowledge about the police's image in society and how excessive use of force can impact it. This is combined with PUOF Training to highlight how forceful measures are used responsibly. The academy's manual strongly emphasizes this need to link theory and practice to educate responsible officers.

Students in Lower Saxony are mandated to follow a module about intercultural interactions, which also includes the topic of racial profiling (Polizeiakademie Niedersachsen, 2021, pp.88-91). As mentioned in *Chapter 2.1.3*, a person's cultural background can influence their behavior during police contact. Therefore, it is crucial to sensitize students to cultural differences and potential issues that can lead to altercations between citizens and police. Furthermore, students learn that the approach and communication style have to be adapted to their opponent to avoid escalations, which the police academy in Lower Saxony tries to convey to the recruits.

Additionally to cultural awareness, students are introduced to the concept of emotional awareness. In theoretical classes, they learn to be aware of a suspect's emotions and how to communicate and present themselves to de-escalate an interaction. Students are also taught to stay alert to their feelings and how physical and mental stress can impact their decision-making (Polizeiakademie Niedersachsen, 2021,

p.114). This is an essential aspect of training as it helps students understand adequate interaction techniques and appeals to the emotional component of every police-citizen interaction. For the police in Lower Saxony, it seems relevant to train officers to be compassionate and able to interact with citizens in different manners to meet them at their level and prevent possible escalations.

Generally, the module manual provides detailed information about the learning goals. Given the data from the manual, students learn various physical skills in the three years of the program. Theoretical knowledge and non-physical abilities are also part of the courses. Students learn to apply and improve their non-physical competencies during physical training sessions and internships. In the manual, it is visible that the academy in Lower Saxony integrates theoretical background into every module to foster an understanding in the students of why specific tactics are used and how they are applied correctly. This theoretical focus also points to the fact that the program is part of higher education, where academic learning is as important as physical training.

Nonetheless, the manual does not provide insight into the actual training and education and can only look at which contents are included and how they are combined.

Regardless, this bachelor's program's module manual is detailed and highlights many skills and other features discussed in *Chapter 2*. Considering the contents of the manual, the police academy in Lower Saxony attempts to educate police students to be well-equipped and fit to conduct police work, even in dangerous scenarios.

4.3 Police Education – Comparison

The first sub-question, "How do the police educational programs differ or coincide in the Netherlands and Germany considering the design and contents?" can be answered by looking back at the online sources and module manuals of the police academies.

The police in Lower Saxony and the Netherlands provide extensive online information about their educational programs. Interested persons and recruits get information about the length of the programs and how the studies are designed to combine theoretical and practical learning.

In Lower Saxony, the police only offer a bachelor's program. In contrast, a bachelor's and an MBO vocational program are provided in the Netherlands. Every study is structured with a mix of learning at the academy and gaining experience in assigned police units. Yet, it varies how much practical work students do during their studies. The MBO degree has the largest focus on practical experiences, preparing recruits in a shorter time to use basic policing skills and conduct police work. However, both bachelor's programs significantly emphasize academic work to equip students for jobs within the police beyond working as patrol officers.

All programs vary in length, which also impacts the amount of training and classes students have during their education. The bachelor's programs are three years in Germany and four years in the Netherlands.

The MBO course is two years long. Furthermore, the Netherlands also offers the possibility of shortening the bachelor's program to two-and-a-half years for recruits with a previous HBO or university degree. However, in this program, students have much less time to gain practical experiences as they focus on teaching basic skills.

One can say that the design of the bachelor's degrees in Germany and the Netherlands is not significantly different, whereas the MBO program differs in length and educational focus.

Looking at the publicly accessible course manual, the study guide from the police academy in Lower Saxony is more detailed than the manuals from the HBO and MPO programs. The manual from Lower Saxony states information about each module's teaching and learning contents and goals. Furthermore, the required hours for classes and self-learning are displayed. Additionally, the manual provides insight into what students can expect during their studies, what they will learn, and which aspects of policing have a great emphasis during their education. Every module and sub-module is listed in detail and general information about the program and the police profession.

The manuals of the Dutch programs are shorter in length and less detailed. No study goals are stated, but bullet points and brief descriptions of what students will learn during different quartiles are provided. The focus of both manuals appears to be on the organizational aspects of the studies. The explanations about the programs are rather general and seem like a way to inform potential recruits than already admitted students.

The manuals of the Dutch programs clearly state that further, in-depth information about the courses can only be accessed by students via the e-learning environment used by the academy. The reader should keep these differences in mind, as the varying levels of detail of the manuals impact the findings and comparison as more information is known about the contents of the police academy program in Lower Saxony.

A significant difference between the two Dutch programs was mentioned previously. The HBO program is a degree of higher education. Therefore, it has an extended focus on research and theoretical knowledge. The MBO program is practically oriented, schooling students in the necessary skills of basic police work in a shorter period. The program manual and web sources state that the MBO program allows for more practice experience, placing the students in their units and schooling them at their place of work. The "Bachelor of Policing" shows similarities with the German bachelor "Polizeiv-ollzugsdienst". Both combine the academic component of a university study with practice features in the form of internships at police units. Students in both countries are trained in basic police work and gain insight into specialized police units. The degrees are earned by writing a bachelor's thesis. Bachelor students spend less time in the units than the MBO students. However, in both countries, the bachelor's programs are dual studies with internships to gain work experience.

These differences in education again indicate that the bachelor's degrees of Lower Saxony and the Netherlands are more similar than the Dutch HBO and MBO programs.

Regarding skills, the manual from the police academy in Lower Saxony states a multitude of physical and non-physical skills that students obtain during the program. Furthermore, repetitions of skills or subjects are indicated to intensify the students' understanding and mastering of them. As stated in *Chapter 4.2.1*, Lower Saxony police students partake in entire modules schooling them in communication, self-defense, law, and psychology, to name a few. Generally, the study guide mentions several skills in detail and indicates which skills are trained and combined during each module. This gives a fairly deep insight into the academy training in Lower Saxony.

The Dutch HBO program also lists a variety of skills. However, the information is less detailed, and no specific classes or study goals are mentioned. Instead, the manual's focus lies in providing information about the program's organization and giving a general insight into course contents.

The MBO module manual also mentions skills that students train. Yet, similar to the HBO manual, the details about specific course information are not provided, and the mentioned skills only give a generic insight into the study program and contents.

Regardless of the differences observed in the manuals, there are similarities in the three programs concerning skills, design, and methods.

The manuals of the three programs emphasize the necessity of combining theory and practice. The academies educate students to be self-sufficient and independent professionals. Each study trains students in basic policing skills and physical abilities such as self-defense, firearms use, and arrest techniques. Other contents include legal regulations and proportionality, subsidiarity, and legitimacy, as they impact daily police work.

Even though the manual descriptions vary in detail, policing background knowledge and various skills mentioned in *Chapter 2.1.3* are part of all three programs to some extent.

Non-physical skills in every program manual include self-reflection, flexibility when using police approaches, fast decision-making, problem-solving, and proactivity. In *Table 2* below, a list of differences and similarities can be found.

Regarding the differences between Germany and the Netherlands, the different skills trained in the academy are noticeable.

The German module manual states additional classes such as history, psychology, and ethics, which cannot be found in the two Dutch manuals.

All three study guides mentioned situational awareness and awareness of the emotions of others. However, only the HBO manual and the one from Lower Saxony also note that the students train to be aware

of their own feelings and cultural aspects that can impact the police-citizen interaction. This is not included in the MBO manual.

According to the study guides, professional and adaptable communication is part of the training in every program. Yet only the German manual includes verbal and non-verbal communication in addition to communication for de-escalation.

The German students also train non-physical skills like assertiveness and organization, which have not been explicitly mentioned in the HBO and MBO manuals.

One remarkable difference is that both Dutch programs state that recruits are trained for advisory positions to create safer communities. This aspect cannot be found in the manual of the Lower Saxony academy.

To summarize, students in all three programs learn vital non-physical police skills listed in *Chapter 2.1.3*. Not every skill is mentioned in each manual. However, there are overlapping skills between all three programs, but also only between the two Dutch programs or the two bachelor's programs. This makes it challenging to fully identify if the academy program in Lower Saxony and the Dutch programs have significant differences.

In conclusion, there are similarities, especially between the design and course contents of the two bachelor's programs. However, the German manual has more detailed information, whereas the Dutch study guides lack in-depth information. Due to this shortage of detail, it can be possible that the Dutch police academy trains their HBO and MBO students in skills that the German students also learn. Additionally, readers should keep in mind that the information about the course contents is taken from the study guides only, and it cannot be confirmed with how much focus the skills are actually trained in the academy. Therefore, in the following chapter, the interviews with the Dutch and German students are analyzed to identify the study contents of the academy programs with a particular focus on Police Use of Force Training.

Table 2. Comparison Table: Educational Programs and Course Contents based on Module Manuals and Web Sources

Features	The Netherlands –	The Netherlands -	Lower Saxony
	MBO	НВО	
Length	2 years	4 years	3 years
Program focus	Practical	Academic	Academic
Degree	MBO	HBO bachelor	Bachelor
Practical Experience	Yes	Yes	Yes
Theoretical knowledge	Yes	Yes	Yes
Basic skills	Yes	Yes	Yes
Physical Skills	Yes	Yes	Yes

Specialized skillsNoYesYesAdvisory positionsYesYesNoProportionality, subsid- iarity, and legitimacy principlesYesYesMonopoly of ViolenceNoNoYesLaw classesYesYesYesPsychology classesNoNoYesHistory classesNoNoYes	Academic skills	No	Yes	Yes
Proportionality, subsid- iarity, and legitimacy principles Monopoly of Violence No No Yes Law classes Yes Yes Yes Psychology classes No No Yes	Specialized skills	No	Yes	Yes
iarity, and legitimacy principles Monopoly of Violence No No Yes Law classes Yes Yes Yes Psychology classes No No Yes	Advisory positions	Yes	Yes	No
principles Monopoly of Violence No No Yes Law classes Yes Yes Yes Psychology classes No No Yes	Proportionality, subsid-	Yes	Yes	Yes
Monopoly of Violence No No Yes Law classes Yes Yes Yes Psychology classes No No Yes	iarity, and legitimacy			
Law classes Yes Yes Yes Psychology classes No No Yes	principles			
Psychology classes No No Yes	Monopoly of Violence	No	No	Yes
	Law classes	Yes	Yes	Yes
History classes No No Yes	Psychology classes	No	No	Yes
	History classes	No	No	Yes
Ethics classes No No Yes	Ethics classes	No	No	Yes
Social science classes No Yes Yes	Social science classes	No	Yes	Yes
Apply theoretical Yes Yes Yes	Apply theoretical	Yes	Yes	Yes
knowledge in practice	knowledge in practice			
Feedback Yes No Yes	Feedback	Yes	No	Yes
Self-reflection Yes Yes Yes	Self-reflection	Yes	Yes	Yes
Situational awareness Yes Yes Yes	Situational awareness	Yes	Yes	Yes
Emotional awareness – No Yes Yes	Emotional awareness –	No	Yes	Yes
self	self			
Emotional awareness – Yes Yes Yes	Emotional awareness –	Yes	Yes	Yes
others	others			
Cultural awareness No Yes Yes	Cultural awareness	No	Yes	Yes
Communication – de- No No Yes	Communication – de-	No	No	Yes
escalation	escalation			
Communication – Yes Yes Yes	Communication –	Yes	Yes	Yes
adaptable	adaptable			
Communication – ver- No No Yes	Communication – ver-	No	No	Yes
bal and non-verbal	bal and non-verbal			
Following protocols Yes Yes Yes	Following protocols	Yes	Yes	Yes
Flexibility/adaptability Yes Yes Yes	Flexibility/adaptability	Yes	Yes	Yes
Fast decision-making Yes Yes Yes	Fast decision-making	Yes	Yes	Yes
Problem-solving Yes Yes Yes	Problem-solving	Yes	Yes	Yes
Proactivity/prevention Yes Yes Yes	Proactivity/prevention	Yes	Yes	Yes
Organization No No Yes	Organization	No	No	Yes
Assertiveness No No Yes	Assertiveness	No	No	Yes
Teamwork Yes Yes Yes	Teamwork	Yes	Yes	Yes

Learning through mis-	Yes	No	No
takes			
Realistic training	Yes	No	No
In-depth course infor-	No	No	Yes
mation			

5. Police Training

In the following, the second sub-question: "Which skills are taught in the use of force training in Dutch and German police academies?" is addressed. Interview answers are analyzed for the skills taught in the Dutch and Lower Saxony police academies, emphasizing non-physical skills. Responses of students and trainers are compared to the module manuals of the police academies in each country. Finally, a comparison of the Dutch and German findings is made.

5.1 Police Training – The Netherlands

The interview answers of HBO student DS1 and MBO student DS2 are compared to the module manuals of the police academy. Additionally, information from DT1, DT2, and DE1 is considered to gain a broader insight into the Dutch Police Use of Force Training.

For the use of force training in the Netherlands, the module manuals and web sources about the two police education programs indicated that various physical skills are trained. Shooting, self-defense, and arrest techniques are some basic skills necessary for police officers. The focus of the interviews lay on non-physical skills that are taught in the police academy. Therefore, no specific information is provided about the different physical skills the Dutch police students learned. The emphasis is on the training in general and the non-physical skills integrated into PUOF Training to foster responsible use of force.

As an essential part of the police work, the participants introduce proportionality and subsidiarity, as they are general and legal guidelines regulating the use of force. The HBO and MBO module manuals stated that students would be familiarized with these concepts (Politieacademie, 2022f, 2022e). Proportionality, subsidiarity, and legitimacy were introduced as guiding principles in the theoretical framework in *Figure 1*. Teaching these guidelines to students during the training is crucial as they will be used to determine the approaches to use of force during daily police work. The extent to which they are taught is not stated in the manuals. However, trainers and students alike emphasized the importance of proportionality and subsidiarity. The participants repeatedly mentioned the principles in relation to various skills and aspects of police work. Therefore, one can assume that their significance to police practice is part of the police training for the HBO and MBO degrees.

Both educational manuals mentioned that students learn self-reflection based on giving and receiving feedback during the academy training (Politieacademie, 2022f, 2022e). This corresponds with the answers of every Dutch trainer and student. They indicated that feedback is a crucial part of training and in-field operations. DT1 said that after every training exercise, a feedback round is conducted (DT1, May 12, 2022). In the field, it can also be used to assess whether a situation should be approached differently the next time or if an approach by the officers was appropriate (DT 2, May 12, 2022). Both students noted feedback as essential since they want to improve through every practice or police operation (DS1, April 29, 2022; DS2, May 19, 2022). Asking colleagues and trainers for feedback allows insights into their skills and is an incentive to improve specific skills. However, DE1 stated that from their experience, feedback is essential but does not happen as much in the field (Expert 1, May 05, 2022). Feedback is a training method that can be considered a vital part of use of force training as this method fosters the students' ability for self-reflection. The HBO and MBO programs want to educate future police officers to be reflective. If students obtain these skills in the academy training, they can use them responsibly as they can think critically about approaches to use of force.

The following paragraph looks at the non-physical skills taught for using force. The bachelor manual mentioned training for adequate communication (Politicacademie, 2022e, p.31). The MBO study guide also stated that students were taught how to adequately approach persons of interest (Politicacademie, 2022f, p.12).

DS1 indicated that communication is crucial for gaining information. Therefore, they learned to ask dispatch for as many details as possible and talk to their colleagues to make an action plan (DS1, April 29, 2022). This is what DE1 and DT1 called forming a picture of the situation, "beeldvorming" (DE1, May 05, 2022; DT1, May 13, 2022, 1.55). DS1 stated that communication with the counterpart was trained as a means to de-escalate a situation by only using words (DS1, April 29, 2022). During the MBO training, DS2 was also taught communication to gain information. They further indicate that in the academy, DS2 learned to adapt their communication to the person they talk with, meaning DS2 would approach teenagers differently than adults (DS2, May 19, 2022).

This displays that in the HBO and MBO programs, communication is not only used as a way to generate information, but it is also part of the skills "situational awareness" and "de-escalation". According to the Dutch trainers and DE1, speech can be considered the most powerful weapon of the police (DT1, May 12, 2022; DT2, May 12, 2022; DE1, May 05, 2022).

Communication, verbal or non-verbal, can stir a situation. Finding the most appropriate way to talk to someone can persuade them to comply with the police. The necessity of using force is diminished if the citizens follow the police's verbal instructions. Communication is a non-physical skill part of PUOF Training in the Netherlands for multiple purposes. The way an officer communicates impacts not only the gathering of information through dispatch and exchanging of strategies with colleagues, but it also

allows them to guide a situation and even calm down tempers if the communication can be adapted to fit the counterpart.

However, it should be acknowledged that DS1 said de-escalation was part of the PUOF Training, yet, they did not learn much about it. DS1 indicated the training for this topic could be improved (DS1, April 29, 2022). The other participants did not verify this point of criticism. However, DS1's concern should be considered as valid since they have gained work experience where communication is crucial. DS1 was able to reflect on their skills and the training to identify potential shortcomings.

Another skill students practice during the academy training is situational awareness (Politicacademie, 2022f, 2022e). DS1 and DS2 mentioned that they were taught to be attentive the situations and environments. They stated that one could gain information and identify possible risks by analyzing a person's behavior and surroundings (DS1, April 29, 2022; DS2, May 19, 2022). To avoid being caught off guard, DS1 was taught a "proactive approach", meaning being aware of the surroundings, making sure oneself and colleagues are safe, and having quick access to their aids of coercive force (DS1, April 29, 2022, 1.121). DT1 agreed that teaching students to be aware of their environment is crucial to avoiding dangerous situations (DT1, May 12, 2022).

As a non-physical skill, situational awareness is pivotal for PUOF and should be trained in the academy. It assists students and officers in identifying risks and allows them to reflect on which action to take next. Being aware of the surrounding is also a safety feature. A greater overview means fewer things that can surprise and endanger the officers. Situational awareness is thus an essential skill that links non-physical skills to physical skills.

To make the connection from observation to action, from non-physical to physical, the DT1 and DT2 teach their students a technique to evaluate situations. The "doel aanpakanalyse" was mentioned by both trainers as a way for officers to determine the right approach, measures, and aids of force or to deescalate a situation (DT1, May 12, 2022; DT2, May 12, 2022). DS1 also remarked that they were taught this technique to analyze if they can use force in specific situations and to see which approach would be the most adequate (DS1, April 29, 2022). This technique is not mentioned explicitly in the module manuals. Nonetheless, it has been used for several years to install a reflected use of force in officers. This analysis technique used by the Dutch police can be used in different situations and for various approaches. Including it in training strengthens the evacuation skills of recruits so they can use this technique in actual operations quickly and easily. The doel aanpakanalyse is a necessary skill linking mental skills and physical approaches and is, therefore, a vital part of the Dutch use of force training.

Now the design of the use of force training is analyzed. The manuals clearly show that the HBO and MBO programs differ in length. Additionally, the HBO program gives the students insight into more police departments than the MBO program does. However, their commonality is that students gain

practical experiences through training at the academy and in police units observing the daily police work. Also, as shown in *Chapter 4.1.1*, the skills students learn in both programs are similar.

In the MBO program, DS2 believed the training prepared them well for the police work, the skills, and quantity but also realism of the exercises. Repetitions of different scenarios helped them feel confident in their abilities (DS2, May 19, 2022). Furthermore, repeating practice exercises can allow students to strengthen skills to use during daily police work and adapt skills to unfamiliar situations.

DS1 trained the physical aspects of approaching and subduing a suspect more intensively than the non-physical aspects in the bachelor program. Yet, they criticized the training as too static and resembling tricks instead of learning solutions one can apply to different scenarios. They said it is difficult to emulate real-life conditions in training. However, the physical skills taught during academy training left DS1 feeling not fully prepared for the work as a police officer, and they perused a combat sport outside the academy for additional practice (DS1, April 29, 2022). DE1, who also obtained a bachelor's degree, indicated that the HBO program is more academically-oriented and, therefore, there is less time to practice physical skills during the academy.

Further, DE1 stated that most skills are obtained through practical work, being part of an operation, and gaining experience with the help of seasoned colleagues (DE1, May 05, 2022). DS1 had similar assumptions as higher education expects students to be able to improve their skills on their own (DS1, April 29, 2022). This shows that the perception of PUOF Training differs between HBO and MBO students. As mentioned in *Figure 1*, the program's design, in terms of length and realism of the exercises, impacts students' skills. Since the HBO and MBO programs each have a different focus but also vary in length, hardly surprising that the impressions differ. The HBO program is longer than the MBO program. However, HBO students are taught academic skills and are introduced to various tasks and positions in the police force besides basic police work. The MBO program is focused on teaching basic police skills to the recruits. Hence, students are not confronted with a range of additional topics. Instead, they can practice more intensely and frequently, as the MBO education is meant to be more practically oriented.

In conclusion, the non-physical skills taught in the HBO and MBO programs overlap. The aspects DS1 and DS2 mentioned as parts of the PUOF Training were supported by the statements of the Dutch trainers. They were also found in the study manuals. However, it has to be remarked that the HBO student did criticize their academy training as lacking realistic exercises and not providing enough time to teach physical and non-physical skills. Additionally, they mentioned that some lecturers did not have policing experience, making it harder for them to convey study material to the students (DS1, April 29, 2022). In contrast, DS2 did not criticize their educational program and felt well-equipped to conduct daily police work after the academy training. The views of the students are subjective, and perceptions about preparedness differ. It cannot be proven that the MBO student is better prepared than the HBO student. Yet, it indicates that DS1 understood that they need more practice and have to develop additional skills to be in control and understand responsible use of force. This does not mean DS2 does not properly

understand responsible use of force. It indicates that DS1 chose to add to their competencies based on their perception of the training. DS2 did not feel the need to do so.

Students who reflect on their training and proactively develop skills or learn new ones might have better grasped that practice is needed constantly to prepare officers for their work on the street.

It should be acknowledged that this chapter only provides a small insight into the Police Use of Force Training from the experience of four participants. Therefore, not every aspect mentioned in the conceptualization chapter was found in the interviews. Nonetheless, one can see an overlap with the concepts of *Chapter 2*. The skills taught in the Dutch PUOF Training can also be found as the building blocks of *Figure 1*. The three main principles shape the training, the design of the programs highlights differences in the training, feedback is used as a method to improve the students' skills, and, lastly, combining the physical and non-physical skills during training is a good practice for future work life.

5.2 Police Training – Lower Saxony

In the following, the answers of GS1 are compared to the module manual and the interviews of GT1 and GT2.

The educational information for Lower Saxony taken from web sources and the study guide showed that physical activities connected to the use of force are an aspect of the police training that is repeated often to strengthen the students' skills. However, the interviews focused more on learning about the non-physical skills taught in the use of force training. It is considered a given that students practice shooting, self-defense, and arrest techniques. Therefore, the answers by the three German participants will be analyzed for general information about the training and the non-physical skills that link to the physical ones for a reflected and responsible use of force.

To build the basis for the use of force training, the manual of the bachelor's program lists classes about law and a focus on the principle of proportionality. All three German participants indicated that the proportional and subsidiary use of force was part of the academy training. GS1 and GT2 also refer to the additional law classes that provide recruits with knowledge beyond the basic principle (GS1, May 02, 2022; GT 2, May 15, 2022). As established, the proportionality and subsidiarity principles are used to guide police decisions before and while using measures of coercive force. Knowing these principles and laws adjacent is not an actual skill of PUOF. However, the three principles create an orientation for any situation in which physical measures are applied. In *Figure 1*, they have been identified as guidelines and should be used by police officers. Therefore, addressing the principles to police students in the use of force training is necessary as proportionality, subsidiarity, and legitimacy will assist students in their decision-making processes even after leaving the academy.

GS1 discussed other subjects taught at the academy, including psychology and criminology, which were also listed in the module manual. Again, these classes are not specifically part of the use of force training. Nonetheless, students gain background knowledge that they can use in situations where they might need to use force. GS1 remarked they learned about mental illnesses and other factors affecting a person's behavior (GS1, May 02, 2022). GT1 also acknowledged that understanding ethical profiling and dealing with stereotypes is a component of the educational program, as stated in the manual by the police academy (GT1, May 13, 2022). These additional classes go beyond the physical training of using force. They provide helpful social-science knowledge to students, which can influence their decision to use force. Courses that teach theory and background information to students are mixed method approaches useful in PUOF Training. Students learn to connect a person's actions and demeanor to how they can impact any scenario and identify appropriate physical or non-physical measures according to the opponent's behavior.

Both trainers mentioned that feedback is essential in the academy training and during the daily police work. GT2 said feedback is paramount to improving skills and learning from possible mistakes (GT2, May 15, 2022). GS1 agreed and mentioned feedback opportunities are provided during any part of the academy training. They use it to self-reflect and support their fellow recruits (GS1, May 02, 2022). GT1 conceded that during daily police work, feedback is not always exchanged, even if it should be (GT1, May 13, 2022). Feedback is an essential training method. It is a way to analyze personal skills and observe colleagues' approaches. Through feedback, police students can improve their skills or identify their strengths. Especially when training the use of force and non-physical skills connected to it, providing feedback to students is crucial to building an understanding of adequate and responsible use of force.

The manual indicated communication as a significant element of the training. All three participants corroborated this. Communication with colleagues and dispatch to gain information is part of the training and an essential aspect of police work (GT1, May 13, 2022). Information is crucial as it determines the approach in a situation. For example, knowing about a potential suspect's violent record allows officers to create effective, safe, and appropriate plans. Students must learn and practice this during PUOF Training to use this skill in their work life.

GT1 and GT2 agreed that talking is the most effective weapon of the police and should always be used before physical force (GT1, May 13, 2022; GT2, May 15, 2022). GS1 mentioned that adequate verbal and non-verbal communication is part of the training, as this determines the police citizen-interaction and can be used for de-escalation, as GT1 remarked (GS1, May 02, 2022; GT1, May 13, 2022). Assertiveness and clear communication are crucial to creating a firm position as the police. It allows officers to assert control in a potentially dangerous situation. Furthermore, physical measures can be avoided if a situation can be controlled or de-escalated using the right communication tactics.

Communication is a vital non-physical skill that should be practiced in PUOF Training. In the academy in Lower Saxony, this skill is trained repeatedly in theory and practice, providing students with a non-physical ability to control a suspect.

Situational and emotional awareness are additional non-physical skills taught during PUOF Training. To get an overview of the situations and understand potential dangers from the opponent or environment, GT1 mentioned the training of a "Gefahrenradar" (Eng. "danger radar") (GT1, May 13, 2022, 1.67). Additionally, the police should be prepared to act on the risks and not react on an action of a suspect (GT2, May 15, 2022). Proactive action gives officers control over a situation and prevents potential escalation.

For GT2, it was essential to teach students how to recognize "Vorkonfliktsanzeichen" (Eng. "pre-conflict signs"), meaning identifying which emotional or behavioral signs of a person can indicate a possible escalation (GT2, May 15, 2022, l.268). Awareness is a non-physical skill that can be applied in practical situations. Emotional and situational awareness impact the police approach in any potentially dangerous situation as they permit students and officers to realize risks and react to them with a thought-out and safe approach. Including this in the police training will prepare students to respond to dangers in stressful situations since they have practiced this with their trainers.

GT2, a former member of a special forces unit, said it is necessary to understand that own emotions can heavily impact a police operation. Officers must consider how stress, fear, or anger can affect an approach and lead to escalation. However, analyzing scenarios using guidelines can provide structure and allows officers to think before acting. Therefore, GT2 taught their students the OODA loop mentioned in *Chapter 2* as a technique to evaluate scenarios and decide which physical or non-physical approaches to take (GT2, May 15, 2022). Introducing a structured approach to students is another way of creating guidelines for the use of force. It can make it easier to ground oneself in stressful situations. Even though the OODA loop is not mentioned as part of the educational program in Lower Saxony, it is a tactic that fosters reflective thinking and action skills. Making this part of use of force training allows students to think about their approaches when using force as it connects mental capabilities with physical skills.

Besides learning the use of the aids to coercive force, as stated in the manual, GS1 referred to learning various self-defense techniques and the "L-Stellung" (Eng. "L-position") as a safety measure (GS1, May 02, 2022, 1.104). The L-Stellung is a safety measure in which one officer talks to the suspect frontally, and the other stands on the side of the suspect to intervene if necessary. The securing person should be in the peripheral vision of the suspect (Habitz, 2019).

GT2 has also indicated this position as part of the training (GT2, May 15, 2022). As stated by GT1, use of force also means knowing how to protect oneself and other officers (GT1, May 13, 2022). Self-defense techniques are essential when using force, as police officers must be prepared to defend

themselves from attacks. The L-Stellung is a way to contain situations, allowing officers to keep control over a suspect without touching them. Further, the position provides security to colleagues. Such techniques must be taught in the academy as responsible use of force always means preventing officers and citizens from more harm than necessary, which can be attempted through knowing tactics for self-protection.

Generally, GS1 said they felt prepared for the daily police work with the physical and non-physical skills they learned. They indicated that academy training occurred under "laboratory conditions," and emulating real-life scenarios is hardly possible (GS1, May 02, 2022, 1.153). However, exercises are based on work experiences of the trainers and lecturers, which made GS1 feel confident that the training of the Lower Saxony police academy would equip recruits with the necessary skills for the police profession. Lastly, they indicated that students always had the opportunity to ask for additional training or information to further skills that might not have received enough focus in training (GS1, May 02, 2022). This shows that the design of the PUOF Training is grounded in empirical evidence. Despite the program length of three years in which basic policing skills are taught in addition to academic content, the student indicated enough time for practicing skills and support from trainers and lecturers. Nonetheless, this is a subjective opinion, and it cannot be proven that GS1 has learned every essential skill to conduct a responsible use of force.

In conclusion, the Police Use of Force Training in Lower Saxony integrated various skills. The German academy manual and the participants' answers overlapped. The basic principles of proportionality and subsidiarity found in *Figure 1* were remarked as crucial by all three participants for the training of use of force to guide thoughts and actions of the students. GS1 considered psychology, law, and criminology classes, providing background information on the daily police work. For the two trainers, feedback is a vital method used in training that allows students to improve themselves through self-reflection. GS1 agreed with this statement.

Further, GS1 described the non-physical skills they learned in training and was able to connect them to scenarios in which the use of force could be necessary. The participants have emphasized communication skills and emotional as well as situation awareness. These skills are used in training to prepare students for police work with the critical aspect of preventing or containing the use of force. Protection measures and techniques were introduced in addition to the OODA loop, used to create reflective thinking and thought-out police approaches based on the structured guidelines.

It has to be acknowledged that the information was taken from three interviews. Therefore, not every aspect of the use of force training mentioned in the module manual was found. These findings display personal experiences of the participants and are subjective.

Nonetheless, the trainers showed extensive knowledge about the importance of non-physical skills in PUOF Training, and the student felt confident in the skills they learned in the academy. Their answers

overlap with elements of PUOF Training that have been identified as important in *Chapter 2*. This leads to conclude that the police academy in Lower Saxony equips the students with various non-physical skills that can support their perception of responsible use of force and adjacent decision-making.

5.3 Police Training – Comparison

After considering the findings from the interviews with the Dutch and German participants, the subquestion "Which skills are taught in the use of force training in Dutch and German police academies?" can be answered.

In both countries, the basic principles of *Figure 1*, proportionality, subsidiarity, and legitimacy, have been acknowledged as the main guidelines for using force and are also a part of the PUOF Training. These principles guide police work in both countries and are therefore crucial in teaching students use of force.

Whereas GS1 and GT2 stated knowledge about laws as necessary to complement the use of force training, the Dutch participants did not mention it, even though it can be found in both module manuals.

In Lower Saxony, students also attend classes about psychology and criminology. GS1 stated that the background knowledge from these theoretical classes helped understand how the citizen-police interaction can be impacted by different factors, such as mental or socio-economic issues. Furthermore, GS1 mentioned that physical or non-physical approaches should be chosen based on the situation. However, no statements by the Dutch interviewees were made regarding additional classes for which the knowledge can be applied to the use of force training.

The interviews were designed to allow the participants to answer freely and not guide them to specific answers. Hence, it is possible that interviewees did not state information from the manuals even though they might have learned these aspects in the academy. This can explain discrepancies between study manuals and the participants' answers, as well as differences between German and Dutch findings.

In terms of methods, the training in both countries is supported by feedback. The Dutch and German trainers indicated how important this aspect is for students to improve themselves and identify strengths and weaknesses. In addition, the Dutch and German students alike noted they used feedback for self-reflection as part of the training to think about how to enhance their use of force skills.

Albeit feedback was mentioned as essential for the training, DE1 and GT1 stated that in daily police work, this opportunity is used much less to advance responsible use of force approaches.

Another way to install the reflected use of force in police students is by using situational evaluation techniques. In the Netherlands, the trainers teach the doel aanpakanalyse as a guideline for use of force. Students learn five questions they must ask themselves to identify if their approach is appropriate or if

a different tactic should be chosen. GT2 used the OODA loop developed for the military to teach students to observe, orient, decide and act in dangerous situations to determine an adequate approach.

Both techniques aim to teach students how to analyze scenarios and train their ability to make this evaluation during actual police operations. As a result, decision-making skills and situational awareness are enhanced, and recruits are prompted to think about responsible use of force in every scenario. The OODA loop and doel aanpakanalyse are connecting elements used in the Dutch and German police academies linking thinking and non-physical police skills to the physical use of force approaches.

Regarding the non-physical skills, there was a significant overlap between the skills taught in Lower Saxony and the Netherlands.

The findings in both countries showed that communication had multiple functions in PUOF Training. The Dutch and German students indicated that the academies taught communication strategies.

Interviews and educational materials suggested that communication is used to gain information from dispatch and colleagues to get a picture of the situation and prepare for possible scenarios beforehand.

Communication is also taught for de-escalation purposes. The four trainers collectively agreed that speech can be considered the most powerful and effective weapon, thus, talking to a suspect should always be done before using physical force. Furthermore, participants in both countries mentioned that they were taught to adapt verbal and non-verbal communication according to the conversation partner. Reacting to a person's behavior can be a valuable technique for the police to control a situation and ultimately prevent using physical force.

Communication for different purposes appears to be a universal technique used and trained across borders to limit the use of force and provide the police with skills to control situations without physical measures.

In Lower Saxony and the Netherlands, situational awareness was presented as an effective non-physical skill. In both countries, participants described situational awareness as knowing the surroundings and identifying threats through people or objects. This is a valuable skill for the police as officers can react faster or prevent escalation by being attentive to environmental dangers.

Situational awareness is part of the use of force training as it strengthens the perception of recruits of dangerous situations. Suppose an officer observed a scene and identified risks, such as potential weapons or a physically aggressive suspect. In that case, the surprise momentum will be smaller, and the officer has time to think about the most appropriate approach and steps to prevent escalation.

Situational awareness also means acting proactively on risks, a skill DS1 and GT2 mentioned. The module manuals for Lower Saxony and the MBO program did indicate proactiveness as part of the training, yet GS1 and DS2 did not refer to it in the interviews.

Another aspect of situational awareness remarked by Dutch and German participants was the safety of officers and colleagues. This means the police have to ensure that in potentially dangerous situations,

the operating officers are kept safe and not exposed to any danger. The Dutch interviewees did not mention specific safety strategies. GS1 and GT2 referred to the L-Stellung as a safety position that gives one officer the freedom to talk to a suspect from a certain distance, and the other officer ensures the safety of the college by having the possibility to detain the suspect before they can attack. Not providing specific information can be because certain police strategies want to be kept confidential and not shared with outsiders. This might have caused the discrepancy between Dutch and German answers.

Nonetheless, knowing how to keep oneself and colleagues safe in potentially dangerous situations is another crucial skill practiced in PUOF Training in both countries. Again, distancing techniques and identification of risk factors are used to prevent escalation, give officers time to react appropriately, and minimize the necessity to use force.

One skill that only GT2 mentioned was emotional awareness, meaning observing the suspect's emotions by identifying the pre-conflict signs and considering that own emotions can impact an officer's actions. Emotions are significant risk factors and can lead to escalations on both sides if they are not contained and worked with appropriately. This is why GT2 used the OODA loop to prepare students to be aware of their own emotions and not let them influence their work by giving them structures to guide their thought process in use of force situations.

Emotional awareness is a skill that can be used by officers on themselves or the suspect, an extra step of situational awareness. For example, in Germany, situational awareness is part of the use of force training to teach officers to stay safe and react in a thought-out manner to avoid disproportionate use of force on the suspect's or the police's side.

What stands out are the different feelings of preparedness between the students. Despite a four-year program, DS1 felt not prepared enough through the academy training and indicated that quantity and quality of physical and non-physical training should be improved. In contrast, the MBO student DS2 did feel prepared to work as a police officer after a two-and-a-half year program. Frequent repetitions of practical approaches helped them strengthen their confidence in their skills.

The German student GS1 also felt that the bachelor's program equipped them with the necessary skills to act appropriately during actual police operations. Even though the Dutch and German bachelor programs have a multitude of overlaps in design and course contents, the experience of the Dutch and German bachelor students appears to be different.

However, it has to be acknowledged that these results are personal, and the experiences of the three students are different. These discrepancies do not mean that the student from Lower Saxony and the one with the MBO degree are better prepared than the HBO student. DS1 has recognized that to feel prepared, they need to invest more time in training different skills they have not or only superficially learned in the academy due to the program's design.

Nonetheless, all three students present knowledge about essential skills and aspects adjacent to the use of force training. Not every part of the training indicated in the module manuals was mentioned in the interviews. Yet, it must be kept in mind that the interviews were designed to understand personal experiences and identify the physical and non-physical skills that appear most prevalent for trainers and students alike. Hence, participants indicated the most significant aspects to them personally, which can cause elements taught in the academies to be left out in the interviews.

In conclusion, it can be said that looking back at the skills and necessary building blocks of use of force training mentioned in *Chapter 2*, several themes were identified in the interviews for both countries. Aspects that come into play in PUOF Training are proportionality and subsidiarity, and other laws. In addition, feedback is used to train self-reflection and improve skills for responsible use of force. Besides physical skills, students practice verbal and non-verbal communication, emotional and situational awareness, and learn to identify the most adequate approach in any scenario using the OODA loop or the doel aanpakanalyse. A summaries skills can be found in *Table 3* comparing the two countries. Generally, it can be said that in both countries, a variety of skills, designs, and methods are present in the use of force training to create responsible and reflected police officers.

Table 3. Comparison Table: Skills and Features of Use of Force Training based on the Interviews Findings.

Skills	The Netherlands –	The Netherlands -	Lower Saxony
	MBO	НВО	
Proportionality, sub-	Yes	Yes	Yes
sidiarity, and legiti-			
macy principles			
Additional classes	No	No	Yes, law, psychology, criminology
Feedback	Yes	Yes	Yes
Situational evaluation	Yes, doel aanpa-	Yes, doel aanpa-	Yes, OODA loop
techniques	kanalyse	kanalyse	
Communication - in-	Yes	Yes	Yes
formation			
Communication – de-	Yes	Yes	Yes
escalation			
Communication –	Yes	Yes	Yes
adaptable			
Communication – ver-	Yes	Yes	Yes
bal and non-verbal			

Situational awareness	Yes	Yes	Yes
Proactivity	Yes	Yes	Yes
Safety measures	Yes, unspecified	Yes, unspecified	Yes, L-Stellung
Emotional awareness	No	No	Yes
Preparedness	Yes	Not enough	Yes

6. Responsible Use of Force

Sub-question three, "What does responsible use of force mean to Dutch and German police students and trainers?" is answered in the following. This question investigates personal experiences. Therefore, interview data is used.

To answer this sub-question, participants in each country were asked questions regarding restrictions to the use of force, the most important skills to have in potentially dangerous situations, and skills that can help prevent excessive use of force. In the end, the answers of Dutch and German police trainers and students are compared.

<u>6.1 Responsible Use of Force – The Netherlands</u>

To answer sub-question three, the Dutch participants were asked a set of questions about the use of force.

Firstly, interviewees identified rules and limits they learned or taught regarding PUOF. Here, every participant referred to proportionality and subsidiarity.

DT1 and DT2 said they taught their students that the least invasive approach should be taken, the means used should always be adapted to the situation, and force should only be used if no non-physical method would be effective on a subject (DT1, May 12, 2022; DT2, May 12, 2022). Additionally, DT2 advised that officers administer a warning before taking action (DT2, May 12, 2022). As stated in the text in Appendix I, Dutch law mandates that warnings should precede any physical action taken by officers. This demonstrated that trainers use the legal standards, proportionality, and subsidiarity to teach their students what they have to keep in mind before using force in a situation.

DS1 and DS2 showed an understanding of what is considered unproportionate use of force. Both indicated that using force and coercive means should only be done if no other option would solve a situation. Each provided an example, stating that a certain amount of hits can lead to the desired outcome of subduing an attacker. However, every blow administered after the attacker is subdued is considered unnecessary according to the principles and, hence, neither legitimate nor legal (DS1, April 29, 2022; DS2, May 19, 2022). The students showed that they have knowledge about proportionality and subsidiarity that goes beyond naming these guidelines. They reflected on actions and distinguished appropriate from inappropriate use of force. Therefore, the three main guidelines for police work stated in *Figure 1* are also essential to the participants' decision-making.

In addition to the three principles, DE1 stated that situational factors must be included when deciding on approaches. Officers must consider where they are, who their suspect is, and if bystanders are around (DE1, May 05, 2022). DS2 mentioned that they were also taught these aspects. If an individual appears less strong than the officer, the necessity of using aids to force, such as pepper spray or a baton, is lower. If the officer's opponent is tall and muscular, they have to consider if they are able to control the person simply with physical force (DS2, May 19, 2022). This showed that besides the legal restrictions, Dutch police personnel consider the entire situation and use their situational awareness skills when deciding which means of physical control should be taken.

DS1 indicated that these principles guide every officer's approach when using force. However, officers should remember that during police operations, they also have emotions that might impact their capacity to follow these regulations (DS1, April 29, 2022).

Nonetheless, the Dutch participants were aware of how the law restricts the Police Use of Force and how the principles of proportionality and subsidiarity are adapted from teaching to real-life scenarios using situational awareness.

Secondly, to identify which techniques guide the decision-making of police officers, the participants were asked which skills they saw as crucial in potentially dangerous situations.

DT2 indicated that personal safety and the safety of colleagues were most important (DT2, May 12, 2022). This means that police officers should always ensure they are as safe as possible and choose their approach to a situation to prevent them from endangering their safety. Suppose officers find themselves in a dangerous situation where they could be harmed. In that case, it can increase the chances of reacting with excessive force as less time is available to think about a responsible approach. Hence, safety measures have to be maintained during operations.

The skills that DT1 named as most important can be matched with the previous statement. They mentioned that calmness is key to keeping the ability to think clearly and decide about the correct approach. Stress should not "[...] get the upper hand on your behavior" (DT1, May 12, 2022, Il.116-117).

Participant DE1 referred to their statement on limitations to the use of force. They indicated that the awareness of the situations and the ability to read the counterpart are crucial to determine how to handle a police operation responsibly. Additionally, they remarked every officer should know "[...] how the scale up or scale down in using [their] force" to achieve the best possible outcome for all parties involved in a dangerous situation (DE1, May 05, 2022, 1.174).

It was visible that the students were taught similar techniques and, thus, considered similar skills to be essential. DS2 referred to aspects of personal safety and added that being in contact with colleagues is also crucial (DS2, May 19, 2022). Observing the actions of colleagues can help reflect on and adapt the own approach. The statement of DS1 was in correspondence with the previous answers. They acknowledge that the mindset and focus of how an operation is approached are vital. Being able to read

a situation and adapt the approach quickly is a technique that officers should master. Additionally, DS1 argued that the training has to be realistic. Students have to be able to gather experience in the academy before doing actual police work (DS1, April 29, 2022).

The participants remarked that no two situations are the same. Hence, no single skill is the most important to control a dangerous situation. Every interviewee mentioned different aspects and combining those allows officers to find the safest and most appropriate approaches for each scenario. Situational awareness and staying calm were mentioned as crucial to being safe, as calmness allows better observation and clearer decision-making. Knowing how to adapt approaches to a person and when to use force or refrain from it is also a safety mechanism. Officers must identify the most secure and effective method depending on their opponent. For young officers, it can help to observe experienced colleagues and communicate with them to gain a picture of the situation. However, the ability to observe the scenario and react to it in the safest, most thought-out manner appeared to be the most prevalent skill for all Dutch participants when handling dangerous operations.

Lastly, the police trainers were asked how they teach recruits to prevent excessive force.

For DT1, teaching the students the possible consequences of their actions is crucial. They indicated that students need background knowledge about which outcomes are created through which approach. However, they remarked it is difficult always to choose the suitable means, as no two situations are alike. Therefore, to prevent excessive force, students must be introduced to as many techniques and tactics as possible during their time in the academy (DT1, May 12, 2022). Recruits need to gain experience to fully judge how their actions affect a situation. Combining physical practice and background knowledge is essential, as this allows students to connect theoretical information about police approaches and experience the direct impact in a training environment.

DT2 indicated the principles of proportionality and subsidiarity to prevent excessive force. Students should be able to judge their actions and identify if colleagues are using more force than necessary. DT2 argued that officers should hold each other accountable when they notice excessive use of force. Additionally, DT2 mentioned every violent incident is investigated. It is researched whether the officer has followed proportionality, subsidiarity, and legitimacy (DT2, May 12, 2022). Teaching students that using excessive force during work has consequences and will be investigated is crucial for the police and trains self-reflection skills for more responsible use of force.

For DT2, another way to avoid excessive force was to always communicate with a suspect before taking action. In addition, if possible, officers should always attempt verbal de-escalation. Yet, if a situation becomes unsafe, the police must consider which physical measures to take (DT2, May 12, 2022).

The statements indicate that different skills can be taught and used to avoid excessive force. Police officers not only have to understand the three main principles that have to be considered for responsible use of force. They must also recognize when these principles are disobeyed, and the line between

legitimate force and violence is crossed. Furthermore, training is crucial as it allows students to learn different skills and approaches. It provides recruits with background knowledge about risks and consequences of excessive force for them or citizens. It is also crucial to balance non-physical skills, such as communication and de-escalation, and the correct use of physical skills to solve conflict situations between citizens and the police safely.

Generally, one can say that the Dutch interviewees indicated that many skills and features impact how force is used responsibly. Most prevalent are proportionality, subsidiarity, and legitimacy, which were also considered the foundation of responsible use of force in *Figure 1*. Knowing these principles means understanding what is considered acceptable or excessive use of force. The participants indicated that officers should use these principles to reflect on and guide their approaches.

However, the Dutch participants also mentioned the necessity for realistic training and gaining enough experience as police students. This shows that the design of the training also influences the responsible use of force. Less training hours in unrealistic scenarios do not allow students to gain experience and understanding of responsible use of force before working on the street.

Training different techniques of use of force also enhance the understanding of risks for officers and citizens. Therefore, the Dutch trainers teach consequences so students can identify disproportionate use of force and how to avoid it.

Participants mentioned various skills and techniques circling the idea of situational awareness. Situational awareness, reading a situation, person, and environment, is an integral part of police training. In theoretical classes, recruits learn which aspects to look for and how different personal conditions of a suspect can impact a situation. Only when allowing students to practice this knowledge during the training, can they grasp how the theoretical use of force knowledge can be applied to practice and real-life situations.

To sum up, responsible use of force had different facets for every participant. Nonetheless, the building blocks in *Figure 1* were discovered in the statements of the Dutch interviewees. The three main principles should be the guideline for every approach, but also training opportunities and gaining experience in addition to using various non-physical skills will also a responsible use of force and prevent escalation.

<u>6.2 Responsible Use of Force – Lower Saxony</u>

To investigate what responsible use of force meant to the German interviewees, they were asked the same questions as their Dutch counterparts.

Firstly, student and trainers were asked which limits to the use of force were essential to acknowledge when force was used.

For GS1, the police law of Lower Saxony was the main guideline. Legal regulations, which can be found in the text of Appendix I, determine which rules have to be followed when using different aids to force or physical force as a police officer. GS1 indicated that following proportionality and subsidiarity are the main priorities in the police. When using force, the infringement of the physical integrity of a suspect needs to be kept at a minimum by only using force if necessary and choosing the least invasive measure adequate in a situation. Additionally, GS1 learned that warnings should be administered before using force to allow suspects to cooperate (GS1, May 02, 2022). GS1 displayed extensive knowledge about the legal limitations and their importance for the actual use of force.

Both trainers also mentioned proportionality. GT1 stated that the goal of using force should never be to hurt a suspect but to gain control over them (GT1, May 13, 2022). For GT2, a crucial aspect is to choose the least strong approach, as officers should always have the option to scale up their force if the situation cannot be controlled. Additionally, GT2 taught students the legal consequences of excessive force to show that police officers that use disproportionate force or the wrong approach will be held accountable (GT2, May 15, 2022). Furthermore, GT1 referred to mandatory distance rules that must be kept (GT 1, May 13, 2022). Holding distance to a suspect is used to keep the officers safe from possible attacks and decelerate a situation.

For German participants, obeying the principles of proportionality and subsidiarity is the main component of responsible use of force. However, aspects like legal consequences for disproportionate force are part of the teaching. Keeping to a necessary minimum of use of force, following laws such as issuing warning statements, and understanding that force should only be used to regain control of a situation are crucial elements for responsible use of force taught in Lower Saxony.

Secondly, to identify which techniques guide the decision-making of police officers, the participants were asked which skills they saw as essential in potentially dangerous situations.

The one factor every German participant mentioned was the correct use of physical skills. GT2 and GS1 said that the aids to the use of force need to be mastered by every student (GT2, May 15, 2022; GS1, May 02, 2022). GT1 stated that appropriately using self-protection and arrest techniques were crucial to react adequately in a dangerous situation (GT1, May 13, 2022).

Physical skills have to be mastered by recruits and officers to protect themselves and to keep or regain control during critical operations. These skills are practiced during training and solidified by experience. If officers can confidently use their physical skills or aids to the use of force, they do not have to think about this aspect. Instead, they can focus on analyzing a situation and developing the most adequate approach since they can use their physical skills without much thinking.

For GT2, using "soft skills" is also essential for dangerous situations (GT2, May 15, 2022, ll.214-215). These include proper communication to gain information, de-escalation, and situational awareness, meaning observing the situation and identifying risk or escalating factors. For GS1, adequate

communication was the most vital skill (GS1, May 02, 2022). The appropriate communication with a person can have an immense impact on a citizen-police interaction

Also, emotional intelligence comes into play for GT2. Noticing stress or fear is a starting point for positive self-instructing and re-affirming personal skills (G2, May 15, 2022). Acknowledging that feelings are impactful can help officers reflect on their behavior and adjust their approach if they notice better options to react in dangerous situations.

According to GT1, emotional intelligence can also be used to communicate better with an opponent. Being empathetic to a person's circumstances and showing compassion is one of the most critical skills for GT1 in dangerous situations. However, this awareness of the opponent's emotions also allows officers to understand when a situation cannot be handled without physical force anymore (GT1, May 13, 2022). A compassionate reaction to a person can be used to de-escalate a situation and make PUOF avoidable. Communicating on the suspect's level is a necessary skill to have for the police, as proper communication has the power to turn a situation into a positive outcome.

It can be said that different skills are considered important in dangerous situations for the three participants. Yet, it stands out that communication is a versatile tool that can be used to gather information and possibly even de-escalate a tension-filled situation. As the goal of the police is that everyone involved in an interaction stays as safe and unharmed as possible, non-physical skills appeared to be essential for the police student and trainers. If non-physical skills are used correctly, the use of physical force might not be necessary. If dangers are noticed and disabled by identifying potential weapons or aggressive behavior of a person, officers can adapt their approaches accordingly.

Lastly, the trainers were asked how excessive use of force could be prevented.

GT1 stated that the ability to work well as a team has an impact on preventing excessive force by individuals (GT1, May 13, 2022). Teamwork means relying on colleagues and knowing they will protect each other. Working as a well-functioning team can give officers a feeling of safety and remove stress, which can cause de-escalations.

Both trainers agreed that practice for students and training activities for fully-trained officers is the best way to prevent violent excesses by the police. They stated that training skills in scenarios emulating dangerous situations would allow officers to stay calm during actual operations. Further, officers can react faster if they do not have to think about every step but are confident in their skills and how to approach certain situations (GT1, May 13, 2022; GT2, May 15, 2022). This indicates that gain experience through constant training creates routines. In these routines, officers strengthen and improve their skills. In emergencies, they can adapt these skills as the situations require. It is vital that officers are not taken over by stress or uncertainty to avoid excessive force. Hence, practicing allows officers to train for multiple scenarios and creates feelings of preparedness.

Feedback and self-reflection also help avoid excessive force, acknowledged GT2. Talking about an operation and reflecting on which aspects went well or could have been done better allows officers to learn from every operation (GT2, May 15, 2022). This means that feedback, as a crucial aspect of police training, can be used to prevent excessive force when also used while working in the field. If feedback is used in the academy, in physical training, or for theoretical classes, students learn to reflect on their actions, learn from their mistakes, and can improve their skills and approaches. The use of feedback during the academy training can become a habit for officers on the streets, a way to reflect and make responsible choices based on learning opportunities.

GT2 remarked that another skill taught at the academy could decrease the possibility of using disproportionate force as a police officer. The way an officer presents can impact a situation. A firm demeanor and straightforward, assertive verbal and non-verbal communication might hinder a suspect from attacking officers (GT2, May 15, 2022). This shows that communication tactics are essential in the daily work of the police and when trying to prevent excesses. Assertiveness and communication demonstrate to citizens that the police are in control of the situation and know how to use their skills.

The German trainers first and foremost indicated the need for constant practice to prevent excessive force. Therefore, it is crucial to evaluate the skills and improve police strategies. Experience can prevent disproportionate PUOF as scenarios as practiced, and officers know they have the skill set to handle various situations. This goes hand in hand with positive self-instruction and feedback, as this strengthens the perception of personal skills, and police officers learn which skills must be improved for a more secure approach in dangerous situations. Officers confident in their abilities will show this to the citizens with their firm, assertive demeanor and clear verbal and non-verbal communication.

For the German participants, excessive use of police force can be prevented through frequent scenario training to gain experience in combination with a confident appearance and trust in personal and team skills.

Responsible use of force has different aspects for every German participant. However, the common point is having control over a situation. Staying in control means one can choose an approach thoughtfully, and no rash actions need to be taken. The interviewees from Lower Saxony indicated different aspects that create and strengthen control, which can also be found in the building block of *Figure 1*. According to the participants, a strong knowledge of proportionality and subsidiarity is essential to avoid excessive force. These principles create the base layer of the theoretical framework in *Figure 1*. Moreover, they guide the officers in their work and give them rules about which approaches are not acceptable or prohibited.

Also, the design of the PUOF Training is discussed regarding responsible use of force. The German trainers emphasized that constant and realistic training is necessary for officers to gain experience and strengthen their skills for dangerous situations, so they know when using force is unavoidable but done

responsibly. This can be improved by using the method of feedback from the training and applying it to actual police operations. Feedback leads to self-reflection and allows individual officers and teams to enhance their skills or adapt their approaches to keep the use of force at a minimum.

Lastly, the German participants referred to different physical and non-physical skills that must be mastered for responsible use of force. Knowing how to use the aids to force is crucial, according to GS1 and the trainers. However, they also mentioned various soft skills like communication techniques and situational and emotional awareness. In addition, the theory and risks behind use of force are taught to police students, so they are familiar with potential consequences for citizens and themselves as an incentive to avoid excessive force.

Summed up, one can say that for the participants in Lower Saxony, responsible use of force means using different elements from the framework of *Figure 1* like the main principles, feedback and training, and using their physical and non-physical skills. That allows officers to trust their capabilities and assert control in potentially dangerous situations.

6.3 Responsible Use of Force – Comparison

To answer the sub-question "What does responsible use of force mean to Dutch and German police students and trainers?", the definition for responsible use of force by Adang et al. stated in Chapter 2.1 is reviewed.

The police are supposed to keep the harm to suspects, bystanders, and officers at a minimum. Therefore, escalation has to be prevented by the police. Additionally, proportionality, subsidiarity, and legitimacy should be followed to ensure responsible PUOF (Adang et al., 2006).

Looking back at *Figure 1*, the participants in both countries have mentioned different aspects of the framework when considering the meaning of responsible use of force. There are overlaps between the answers of Dutch and Lower Saxony participants. However, some dissimilarities are also noticeable.

Figure 1 displays the principles of proportionality, subsidiarity, and legitimacy as guidelines for responsible police work. All participants in both countries named these principles. The Dutch and German students showed knowledge about these principles and could apply them to scenarios. Besides these principles, in both countries, participants stated the necessity to issue warnings before using force. This aspect is manifested in the Dutch and Lower Saxony police law. In Germany, officers are also mandated to keep a distance for personal safety and to avoid fast escalations. These aspects indicate that responsible use of force goes beyond the main principles, and the police consider legal factors in each country, so use of force is conducted responsibly.

The legal background is crucial in the Netherlands and Germany, as it guides police approaches and determines their adequacy depending on different factors.

Another aspect of *Figure 1* concerns the design of the training with elements like realistic training, educational content, and length of the program. For this building block, similarities between Germany and the Netherlands were found again. All four trainers acknowledged that experience is crucial to understanding responsible use of force and preparing for various police operations. Additionally, participants acknowledged that situations are never the same. However, realistic training allows police officers to practice different approaches and strengthen their physical and non-physical skills to use in real-life situations.

The next block of *Figure 1* discusses the methods used in police training. One aspect necessary for responsible use of force is liking theoretical knowledge with practice skills, which falls into the category of training methods. Police officers need to be able to make a connection between theory and practice. Therefore, the trainers in both countries teach a variety of physical approaches. Further, they lecture about the consequences of excessive force that can go along with trained techniques. Creating a connection between action and outcome is essential, so students internalize possible consequences, are deterred from using excessive force and think about their approaches before acting.

Another method the German trainers used to install responsible use of force in their students is feedback. For the German trainers, feedback is vital as it makes students and officers reflect on their approaches and aspects that need improvement for the next police operation. However, the Dutch participants did not mention feedback as part of creating responsible use of force. This does not mean feedback is not used to reflect on police approaches in the Netherlands to develop responsible use of force. The participants did not think of feedback as an essential element when answering the questions.

Introducing the methods of feedback and mixing theory with practice can enhance the responsible use of force of the police through critical thinking and self-reflection.

Figure 1 also included physical and non-physical skills. The most differences between the Dutch and Lower Saxony participants were found here. It was previously discussed that interviewees acknowledged how crucial it is to combine physical and non-physical skills for responsible use of force in both countries. Dutch and German participants also agreed that mastering the use of aids to use of force and purely physical defense techniques affects the responsible use of force. For the Dutch participants, not only personal safety but also the safety of colleagues is part of responsible use of force, as it is attempted to minimize potential harm.

Mastering physical skills is essential as it allows officers more time to think about other aspects of their approach in dangerous situations because they can use their physical skills without having to think about them.

Regarding non-physical skills, the findings show that the interviewees consider different elements.

In both countries, communication was mentioned as a valuable skill to avoid excessive force. Furthermore, Dutch and German participants alike considered communication necessary for de-escalation. Therefore, officers need to be able to adapt the way they communicate with a person to meet the suspect on the same level.

German interviewees further stated that information could be gathered through communicating. The more information, the better the police can prepare for an operation, and uncertainties that unsettle officers can be eliminated.

The German trainers further mentioned how pivotal clear and assertive verbal and non-verbal communication is for the police to control a situation.

Another skill mentioned by participants of both countries was situational awareness, which allows identification and elimination of risks. This also allows officers to scale up their use of force if they identify factors that make it unsafe only to use non-physical approaches. The possibility of adjusting the approach has again been mentioned on both sides. Additionally, the Dutch police students indicated that they observed their experienced colleagues to adapt their strategies in dangerous situations.

In both countries, police try to stay flexible within their approaches to avoid disproportionate force GT1 stated how crucial teamwork and being able to rely on each other is to conduct a police operation without excessive force. This provides a feeling of safety, and officers can direct their thoughts to other aspects of the operation that need to be considered.

A last non-physical skill that impacts responsible use of force is emotional awareness. In both countries, it was remarked that personal emotions should always be considered. For example, stress or fear can influence how officers conduct their work and can lead to extreme physical measures. Therefore, officers must train to stay calm and think clearly, even in dangerous situations, as this allows reflection, reducing the possibility of excess.

The German participants also mentioned that officers should always be aware of their opponent's emotions as they can be escalating factors. Compassion can positively affect a person's temper and might make the use of physical force unnecessary if the situation can be controlled with empathetic communication.

The German participants pointed to one thing determining responsible use of force for them - staying in control. For the trainers, having control over a situation meant having the possibility to think about an approach. A thought-out tactic to resolve a dangerous or tension-filled scenario can minimize the use of force necessary or prevent it all along.

Staying in control was not mentioned explicitly by the Dutch participants as part of responsible use of force. Therefore, this is a difference between the Dutch and German findings.

It has to be remarked that the findings are from a small case study. Certain aspects of responsible use of force might not have been mentioned. The answers are personal to the individual participants and should be considered by the readers. There are overlaps in the responses within each country. However, also some of the Dutch and German answers coincide. This shows that certain features are universally regarded as contributing to responsible use of force by the police. A comparative list of the findings for Lower Saxony and the Netherlands can be found in *Table 4*.

To conclude, it is visible that several aspects of PUOF Training affect the understanding of responsible use of force of the interviewees. Therefore, different parts of the building blocks of *Figure 1* are necessary to create the ultimate result of responsible use of force by the police.

In both countries, responsible use of force and the perception of it appears to follow a similar scheme. From the start of their police training, students are confronted with theories and skills that are supposed to influence their perception of "responsible" policing and use of force. The findings from the interviews showed that there is no one correct way of conducting PUOF responsibly. Instead, different elements must be used together to ensure the greatest level of reasonability. Even though the participants in both countries have mentioned divergent skills they consider necessary for responsible use of force, they all came to similar conclusions on which aspects contribute to responsible use of force for them.

The general guidelines to responsibly use of force are considering the three main principles and police laws, gaining experience and practicing skills, using feedback as an improvement opportunity, applying theoretical skills where possible, and using physical interventions if necessary. Of course, responsible use of force is context-dependent, but including these elements in the decision-making can bring officers closer to avoiding excessive force and using their powers responsibly.

Table 4. Comparison Table: Features of Responsible Use of Force based on the Interviews Findings.

Features	The Netherlands -	The Netherlands -	Lower Saxony
	MBO	НВО	
Proportionality, sub-	Yes	Yes	Yes
sidiarity, and legiti-			
macy principles			
Warnings	Yes	Yes	Yes
Knowing conse-	Yes	Yes	Yes
quences			
Mandatory distance	No	No	Yes
Experience through	Yes	Yes	Yes
training			
Apply theoretical	Yes	Yes	Yes
knowledge in practice			

Feedback	No	No	Yes
Self-reflection	Yes	Yes	Yes
Situational awareness	Yes	Yes	Yes
Emotional awareness –	Yes	Yes	Yes
self			
Emotional awareness –	No	No	Yes
others			
Communication - in-	No	No	Yes
formation			
Communication – de-	Yes	Yes	Yes
escalation			
Communication –	Yes	Yes	Yes
adaptable			
Communication – ver-	No	No	Yes
bal and non-verbal			
Demeanor and asser-	No	No	Yes
tiveness			
Adjusting approach	Yes	Yes	Yes
Mastering Physical	Yes	Yes	Yes
Skills			
Safety – colleagues	Yes	Yes	No
Safety – personal	Yes	Yes	Yes
Observing colleagues	Yes	Yes	No
to learn			
Teamwork	No	No	Yes
Staying in control	No	No	Yes

7. Conclusion

Violent excesses by the police are a reoccurring picture in news media worldwide. As a result, they gain attention, and police units face scrutiny from society. However, especially since the start of the pandemic, the police have become a target of rioters' anger. Therefore, now more than ever, they have to use their rights connected to the Monopoly of Violence. Yet, this has to be done responsibly, following rules and preventing disproportionate use of force to minimize harm to citizens and officers. Therefore, this thesis researched the influence of police training on understanding responsible use of force.

The main research question, "How do Dutch and German police students and trainers experience the Police Use of Force Training in terms of educational programs, skills, and responsible use of force?"

can be answered by considering the three sub-questions, all revolving around the idea that police training will create responsible police officers.

The Police Use of Force Training in the police academies is the primary element introducing recruits to use of force and its challenges. The perception of this training is individual, and various factors, from design to methods to skills, pave the way for police officers to be equipped to conduct their tasks and use force responsibly.

Based on this idea, the author created *Figure 1* as a theoretical framework and evaluated the three study manuals and the interviews using this strategy.

Each sub-question was analyzed with a focus on different non-physical skills that have been introduced as significant for police work by Otto Adang (2012) and adapted by Rajakaruna and colleagues (2017).

Even with a small-scale design, this research has contributed to the topic of Police Use of Force Training and presented outcomes that should be used for further studies.

Chapter 4 showed that the Dutch and Lower Saxony police training design and contents have significant overlaps based on educational and online materials. Especially the two bachelor's programs display similarities as they combine academic values with basic police training. The MBO program does show differences in design since it is aimed at training students in basic skills. However, the contents are similar to the other programs. Overall, the module manuals show that use of force and connected skills are trained and taught in comparable ways in all analyzed programs.

In *Chapter 5*, the interview results were included. It is repeatedly visible that students and trainers in both countries mentioned similar skills as part of the academy training. A remarkable finding is that DE1 and DS1 both agreed that the bachelor's program did not allow enough training opportunities, emphasizing academic skills. Whereas DS2, with an MBO degree, and GS1 felt well-prepared by the academy training. These differences in perception are interesting as all three programs offer similar skills training with different training intensities. However, these perceptual differences do not indicate that some students are better prepared than others. Instead, it means that some students feel the need to develop additional skills beyond the academy's teachings. How these discrepancies in perception occur in students that receive relatively similar education warrants further research.

In Chapter 6, the meaning of responsible use of force was investigated. Once more, the findings for both countries coincide. The understating and following of the three principles were mentioned as vital to avoid excessive force. Students and trainers on both sides further listed training and gaining experience as paramount. The Lower Saxony and Dutch participants indicated combining physical and non-physical skills through different situational evaluation techniques to foster the understating of responsible use of force. A remarkable result was that the German interviewees strongly emphasized the need to gain or keep control over suspects when using force to prevent excesses, indicating a difference in the results between the two countries. Based on this finding, it could be of value to investigate specific tactics that

allow the keeping or regaining of control and see whether the Dutch counterparts use similar techniques that they did not mention in the interviews.

After considering these results, the main question can be answered by saying that the participants from Lower Saxony and the Netherlands indicated significant similarities. The skills trained in the PUOF Training overlap. All interviewees highlighted the importance of communication, situational awareness, and adaptability. Proportionality, subsidiarity, and legitimacy are reoccurring and vital aspects of theoretical and practical police training. They also guide the understanding of responsible use of force in both countries. There are differences in educational programs, especially between the bachelor's programs and the MBO course, in terms of length and academic focus. However, the theories and skills taught in the different programs are alike.

Despite these discrepancies, it is remarkable that the academy training strongly influenced the participants' perception of responsible use of force. Students mentioned various factors affecting their approaches, from the three principles to the training time to methods like feedback helping them reflect on their actions. Even the trainers agree that aspects of education and adequate training opportunities affect the understanding of every police officer as they learn about responsible use of force by gaining experience. Finally, the proper balance and combination of physical and non-physical skills using situational evaluation techniques also impact police actions. These techniques are not the same in both countries. Nonetheless, techniques are used with the same goal of assessing situations and emotions to identify the safest action combining non-physical and physical competencies.

Overall, it can be said that the experiences and perceptions of the Police Use of Force Training of students and trainers in both countries show significant overlaps. This makes it attractive to further look into police education across EU countries regarding responsible use of force.

When looking at this thesis, certain limitations must also be acknowledged.

Firstly, the case study provides limited insight into PUOF Training and its perception due to the small-scale qualitative study with eight participants. More participants would allow uncovering details and aspects that have not been discussed. In future research, more interviews on either side should be conducted. However, due to the topic of use of force, external researchers have difficulties finding police officers willing to participate in research. Therefore, the interviewee selection was limited to the police trainers, students, and officers that answered the author's request. Also, internal police information is only available to external researchers with limitations. Therefore, it should be considered to cooperate with different police organizations for additional studies. Collaborative research not only allows excess to more internal materials but also increases the likelihood for officers to participate in interviews. Hence, more participants can be reached, and a larger-scale project can be conducted to broaden the insight and enhance generalizability.

Secondly, another concern is that the MBO student DS2 graduated before the revision of the program. They participated in the program when it was six months longer and contained different course topics. This can mean that DS2 might not have mentioned essential aspects from the manual. In future research, the original manual has to be attained, and contents need to be compared to the present study guide. Additionally, students from the current, revised program should be interviewed. This could be done by collaborating with police organizations to attract students to participate in the research.

Despite the limitations, the findings of this thesis are significant to the field of research as they allow an insight into the individual perceptions of Police Use of Force Training and responsible use of force in two countries. The interviews show that certain aspects of police theory become fundamental elements of police training and practical work. Proportionality, subsidiarity, and legitimacy permeate the educational manuals, use of force training, and the meaning of responsible use of force. Participants describe the relevance of non-physical skills such as communication and situational and emotional awareness for police work as they guide the decision-making process to using or refraining from physical force based on environmental or social-scientific factors. Many skills taught in the police academies and used by police officers in their working life can be found on the Dutch and German sides of the research. Through the theoretical framework, it became visible that the aspects in Figure 1 connect the different elements of PUOF Training. Although small-scale, this project should be considered as starting point for further research, analyzing the connection between class contents and use of force by police officers in real life. On a broader level, it should be investigated if police training and education differences impact the understanding of response use of force and the statistics of police misuse of force. More generalizable research can contribute to restructuring educational and training content and the methods used to teach the recruits to erase disproportionate use of force deriving from the training design, methods, or content. Additional research into police training can advance understanding of the causes of police violence and promote its prevention.

This cross-border comparison between two EU countries further provided small-scale insight into the similarities of police training and perceptions of responsible use of force. In the future, these findings can be used as a starting point for intensified research into police education in countries belonging to the European Union to facilitate cooperation between police organizations or even offer EU-wide police education programs.

On an individual level, this research can also be considered significant. Readers that work in the police might be provoked to review their approaches to and definition of responsible use of force. As the findings are based on personal experiences, relating to answers can be done with ease. If trainers use the information to revise how they conduct training and integrate theory, or if one police officer questions their understanding of responsible use of force, this thesis has contributed to the police practice. The

framework of *Figure 1* can be used as a guideline and developed further to understand the connections between the different aspects of the framework and their combined effects on responsible use of force. Practitioners, like PUOF coaches or police teachers, should recognize how impactful their teaching and approaches are on the students. For this purpose, training content has to be created with the idea of stopping the disproportionate use of force before it can occur. Furthermore, as the participating trainer and students agreed, gaining experience helps to prepare recruits for actual police operations. If they do not feel prepared, mistakes or excesses might happen. Therefore, students' opinions should be included in the PUOF Training to accommodate their needs and prepare them in the best way possible, using the trainers' expertise to install an adequate understating of responsible use of force.

The training on use of force in police academies in Europe has only recently proven relevant for police research. This thesis has contributed to this field by exploring the relations between educational content and police training and the understanding of responsible use of force on an individual level in two countries to foster further investigation into the topic. Additionally, it has added to the discussion of how vital the Police Use of Force Training is to conduct police work in a responsible and reflective manner. This thesis has discovered a relationship between the main principles, design, methods, and skills that rings true for responsible Police Use of Force in the Netherlands and Lower Saxony. The author developed the framework in *Figure 1* for the analysis. It was used to evaluate the findings and successfully showed that each element had an essential part in the sequence of creating responsible use of force in the police academy training.

In the future, further research is warranted to identify whether this relationship can be found in the police training of more German federal states and additional EU countries to endorse the responsible use of force by the police from the academies onward.

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Appendix I

Police Law

The following explanations provide information about how the Police Monopoly of Violence is manifested and limited in the Dutch and German police laws. For the German law, the police regulations for Lower Saxony are considered, as this is the federal state of importance for the thesis. *Table 1* provides a comparison.

Police Law – The Netherlands

The Dutch "Politiewet" (Eng. "police law") states that the police are responsible for preserving the rule of law, public order, and helping citizens in need. In performing their duties, they are bound by the law and authorities' instructions (Politiewet, 2012, art.3). Police officers are allowed to use force to a necessary and legitimate extent. Use of force is permitted when no other measures are deemed successful and in situations of immediate danger. Before applying coercive means, a warning needs to be issued if possible (Politiewet, 2012, art.7 (1)). Use of force must follow the proportionality principle. Thus, it has to be reasonable, moderate, adequate for the situation and should be the least invasive means available (Politiewet, 2012, art.7 (7)). Article 68 (2c) of the Politiewet regulates the yearly publishing and analysis of complaints against police conduct. If established that shortcomings in police performance cause incidents, it is attempted to improve the performance and prevent the incidents in question.

The use of a firearm is only permitted when the suspect has or is expected to have a firearm to hurt officers or bystanders, when a suspect has evaded capture for a crime committed, or when the suspect creates a danger to society. However, according to the "Ambtsinstructie voor de politie, de Koninklijke marechaussee en andere opsporingsambtenaren" (Eng. "Official instructions for the police, the Royal Netherlands Marechaussee and other investigating officers"; in the following "Ambtsinstructie"), other measures should be considered before making use of a weapon (Ambtsinstructie, 2021, art.7). Warning shots need to be administered before making use of the firearm against a subject (Ambtsinstructie, 2021, art.10c). Stating a warning also has to be done before administering other measures of force, such as pepper spray or tasers (Ambtsinstructie, 2021, art.12b).

Article 17 states that every incident in which an officer has used force or a coercive means, such as a warning shot or the use of firearms against a suspect, must be reported to the assistant public prosecutor. This includes the kind of force or aid to force used, the consequences of the use, and the reasoning that lead to the use of force or coercive means (Ambtsinstructie, 2021, art.17). Incidents are investigated by the independent officials of the "rijksrecherche" (Eng. "National Criminal Investigation Service") (Aanwijzing Handelwijze Geweldsaanwending (Politie) Ambtenaar, 2006).

However, Dutch law does not explicitly state which use of force approach has to be taken in specific scenarios. Therefore, it is unclear what classifies as excessive violence by a police officer and when and how using means of force can be punished by law. It is merely mentioned that police agents should

conduct their tasks based on the legal rules they are provided with and by following the instructions of superiors and authorities in charge.

Police Law – Germany

The German "Grundgesetz" (Eng. "basic law"), which equals a constitution, states that the organization and legal regulations of the police are the task of each "Bundesland" (Eng. "federal state") (Grundgesetz, 2012, Art.30). Thus, the police law varies in each federal state.

The "Niedersächsisches Polizei- und Ordnungsbehördengesetz" (Eng. "Lower Saxony Police and Regulatory Authorities Act") states that the police are tasked with warding off dangers to public safety or order. Therefore, they must prevent and combat crimes and criminal offenses (NPOG, 2005, §1(1)). To do so, the police are allowed to interfere with the rights of a person if they are suspected of having committed or planning to commit a crime. However, under all circumstances, the principle of proportionality has to be followed. The measure to interfere with a person's rights has to be in accordance with the purpose, and the most minimal action has to be chosen (NPOG, 2005, §4(1)-(3)). Officers are held to use their discretion and professional judgment to determine which approach is appropriate. The law states that it limits the powers assigned to the police, and if it is not limited, they have the right to take necessary measures to fulfill their tasks (NPOG, 2005, §5(1)-(2)).

Nevertheless, the law does not mention specific measures to be prohibited as police approaches depend on the context and can be used as seen fit. When it comes to physical force, it is described as "any direct physical impact on people or things" (NPOG, 2005, §69(2)). By law, the police can use measures such as shackles, water cannons, service dogs, and irritant gases to stop suspects in dangerous situations. The law regulates the use of firearms as the last measure to take if no other actions can be seen as successful. Firearms may only be used against persons to render them incapable of attack or escape and if the person appears to be older than 14 years of age. Before using the firearm, an announcement has to be made, and a warning shot has to be fired to protect bystanders and give suspects time to surrender (NPOG, 2005, §74, §§76-78). Furthermore, the use of firearms by officers is prohibited if uninvolved people could be affected unintentionally. However, these limitations do not apply if no other means can be used to avert danger or the officers' or civilians' lives or physical integrity are in danger (NPOG, 2005, §74(2)).

Generally, police officers have to follow superiors' orders about using or refraining from forceful measures. Officers can disobey orders to use coercive force when the measures violate human rights or are not issued for official purposes (NPOG, 2005, §72(1)). Furthermore, officers can disobey orders if a criminal offense would be committed. Officers can be legally punished if an order is followed that can be immediately recognized as a crime (NPOG, 2005, §72(2)). Further rules and limitations about the use of force are not specified in this law text.

Table 1. Similarities and Differences of Dutch and German Police Law

Tasks	The Netherlands	Germany
Preserving rule of law	Yes	Yes
Keeping public order	Yes	Yes
Prevent/combat crimes	Yes	Yes
Bound to law during operations	Yes	Yes, unless measures are not explicitly regulated
Bound to supervisor instruc-	Yes	Yes, except when action is
tions		criminal offense
Legal use of force with limita-	In immediate danger; when	Yes; allowed to interfere with
tions	last/best possible approach; is-	personal right of suspect
	suing warning before	
Proportionality principles	Yes	Yes
Professional discretion when	Yes	Yes
using force		
Mandatory yearly publishing of	Yes, adjustments of approaches	No
complaints against police	as result	
Use of firearms	As last measure, in immediate	As last measure, in immediate
	danger to police or bystanders,	danger to police or bystanders,
	when evading capture	when evading capture, against
		subjects older than 14 with exceptions
Distributing warning shots	Yes	Yes, except for immediate dan-
		ger
Explicit instructions when use	No explicit limitations or in-	No explicit limitations to police
force is allowed	structions	approaches

Table 2. List of Web Sources from The Dutch and Lower Saxony Police Academies with Links.

Source Name	Country	Title	Link
(Infopolitie.nl, 2022)	The Netherlands	Bachelor of Policing	https://www.infopoli-
			tie.nl/index.php/poli-
			tie3/228-politie/sol-
			liciteren-bij-de-poli-
			tie/1630-bachelor-of-
			policing
(Kom bij de politie,	The Netherlands	Inhoud politieoplei-	https://kombijde.poli-
2022a)		ding hbo	tie.nl/agent-wor-
			den/overzicht-oplei-
			dingen/hbo/inhoud-
			studie
(Kom bij de politie,	The Netherlands	Locaties politieoplei-	https://kombijde.poli-
2022b)		ding en werkgebied	tie.nl/agent-wor-
			den/zo-werkt-het/loca-
			ties
(Politieacademie,	The Netherlands	Basis politieopleiding	https://www.politie-
2022a)		op niveau 4	academie.nl/onder-
			wijs/studeren/Pa-
			ges/Mbo-4-politieop-
			leiding.aspx
(Politieacademie,	The Netherlands	Hbo-politieopleiding	https://www.politie-
2022b)		(2,5 jaar)	academie.nl/onder-
			wijs/studeren/Pa-
			ges/Hbo-politieoplei-
			ding-2,5-jaar.aspx
(Politieacademie,	The Netherlands	Onderwijsaanbod -	https://www.politie-
2022c)		HBO-Bachelor of Po-	academie.nl/onder-
		licing	wijs/onderwijsaan-
			bod/pages/oplei-
			ding.aspx?code=19002
			12&interessege-
			bied=1&thema=20

(Politieacademie, 2022d)	The Netherlands	Over het Basis Politie- onderwijs	https://www.politie- academie.nl/onder- wijs/studeren/Pa- ges/Overhetpolitieon- derwijs.aspx
(Politieacademie,	The Netherlands	Studiegids - Bachelor	studiegids_Bache-
2022e)		of Policing	lor_of_Polic-
			ing_2022.pdf
(Politieacademie,	The Netherlands	Studiegids - Politie-	Studiegids_Politiea-
2022f)		agent GGP	gent_GGP_2022.pdf
(Polizeiakademie Nie-	Germany	Ausbildung: Bachelor-	https://www.pa.poli-
dersachsen, 2022)		Studiengang	zei-nds.de/start-
			seite/aufgaben/ba-
			chelorstudium/ausbil-
			dung-bachelor-studi-
			engang-114598.html
(Polizeiakademie Nie-	Germany	Modulhandbuch - Ba-	Modulhand-
dersachsen, 2021)		chelorstudiengang Po-	buch_ab_1102021.pdf
		lizeivollzugsdienst	
(Polizei Niedersach-	Germany	Studium an der Poli-	https://www.polizei-
sen, 2018)		zeiakademie Nieder-	nds.de/berufundkarri-
		sachsen	ere/beruf_karriere/stu-
			dium-polizei-nieder-
			sachsen-110137.html
(Polizei Niedersach-	Germany	Das Studium	https://polizei-stu-
sen, 2022a)			dium.de/studium/
(Polizei Niedersach-	Germany	Voraussetzungen für	https://polizei-stu-
sen, 2022b)		ein Polizeistudium	dium.de/voraussetzun-
			gen/

Table 3. Code Catalog for the Interview Analysis

	communication, plan- nication, plan- ning, de- escala- tion					
	situa- tional aware- ness, adapta- bility, decision- making, commu- nication, correct- ing each					
	trust, sit- uational aware- ness, reading people					
	commu- nication, de-esca- lation					
	commu- nication, de-esca- lation, emo- tional aware- ness					
	doel aanpa- kanalyse					
	Communication, trust-building			Communication, plan-ning, adapta-bility		
	Situational awareness and adaptability			Experi- ence		
	Gain information			Master- ing skills		
	Evaluation non- physical skills	Necessity of training		Empa- thy, hu- manity		
Training PUOF	Self-re-flection	Evaluation physical and non-physical training		Personal Safety		Function as team
Safety measure	Other classes for non-physical skills	Evaluation non- physical skills	Inappro- priate behavior col- leagues	Situa- tional aware- ness		Losing
Warning state- ments	Safety measure	Critique training realism	Prejudice	Situa- tional aware- ness, adapta- bility		Training, experi- ence, feedback
Lawful- ness	Emo- tional aware- ness	Critique physical training	Han- dling prejudice	Use of tools/aid s, fast decision- making		Avoid- ing ex- cess
Proportionality & subsidiarity principle	Fast decision- making	Critique non- physical training	Address- ing is- sues	Communication		Commu- nication
Subsidi- arity principle	Situational awareness and trust	Critique physical and non- physical training	Racism or dis- crimina- tion	Realistic training		Excessive use of force
Proportionality principle	Situational aware-ness	Critique examina- tion	Inappro- priate behavior by super- visor or higher rank of- ficer	Actionable intellilibre gence/sit adaptability	Asking feed-back, self-re-flection	PUOF in law
Laws	Communication	Kind of physical training	Racism	Mindset	Ask- ing/giv- ing feed- back	PUOF in real life
Responsible Use	Non- physical Skills	General Training (Cri- tique)	Inappro- priate Behavior	Im- portant Skills/Fe atures	Feed- back	Police Use of Force

Appendix II

Table 1. Consent Form for Interview Participants

			Yes	No
I voluntarily participate in this inter-	view.			
I have been informed about the re	search topic: the Traini	ing of Police Use of		
Force, its design and methods, and t	he skills taught during t	he training.		
I have been informed that the interv	iew will be part of a mas	ster thesis comparing		
the Training of Police Use of Force	in Germany and the Net	therlands.		
I received the interview questions be	eforehand.			
I have been informed beforehand th	at the interview will be	recorded for the pur-		
pose of transcription.				
I consented to the recording.				
I have been informed that my ident	ity will be anonymized	in the transcript and		
thesis, and only the author will have	access to uncensored a	udio.		
I have been informed that the uncen	sored audio will be dele	eted after the comple-		
tion of the thesis.				
I am aware that I do not have to ans	wer questions I do not fe	eel comfortable with.		
I have been given the opportunity t	o ask questions or mak	e remarks before the		
interview.				
I have been given the contact inform	nation of Martha Elisab	eth Haese to address		
questions or remarks.				
I give consent to Martha Elisabeth H	laese to contact me after	the interview for the		
purpose of clarifications or addition	al questions.			
I understand I can contact Martha E	lisabeth Haese about qu	estions regarding the		
consent form.				
Signatures				
I have read and understood the cons	ent form.			
Participant name [printed]	Signature	Place and 1	Date	
Tartopant name [printed]	Signature	1 face and 1	<u> </u>	
·				
Researcher name [printed]	Signature	Place and l	Date	

Table 2. Interview Questionnaire for Police Students - English

Can you shortly introduce yourself and describe your current position in the police?
How long have you been in this position?
When using force in daily police practice, which restrictions on the use of force
should you as a police officer take into account?
When you are called to any incident, how do you prepare yourself?
How did you learn during training to deal with an unarmed, but violent person?
How did you learn during training to approach a non-violent person that has a crim-
inal record?
Do you consider the lessons learned during training useful in practice?
Have you ever acted together with a colleague who treated a citizen inappropriate
for example because of the ethnic or economic background of the citizen involved
or because they had a police record? If so: Have you addressed this colleague after-
ward?
Which non-physical skills are taught for dealing with unruly citizens?
Do you consider these skills useful in practice, especially in potentially dangerous
situations?
Which skills do you think are most important for you as a police officer in poten-
tially dangerous situations?
In the field and during training: Do you give feedback to your colleagues and are
you provided with feedback?
Do you feel certain skills should be emphasized more and others should be empha-
sized less in policing?
Do you have anything to add or any questions for me?

Table 3. Interview Questionnaire for Police Trainers - English

Introduction	Can you shortly introduce yourself and describe your current position in the police?
Introduction	How long have you been in this position/doing this job?
Introduction	Please shortly describe your field of expertise (form of research or training).
Q1	In daily police practice, how often is it necessary to use forceful measures? (in percent or x out of 10 incidences)
Q2	The power of speaking has been called "the strongest weapon the police can use". Do you agree with this statement?
Q3	Regarding responsible use of force: Which restrictions on the use of force do you teach to the students and how?
Q4	During training, how do you teach students to approach an unfamiliar situation? What are they supposed to do?

Q5	What are students taught to do when they encounter an unarmed, but violent person?
Q6	What are students taught to do if they encounter a person with a criminal record but
	without violent behavior?
Q7	Which non-physical skills do you teach students to use in potentially dangerous
	situations?
Q8	During training, do you address potential stereotypes officers might have against
	people with a certain ethnic or economic background? If so: how do you teach them
	to handle such situations/stereotypes?
Q9	Do you encourage the sharing of feedback between the students? If so: how?
Q10	Which skills do you think are most important for the police in potentially dangerous
	situations?
Q11	Which skills are most important to teach students to prevent excessive use of force?
extra	Do you think that the police sometimes focusses too much on talking when other
	actions might be more effective?
End	Do you have anything to add or any questions for me?

Table 4. Interview Questionnaire for Police Expert – English

Introduction	Can you shortly introduce yourself and describe your current position in the police?
Introduction	How long have you been in this position?
Introduction	Please shortly describe your field of expertise (form of research or training).
Q1	When using force in daily police practice, which restrictions on the use of force
	should you as a police officer take into account?
Q2	When you are called to any incident, how do you prepare yourself?
Q3	How should a police officer handle an incident with an unarmed, but violent person?
Q4	How should a police officer approach a person that has a criminal record for non-
	violent offenses?
Q5	Have you ever encountered a colleague who treated a citizen inappropriately for
	example because of the ethnic or economic background of the citizen or because
	they had a police record? If so: Have you addressed this colleague afterward?
Q6	Which non-physical skills should police officers use when dealing with unruly cit-
	izens?
Q7	Do you consider non-physical skills useful in practice, especially in potentially dan-
	gerous situations?
Q8	Which skills in general do you think are most important for police officers in po-
	tentially dangerous situations?
Q9	Which skills are most important to prevent the excessive use of force and escalation
	of potentially dangerous situations?

Q10	When working with colleagues: How important is feedback when working together
	daily?
Q11	The power of speaking has been called "the strongest weapon the police can use".
	Do you agree with this statement?
End	Do you have anything to add or any questions for me?

Table 5. Interview Questionnaire for Police Students – German

Würden Sie sich kurz vorstellen und eine Beschreibung Ihrer Position in der Polizei
geben?
Wie lange sind tun Sie dies bereits?
Während der täglichen Polizeiarbeit, welche Restriktionen müssen Polizeibeamte
bei der Anwendung von Gewalt beachten?
Wenn Sie zu einem Einsatz gerufen werden, wie bereiten Sie sich darauf vor?
Was wurde Ihnen im Training zum Umgang mit gewaltsamen, aber unbewaffneten
Personen beigebracht?
Sie nähern sich einer Person mit Vorstrafen. Keine davon ist für Gewalttaten. Was
wurde Ihnen im Training beigebracht, wie Sie sich verhalten sollen?
Halten Sie diese Lektionen aus dem Training, über die wir gerade gesprochen ha-
ben, auch in der Praxis für nützlich?
Haben Sie es jemals in einem Einsatz erlebt, dass ein*e Kolleg*in sich unangemes-
sen gegenüber einer Person verhalten hat aufgrund des ethnischen oder sozialen
Hintergrundes oder weil die Person Vorstrafen hatte? Falls ja: Haben Sie dieses
Verhalten hinterher angesprochen?
Welche nicht-physischen Fähigkeiten werden Ihnen für den Umgang mit gewaltsa-
men Personen beigebracht?
Halten Sie diese Fähigkeiten in der Praxis für nützlich, vor allem in potenziell ge-
fährlichen Situationen?
Welche Fähigkeiten halten Sie für besonders wichtige, wenn Sie im Einsatz einer
potenziell gefährlichen Situation ausgesetzt sind?
In der Praxis oder im Training: Geben Sie Feedback an Kolleg*innen und erhalten
Sie welches?
Denken Sie, manche Fähigkeiten sollte mehr Aufmerksamkeit im Training ge-
schenkt werden und manchen weniger?
Haben Sie noch Fragen an mich oder etwas, dass Sie gerne hinzufügen wollen?

Table 6. Interview Questionnaire for Police Trainers - German

Einleitung	Würden Sie sich kurz vorstellen und eine Beschreibung Ihrer Position in der Polizei
	geben?
Einleitung	Wie lange führen Sie diese Position bereits aus?
Einleitung	Bitte erläutern Sie kurz den Bereich Ihrer Expertise.
F1	Während der täglichen Polizeiarbeit, wie oft ist die Anwendung von Gewalt oder
	Gewaltmitteln notwendig?
F2	Die Kraft der Sprache wurde als "stärkste Waffe der Polizei" bezeichnet. Stimmen
	Sie dieser Aussage zu?
F3	Bezüglich der verantwortungsvollen Anwendung von Gewalt: Welche Restriktio-
	nen für die Anwendung von Gewalt bringen Sie den Student*innen bei und wie tun
	Sie dies?
F4	Während des Trainings, welche Herangehensweise für unbekannte Situationen
	bringen Sie den Student*innen bei? Was sollten sie tun?
F5	Was wird den Student*innen beigebracht, für den Fall dass sie einer gewaltbereiten
	Person begegnen, die aber unbewaffnet ist.
F6	Was wird den Student*innen beigebracht, für den Fall dass sie einer Person begeg-
	nen, die Vorstrafen hat, aber nicht für gewaltsame Taten?
F7	Welche nicht-physischen Fähigkeiten werden den Student*innen beigebracht, die
	sie in potenziell gefährlichen Einsätzen benutzen sollen?
F8	Während des Trainings, sprechen Sie Vorurteile an, die Polizeibeamte bezüglich
	des sozialen oder ethnischen Hintergrunds einer Person haben könnten? Falls ja:
	Was bringen Sie den Student*innen bei für den Umgang mit Vorurteilen?
F9	Regen Sie die Student*innen an sich gegenseitig Feedback geben? Falls ja: Wie
	genau tun Sie dies?
F10	Welche Fähigkeiten sind Ihrer Meinung nach die wichtigsten für Polizeibeamte in
	potenziell gefährlichen Situationen?
F11	Welche Fähigkeiten sind besonders wichtig, damit exzessive Gewalt verhindert
	werden kann?
Ende	Haben Sie noch Fragen an mich oder etwas, dass Sie gerne hinzufügen wollen?

Appendix III

Appendix III can be found in an extra document.